

October 24, 2022

District Supervisor Oil Conservation Division, District 2 506 W. Texas Ave. Artesia, New Mexico 88210

Re: Release Characterization and Remediation Work Plan **ConocoPhillips James E Upper Battery Release** Unit Letter M, Section 12, Township 22 South, Range 30 East **Eddy County, New Mexico** Incident ID# NAPP2200639375

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the James E Upper Battery. The release footprint is located in Public Land Survey System (PLSS) Unit Letter M, Section 12, Township 22 South, Range 30 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.408505°, -103.840308°, as shown on Figures 1 and 2.

#### **BACKGROUND**

According to the State of New Mexico C-141 Initial Report (Attachment A), the release occurred as the result of a failure from the pop off (pressure release valve) on the production separator and was discovered on December 20, 2021. Approximately 21 barrels (bbls) of produced water and 3 bbls of crude oil were reported released, of which 2 bbl of crude oil were recovered. The release extent was described in the spill calculator as equaling 24,520 square feet. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on January 6, 2022. The NMOCD Incident ID for this release is NAPP2200639375.

Subsequent to the December 20, 2021 discovery of the NAPP2200639375 release, a release associated with Incident ID NAPP2202446534 was discovered on January 1, 2022. This release also resulted from the failure of the pop off (pressure release valve). The release associated with Incident ID NAPP2202446534 will be addressed in a separate report.

#### SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, stream bodies, 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 medium karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within ½ mile (800 meters) of the Site. There is one (1) water well within 3.1 miles (5,000 meters) of the site with a depth to groundwater of 262 feet below ground surface (bgs). As the available water level information was from a well further than ½ mile away from the Site, COP elected to drill a boring associated with the assessment to depth for groundwater verification. On September 8, 2022, a licensed drilling

Tetra Tech

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

subcontractor was onsite to a drill a borehole (DTW) to 55 feet bgs. The borehole was located just outside the reported release footprint. The borehole was dry upon completion, and soils were dry from surface to total depth. The depth to groundwater in the area was thus verified as greater than 55 feet bgs. The borehole was plugged with 3/8" bentonite chips. The borehole coordinates are 32.408324°, -103.841301° and the boring location is indicated on Figure 3. The site characterization data, along with the boring log, is included in Appendix B.

#### **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 and in accordance with Table I of 19.15.29.12 NMAC, the proposed remediation RRALs for the Site are as follows:

Constituent	Remediation RRAL
Chloride	10,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 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 ft 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**

In accordance with 19.15.29.8. B. (4) NMAC that states "the responsible party may commence remediation immediately after discovery of a release", COP elected to begin remediation of the impacted area footprint in 2022. The NAPP2200639375 release extent consisted of approximately 22,432 square feet of oil-gas lease pad and pastureland.

Initial response remedial actions were performed at the release site between January and February 2022. Visibly stained areas were scraped to remove impacted materials. On-pad areas were scraped to approximately 3 to 6 inches below ground surface, resulting in approximately 181 cubic yards of contaminated soil being removed and sent to R360 Halfway Facility in Hobbs, New Mexico. Waste manifests are included in Appendix C. The initial response area is indicated in Figure 3. Photographic Documentation of the scrape is found in Appendix D.

## **INITIAL SITE ASSESSMENT ACTIVITIES AND RESULTS**

Tetra Tech personnel were onsite to delineate and sample the release area on August 9, 2022. A total of twenty-two (22) soil borings (AH-1 through AH-19) were installed using a hand auger within and around the release to evaluate the vertical and horizontal extent of the release. AH-3, AH-4, AH-6, AH-7 and AH-8 were installed within the release extent to assess the vertical extent of impact. The remainder of the borings were installed around the perimeter of the release footprint to delineate the horizontal extent of impacted soil. The boring locations are shown on Figure 4.

Release Characterization and Remediation Work Plan October 24, 2022

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A total of twenty-eight (28) samples were collected from the sample locations and transferred under chain of custody and analyzed within appropriate holding times by Cardinal Laboratories (Cardinal). The soil samples were analyzed for TPH via Method 8015 Modified, chloride via Method SM4500Cl-B, and BTEX via Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Results from the August 2022 soil sampling event are summarized in Table 1. Analytical results associated with boring location AH-8 exceeded the proposed Site RRALs for TPH in soils. Additionally, results associated with AH-4, AH-7, AH-15 and AH-23 exceeded the proposed RRAL for TPH. All other analytical results from the August 2022 sampling were below Site RRALs. While horizontal delineation of the release area was successful, vertical delineation was not achieved during the August 2022 sampling event due to the TPH exceedances from boring location AH-8.

#### ADDITIONAL SITE ASSESSMENT ACTIVITIES AND RESULTS

Tetra Tech personnel returned to the Site to complete vertical delineation of the release area on September 14 through 26, 2022. A total of eleven (11) soil borings (BH-1 through BH-7 and AH-20 through AH-23) within the release footprint to a maximum depth of 30 feet bgs. The boring locations are shown on Figure 4.

A total of forty-seven (47) samples were collected from the seven boring locations and transferred under chain of custody and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH via Method 8015 Modified, chloride via Method SM4500Cl-B, and BTEX via Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Results from the September 2022 soil sampling event are summarized in Table 2. Analytical results associated with boring locations BH-1 and BH-2 exceeded the RRAL for TPH and/chloride down to a depth of 3 feet bgs. Results from BH-5 and BH-6 exceeded the RRAL for TPH at the 0-1' sample depth interval. All other analytical results from the September 2022 sampling event were below Site RRALs. Analytical results from BH-1, as well as other borings, at depth were below delineation standards for TPH, BTEX and chloride. Following the September 2022 assessment activities, the release is considered delineated.

#### **REMEDIATION WORK PLAN**

Based on the analytical results, ConocoPhillips proposes to remove the remaining impacted material as shown on Figure 5. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 5 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the applicable RRALs. Any area containing pressurized lines will be hand-dug to the proposed depth shown on Figure 5 or the maximum extent practicable; heavy equipment will come no more than 4 feet from any pressurized lines.

Prior to inception of remedial activities, a Request for Approval of the Remediation Work Plan will be sent via email to the Bureau of Land Management (BLM). The BLM will be contacted, and the proposed remedial activities shall be cleared to proceed with the appropriate BLM representatives. Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Prior to confirmation sampling the NMOCD district office will be notified via email in accordance with Subsection D of 19.15.29.12 NMAC. Confirmation floor and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. The estimated volume of material to be remediated is approximately 1,576 cubic yards.

#### **ALTERNATIVE CONFIRMATION SAMPLING PLAN**

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 6. Ten (10) confirmation floor samples and fourteen (14) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 11,950 square feet.

Release Characterization and Remediation Work Plan October 24, 2022

ConocoPhillips

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to an accredited analytical laboratory for analysis of chloride, TPH, and BTEX.

#### SITE RECLAMATION AND RESTORATION PLAN

Once acceptable confirmation sample results are received the excavation will be backfilled with clean material to surface grade. The backfilled areas within the off-pad pasture areas will be seeded in the first favorable growing season to aid in revegetation. Based on the location of the Site, the seed mixture for LPC Sand/Shinnery Sites will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the Bureau of Land Management (BLM) will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The BLM seed mixture details and corresponding pounds pure live seed per acre are included in Appendix F.

#### **CONCLUSION**

ConocoPhillips proposes to begin remediation activities at the Site within 90 days of NMOCD plan approval. The Work Plan for the subsequent Incident (ID NAPP2202446534) at the site will be submitted under separate cover, along with the proper fee application.

As the release footprints generally coincide and the remediation work plans are nearly identical, should this Work Plan gain NMOCD approval prior to the NAPP2202446534 Work Plan, COP requests the opportunity to remediate both release extents with the approval of this Work Plan. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD. If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 217-7254 or Christian at (512) 338-2861.

Sincerely,

Tetra Tech, Inc.

Ryan C Dickerson

Project Lead

Christian M. Llull, P.G.

Project Manager

cc

Mr. Sam Widmer, RMR – ConocoPhillips Mr. Charles Beauvais, GPBU - ConocoPhillips Release Characterization and Remediation Work Plan October 24, 2022

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## LIST OF ATTACHMENTS

#### Figures:

Figure 1 – Overview Map

Figure 2 – Site Location/Topographic Map

Figure 3 – Approximate Release Extent and Initial Response

Figure 4 – Site Assessment

Figure 5 - Proposed Remediation Extent

Figure 6 – Alternative Confirmation Sampling Plan

#### Tables:

Table 1 – Summary of Analytical Results – Initial Soil Assessment

Table 2 – Summary of Analytical Results – Additional Soil Assessment

## Appendices:

Appendix A – C-141 Forms

Appendix B – Site Characterization Data

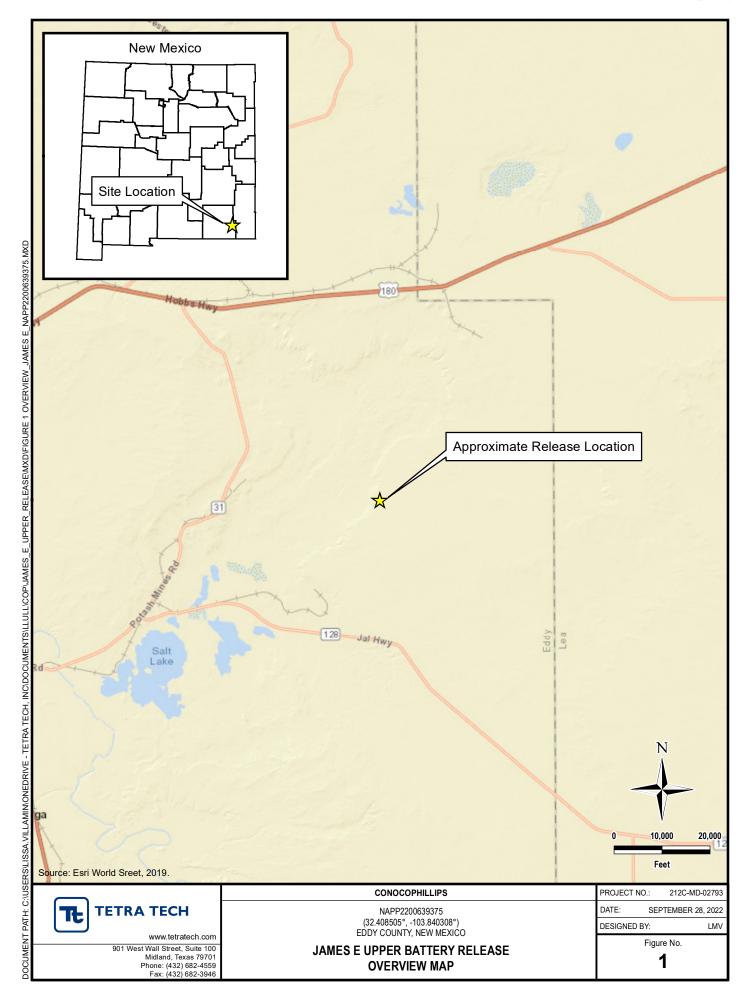
Appendix C – Initial Response Waste Manifests

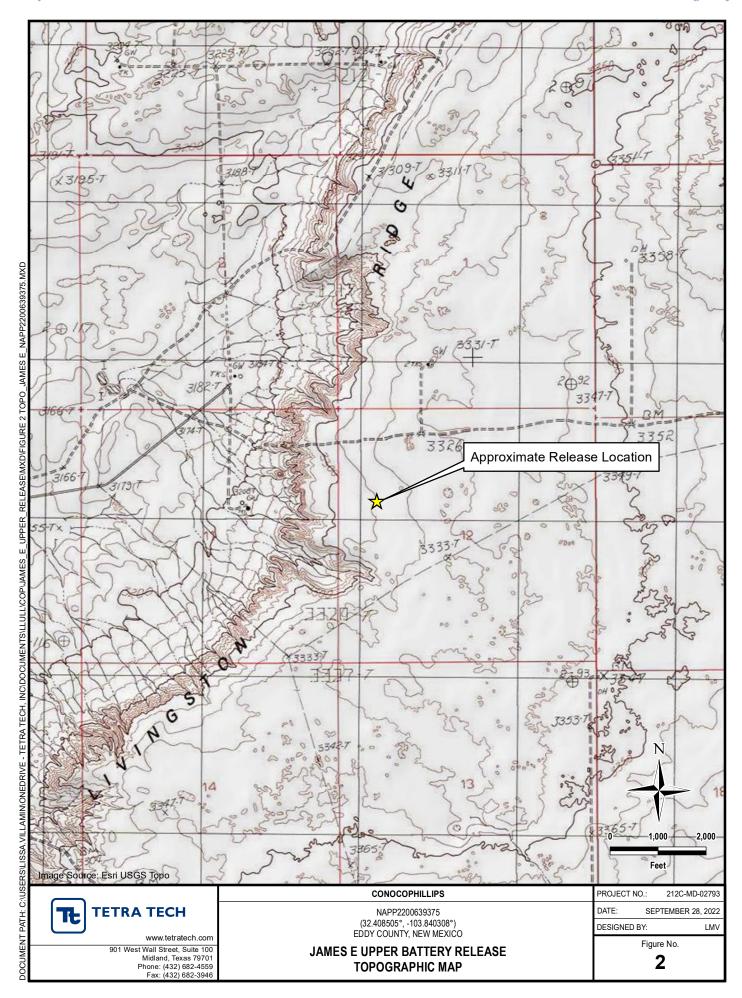
Appendix D – Photographic Documentation

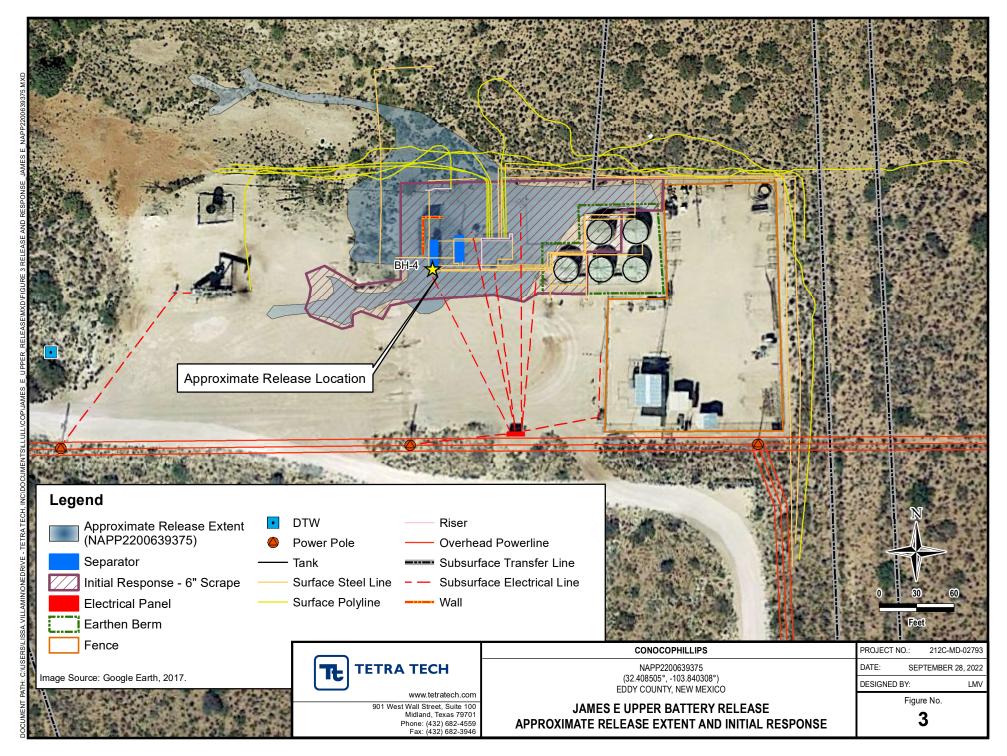
Appendix E - Laboratory Analytical Data

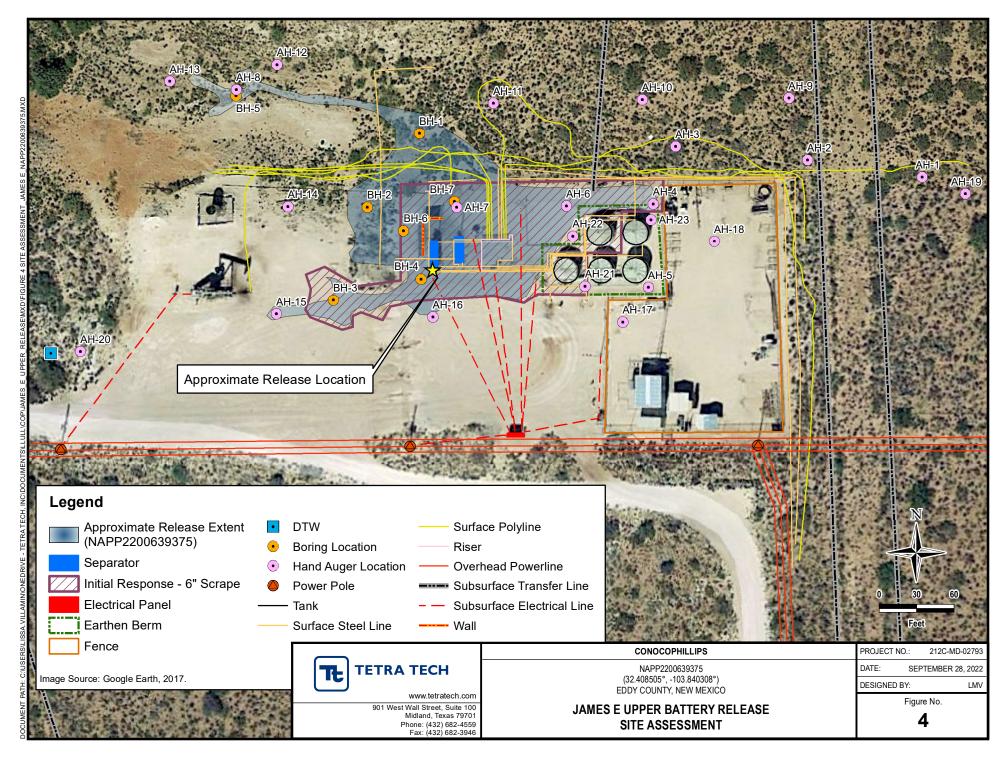
Appendix F - Seed Mixture Details

# **FIGURES**

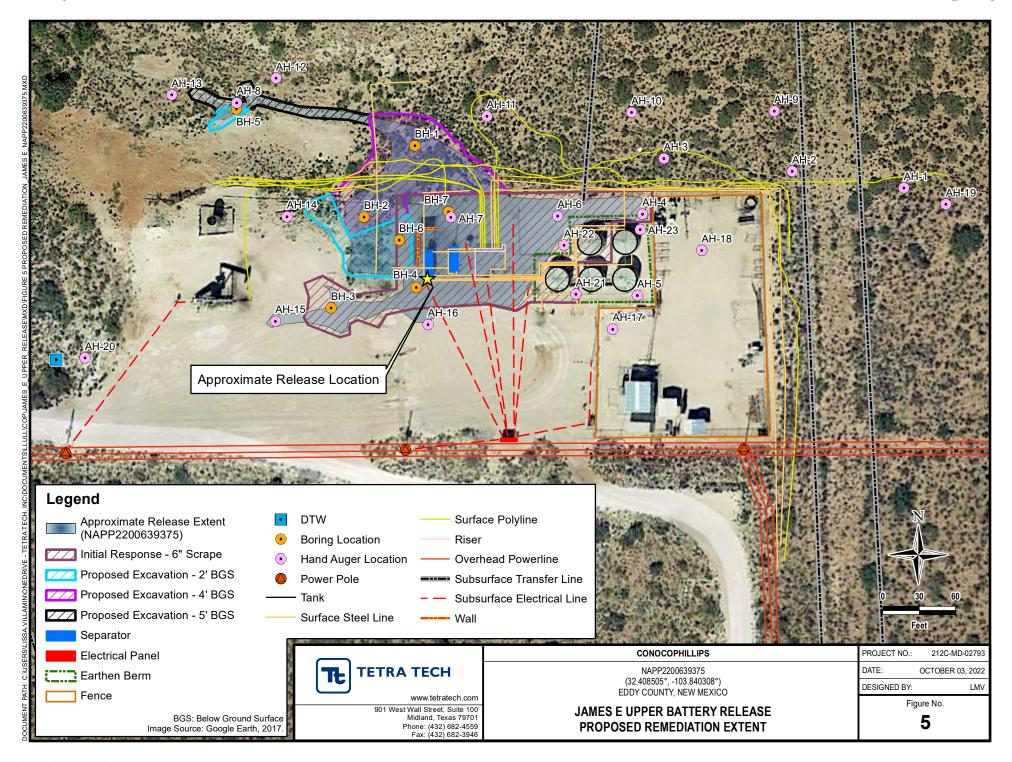


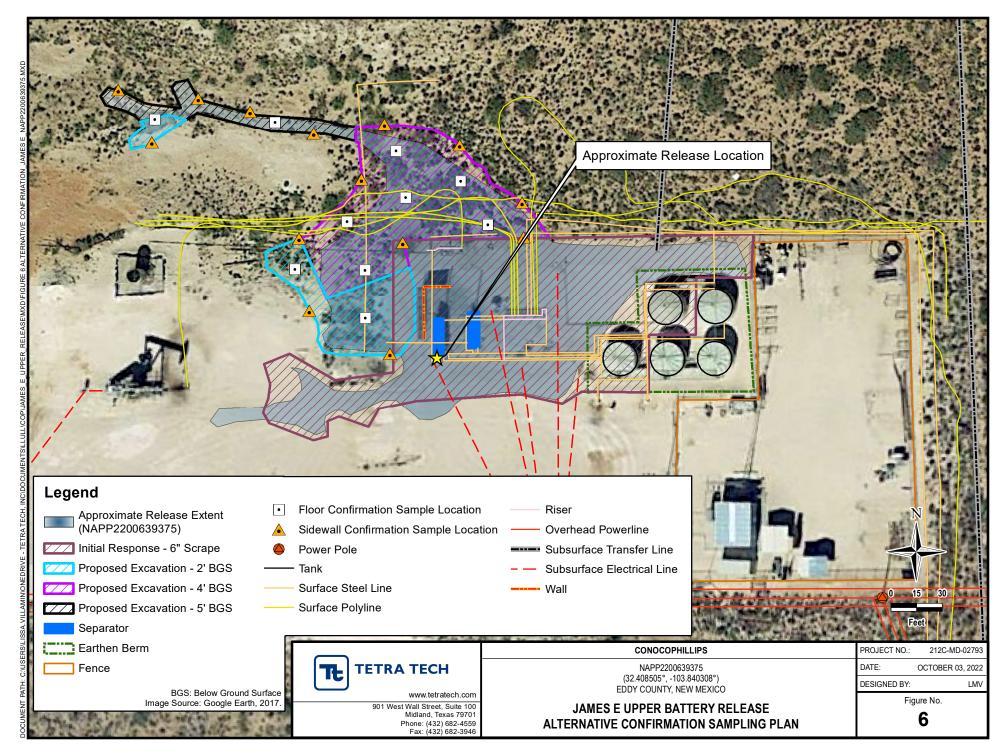






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# **TABLES**

Page 14 of 162 Received by OCD: 10/24/2022 8:33:36 AM

# TABLE 1 SUMMARY OF ANALYTICAL RESULTS SOIL ASSESSMENT - NAPP2200639375 CONOCOPHILLIPS JAMES E UPPER BATTERY RELEASE LEA COUNTY, NM

											ВТЕХ	2									TPH <sup>3</sup>			
		Sample Depth	Field Scree	ening Results	Chlorid	$e^1$	_						<b>-</b>		<b>.</b>	<b>T</b> EV	GRO		DRC	)	EXT DI	RO	(000,000)	Total TPH
Sample ID	Sample Date		Chloride	PID			Benzer	ie	Toluer	ne	Ethylben	zene	Total Xyl	enes	Total B	IEX	C <sub>6</sub> - C <sub>1</sub>	0	> C <sub>10</sub> - C <sub>28</sub>		> C <sub>28</sub> -	C <sub>36</sub>	(GRO+DRO)	(GRO+DRO+EXT DRO)
Sample 15	Sample Date	ft. bgs	p	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	mg/kg
		Closure Criteria for			<u>600 mg/</u>	_	<u>&lt; 10 mg,</u>	_							<u>&lt; 50 mg</u>	_								<u>100 mg/kg</u>
		Closure Criteria f	or Soils >4' bgs (	GW 50-100 ft):	<u>10,000 mg</u>	<u>g/kg</u>	< 10 mg/	<u>/kg</u>		1		1		1	< 50 mg	g/kg							<u>1000 mg/kg</u>	<u>2500 mg/kg</u>
AH-1	8/9/2022	0-1 2-3			16.0 32.0		< 0.050 < 0.050		< 0.050 < 0.050		< 0.050 < 0.050		< 0.150 < 0.150		< 0.300 < 0.300		< 10.0 < 10.0		< 10.0 < 10.0		< 10.0 < 10.0			<u>-</u>
	<u> </u>			1						<u> </u>		<u> </u>												
AH-2	8/9/2022	0-1 2-3			16.0 32.0		< 0.050 < 0.050		< 0.050 < 0.050		< 0.050 < 0.050		< 0.150 < 0.150		< 0.300 < 0.300		< 10.0 < 10.0		< 10.0 < 10.0		< 10.0 < 10.0			-
	<u> </u>	0-1			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			_
AH-3	8/9/2022	2-3			32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
	0 /0 /0 00	0-1			32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		279		220		279	499
AH-4	8/9/2022	2-3			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		43.1		35.5		43.1	78.6
AH-5	8/9/2022	0-1			16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AITS	0/ 3/ 2022	2-3			16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-6	8/9/2022	0-1			96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
	<u> </u>	2-3			96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-7	8/9/2022	0-1			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		22.5		11.7		22.5	34.2
	<u> </u>	2-3			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		113		59.9		113	173
	0 /0 /0000	0-1			352		< 0.500		< 0.500		4.05	GC-NC1		GC-NC1	28.7	GC-NC1	3,110		32,900		6,700		36,010	42,710
AH-8	8/9/2022	2-3 4-5			576 544		< 0.050 < 0.050		< 0.050 < 0.050		< 0.050 < 0.050		0.531 < 0.150	GC-NC1	0.531 < 0.300	GC-NC1	< 50.0 < 50.0		1470 1040		412 292		1470 1040	<b>1,882</b> 1,332
AH-9	0/0/2022								< 0.050		< 0.050				< 0.300									12.8
	8/9/2022	0-1			64.0		< 0.050						< 0.150		•		< 10.0		12.8		< 10.0		12.8	12.8
AH-10	8/9/2022	0-1			32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			
AH-11	8/9/2022	0-1			32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-12	8/9/2022	0-1			16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-13	8/9/2022	0-1			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-14	8/9/2022	0-1			32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		_	-
AH-15	8/9/2022	0-1			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		184		130		184	314
AH-16	8/9/2022	0-1			112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		15.2		< 10.0		15.2	15.2
AH-17	8/9/2022	0-1			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-18	8/9/2022	0-1			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
AH-19	8/9/2022	0-1			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0			-
NOTES:									<u> </u>															

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons GRO Gasoline range organics

DRO Diesel range organics

Method 8015M

Method SM4500Cl-B

Method 8021B

Bold and italicized values indicate exceedance of proposed Site RRALs.

Shaded rows indicate intervals proposed for excavation.

# **QUALIFIERS**:

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

# TABLE 2 SUMMARY OF ANALYTICAL RESULTS ADDITIONAL SOIL ASSESSMENT - NAPP2200639375 CONOCOPHILLIPS JAMES E UPPER BATTERY RELEASE LEA COUNTY, NM

								BTEX <sup>2</sup>							TPH <sup>3</sup>		
		Sample Depth	Field Screening Results	Chloride <sup>1</sup>					=				GRO	DRO	EXT DRO	(000 000)	Total TPH
			Chloride PID		Benzene	Toluene	Ethylben	nzene	Total Xyl	enes	Total B	TEX	C <sub>6</sub> - C <sub>10</sub>	> C <sub>10</sub> - C <sub>28</sub>	> C <sub>28</sub> - C <sub>36</sub>	(GRO+DRO)	(GRO+DRO+EXT DRO)
Sample ID	Sample Date	ft. bgs	ppm	mg/kg Q	mg/kg O	mg/kg C	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg Q	mg/kg	Q mg/kg O	mg/kg	mg/kg
		Closure Criteria fo	r Pasture / Off-Pad Soils 0-4' bgs:	<u>600 mg/kg</u>	< 10 mg/kg						< 50 mg	<u>/kg</u>					<u>100 mg/kg</u>
		Closure Criteria	for Soils >4' bgs (GW 50-100 ft):	<u>10,000 mg/kg</u>	<u>&lt; 10 mg/kg</u>						< 50 mg	<u>/kg</u>				1000 mg/kg	<u>2500 mg/kg</u>
		0-1		208	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	128	76.7	128	205
		2-3		896	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	13.0	< 10.0	13	13.0
		4-5		1,410	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		6-7		1,390	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
BH-1	9/13/2022	9-10		1,710	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		14-15		1,630	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		19-20		544	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		24-25		560	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		29-30		96.0	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		0-1		672	< 0.050	< 0.050	< 0.050	GC-NC	0.746	GC-NC1	0.746	GC-NC1	348	14,100	3,630	14,448	18,078
		2-3		608	< 0.050	< 0.050	< 0.050	GC-NC	< 0.150		< 0.300		31.5	1,760	470	1,792	2,262
BH-2	9/14/2022	4-5		688	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		13.1	809	241	822.1	1,063
		6-7		1,140	< 0.050	< 0.050	< 0.050	GC-NC	< 0.150		< 0.300		< 10.0	330	97.3	330	427
		9-10		1,040	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	164	54.2	164	218
		0-1		128	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	28.6	< 10.0	28.6	28.6
		2-3		496	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
BH-3	9/14/2022	4-5		960	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		6-7		768	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		9-10		416	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		0-1		1,960	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	157	42.0	157	199
		2-3		496	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	19.9	< 10.0	19.9	19.9
BH-4	9/14/2022	4-5		656	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		6-7		896	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		9-10		640	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		0-1		496	< 0.050	< 0.050	< 0.050	GC-NC	0.942	GC-NC1	0.942	GC-NC1	225	6,000	1,100	6,225	7,325
		2-3		288	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	55.8	17.3	55.8	73.1
		4-5		624	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	82.5	20.4	82.5	103
		6-7		240	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	17.7	< 10.0	17.7	17.7
BH-5	9/14/2022	9-10		240	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		14-15		784	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	40.1	< 10.0	40.1	40.1
		19-20		2,800	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		24-25		2,040	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		29-30		1,020	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
		0-1		4,240	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 50.0	2060	615	2060	2,675
		2-3		1,200	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	397	172	397	569
вн-6	9/14/2022	4-5		640	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	179	37.5	179	217
		6-7		656	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	44.0	10.3	44	54.3
à					< 0.050	< 0.050	< 0.050	1	< 0.150		< 0.300		< 10.0	45.3	< 10.0	45.3	45.3
		9-10		592	< 0.030	10.030	1 0.030										
		9-10		80.0	< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	64.0	11.8	64	75.8
									< 0.150 < 0.150		< 0.300 < 0.300		< 10.0 < 10.0	64.0 < 10.0	11.8	64 -	75.8 -
BH-7	9/14/2022	0-1		80.0	< 0.050	< 0.050	< 0.050							1		64 - -	
BH-7	9/14/2022	0-1 2-3		80.0 64.0	< 0.050 < 0.050	< 0.050 < 0.050	< 0.050 < 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	64 - - -	-

# TABLE 2

# SUMMARY OF ANALYTICAL RESULTS

# ADDITIONAL SOIL ASSESSMENT - NAPP2200639375

# CONOCOPHILLIPS

# JAMES E UPPER BATTERY RELEASE

# LEA COUNTY, NM

		Sample Depth	Field Screening Results							BTEX <sup>2</sup>							TPH <sup>3</sup>		
Sample ID Sa			Field Screening	rieiu screening results		Chloride <sup>1</sup>		Benzene Toluene		Ethylbenzene		Total Xylenes		Total BTEX		DRO	EXT DRO	(GRO+DRO)	Total TPH
	Sample Date		Chloride	PID		Di	Belizelle	Toldelle	Littyibelizelle		Total Aylelles		TOTAL BIEN		C <sub>6</sub> - C <sub>10</sub>	> C <sub>10</sub> - C <sub>28</sub>	> C <sub>28</sub> - C <sub>36</sub>	(GKO+DKO)	(GRO+DRO+EXT DRO)
Sample 15	Sample Date	ft. bgs	ppn	n	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	mg/kg
		Closure Criteria for	r Pasture / Off-Pad S	Soils 0-4' bgs:	<u>600 mg</u> ,	00 mg/kg < 10 mg/							< 50 mg/	<u>′kq</u>					<u>100 mg/kg</u>
		Closure Criteria f	for Soils >4' bgs (GW	/ 50-100 ft):	<u>10,000 m</u>	g/kg	<u>&lt; 10 mg/kg</u>						< 50 mg/	<u>′kg</u>				1000 mg/kg	<u>2500 mg/kg</u>
AH-20	9/26/2022	0-1			16.0		< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
AH-21	9/12/2022	0-1			32.0		< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	< 10.0	< 10.0	-	-
AH-22	9/12/2022	0-1			< 16.0		< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	50.3	27.3	50.3	77.6
AH-23	9/12/2022	0-1			< 16.0		< 0.050	< 0.050	< 0.050		< 0.150		< 0.300		< 10.0	247	166	247	413

NOTES:

ft. Feet Bold and italicized values indicate exceedance of proposed Site RRALs.

bgs Below ground surface Shaded rows indicate intervals proposed for excavation.

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons QUALIFIERS:

GRO Gasoline range organics GC-NC 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis

Diesel range organics and are reported as ND.

Method SM4500Cl-B GC-NC1 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.

Method 8021B
 Method 8015M
 and are biased high with interfering compounds.

# **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	NAPP2200639375
District RP	
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible	Party	ConocoPhil	lips		OGRID					
Contact Nam	ne	Kelsy Wa	ggaman		Contact Tele	phone	(432) 688 - 9057			
Contact email Kelsy.Waggaman@ConocoPhillips.com					n Incident # (assigned by OCD) NAPP2200639375					
Contact mail	ling address	600 West III	inois Avenue, N	Midlar	nd, Texas 79	9701				
					. ~					
			Location	of R	elease Sou	ırce				
Latitude '	32.408	333			Longitude	-103.8	40278			
Latitude			(NAD 83 in deci		grees to 5 decimal			_		
Site Name		Jamas E Hr	nor.		Site Type	Tank	Battery			
	D' 1	James E Up	•				Dattery			
Date Release	Discovered	December 2	20, 2021		API# (if applic	able)				
	Ι α	m 1.								
Unit Letter	Section	Township	Range		County					
E	12	22S	30E		Eddy	′				
Surface Owner	Ctoto	■ Fadaral □ Tr	ibal  Private (A	James			,			
Surface Owner	r:	rederal III	ibai 🔛 Private (N	vame: _			)			
			Nature and	Vol	ume of Ro	elease				
Crude Oil				calculati			volumes provided below)			
Crude Off	l	Volume Release	d (bbls) 3			Volume Recov	vered (bbls) 2			
■ Produced	Water	Volume Release	d (bbls) 21			Volume Recov	vered (bbls) 0			
		Is the concentrat	ion of dissolved ch	hloride	in the	Yes No	)			
		produced water	>10,000 mg/l?							
☐ Condensa	ate	Volume Release	d (bbls)		,	Volume Recov	vered (bbls)			

Cause of Release

Natural Gas

Other (describe)

The release was caused by a failed pressure relief valve on the production separator. The release occurred on and off pad. A vacuum truck was dispatched to remove all freestanding fluids. ConocoPhillips will have the spill area evaluated for any possible impact from the release.

Volume Recovered (Mcf)

Volume/Weight Recovered (provide units)

Volume Released (Mcf)

Volume/Weight Released (provide units)

Received by OCD: 10/24/2022/8:33:36 AM State of New Mexico
Page 2 Oil Conservation Division

Page 19eof 162

Incident ID	NAPP2200639375
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
☐ Yes ■ No	
If YES, was immediate no	otice 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
■ The source of the rele	ease has been stopped.
	s been secured to protect human health and the environment.
Released materials ha	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
has begun, please attach	IAC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance o and/or regulations.	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have ate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name Brittar	ny N. Esparza <u>Environmental Technician</u>
Signature:	Title: Environmental Technician  Date: 1/6/2022
email: besparza@	Date: 1/6/2022  Concho.com  Telephone: (432) 221-0398
OCD Only	
Received by: Ramona N	Marcus Date: 1/6/2022

Received by OCD: 10/24/2022 8:33:36 AM

Page 20 of 162

	L48 Spill Volume Estimate Form												
Received by OCD	V: 1/6/2022 17	1:05:27adit//Name & Number: J.	James E Upper						Page 3 of 4				
		Asset Area:	Cabin Lake, Hobbs										
	F	Release Discovery Date & Time: D	December 20th, 9:1	15 am			NAPP22	00639375					
Release Type: oil mixture													
Provide any known details about the event: Spill originated from the pressure releave valve on the production separator.													
	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	52.0	40.0	1.00	10.50%	30.853	3.240	13.00%	0.421	2.818				
Rectangle B	120.0	180.0	0.25	10.50%	80.100	8.411	13.00%	1.093	7.317				
Rectangle C	60.0	14.0	3.00	15.16%	37.380	5.667	13.00%	0.737	4.930				
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				
Released to Imagi	ing: 1/6/2022	4:44:30 PM			0.000	0.000		0.000	0.000				
					Total Volume Release:	17.317		2.251	15.066				

Released to Imaging: 12/6/2022 4:02:43 PM

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

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 70845

## **CONDITIONS**

Operator:	OGRID:
COG OPERATING LLC	229137
	Action Number:
Midland, TX 79701	70845
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	/ Condition	Condition Date
rmarcus	None	1/6/2022

	Page 22 of 16	52
Incident ID	NAPP2200639375	
District RP		
Facility ID		
Application ID		

# Site Assessment/Characterization

What is the shallowest depth to groundwater beneath the area affected by the release?	>50 (ft bgs)		
Did this release impact groundwater or surface water?	☐ Yes 🗹 No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes 🗹 No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes 🗸 No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes 🗸 No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes 🗸 No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes 🔽 No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes 🗹 No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes 🗸 No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes 🗹 No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes 🗹 No		
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes 🗹 No		
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes 🔽 No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			

Ch	aracterization Report Checklist: Each of the following items must be included in the report.
-	
l —	
	Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
V	Field data
V	Data table of soil contaminant concentration data
V	Depth to water determination
V	Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
V	
V	Photographs including date and GIS information
V	
V	Laboratory data including chain of custody
1	

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.

Received by OCD: 10/24/2022 8:33:36 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Page 23 of 162

Incident ID	NAPP2200639375
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: Sam widmer	Title: Principal Program Manager		
Signature: Sam Widmer	Date: Oct-17-2022		
email:5454CA5BAD33498 Sam.Widmer@conocophillips.com	Telephone:281-206-5298		
OCD Only			
Received by: Jocelyn Harimon	Date: 10/24/2022		

Matate of New Mexico

Incident ID	NAPP2200639375
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.				
<ul> <li>✓ Detailed description of proposed remediation technique</li> <li>✓ Scaled sitemap with GPS coordinates showing delineation points</li> <li>✓ Estimated volume of material to be remediated</li> <li>✓ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>✓ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>				
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: Sam Widmer Title: Principal Program Manager				
Signature: Sam Widmer Date: Oct-17-2022				
email: Sam.Widmer@conocophillips.com Telephone: 281-206-5298				
OCD Only				
Received by:Jocelyn Harimon Date:10/24/2022				
☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved				
Signature: Dannifer Nobili Date: 12/06/2022				

# **APPENDIX B Site Characterization Data**



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

water right file.) (In feet) closed) **POD** Sub-QQQ Depth Depth Water **Well Water Column POD Number** Code basin County 64 16 4 Sec Tws Rng **Distance** C 04528 POD1 **CUB** 1 3 3 12 22S 30E 608886 3585625 703 3585146\* 640 C 02749 **CUB** ED 1 1 1 18 22S 31E 610556 1899 C 02750 **CUB** ED 1 1 1 18 22S 31E 610556 3585146\* 741 1899 C 02751 CUB ED 1 1 18 22S 31E 610556 3585146\* 1899 637 3 1 3 31 21S 31E 3588970\* C 03003 CUB ED 610511 3034 650 4 2 4 06 22S C 03002 CUB ED 31E 611933 3587375\* 3070 668 C 03234 EXPLORE **CUB** ED 1 2 3 35 21S 30E 607695 3589207\* 3201 410 **CUB** ED 2 2 3 15 22S 30E 606282 3386 651 C 02723 3584363\* C 02950 EXPL **CUB** ED 4 2 4 23 22S 30E 608740 3582576\* 3745 845 1 3 3 24 22S 30E C 02637 **CUB** ED 608950 3582377\* 3932 759 C 02748 CUB ED 1 2 3 17 22S 31E 612576 3584364\* 4023 3856 C 02683 CUB ED 1 1 20 22S 31E 612184 3583356\* 4302 840 20 22S C 02413 CUB ED 2 1 31E 612586 3583560\* 4475 737 C 02682 CUB ED 08 22S 31E 613566 3585379\* 4606 4400 4 4 C 03112 EXPLORE **CUB** ED 09 22S 31E 613753 3586590\* 3567 3 1 1 4707 C 03221 EXPLORE CUB ED 30 22S 610995 3581935\* 1 2 1 31F 4784 651 C 03015 **CUB** ED 1 4 3 22 22S 30E 606099 3582353\* 4937 1316 262 1054

Average Depth to Water:

262 feet

Minimum Depth:

262 feet

Maximum Depth:

262 feet

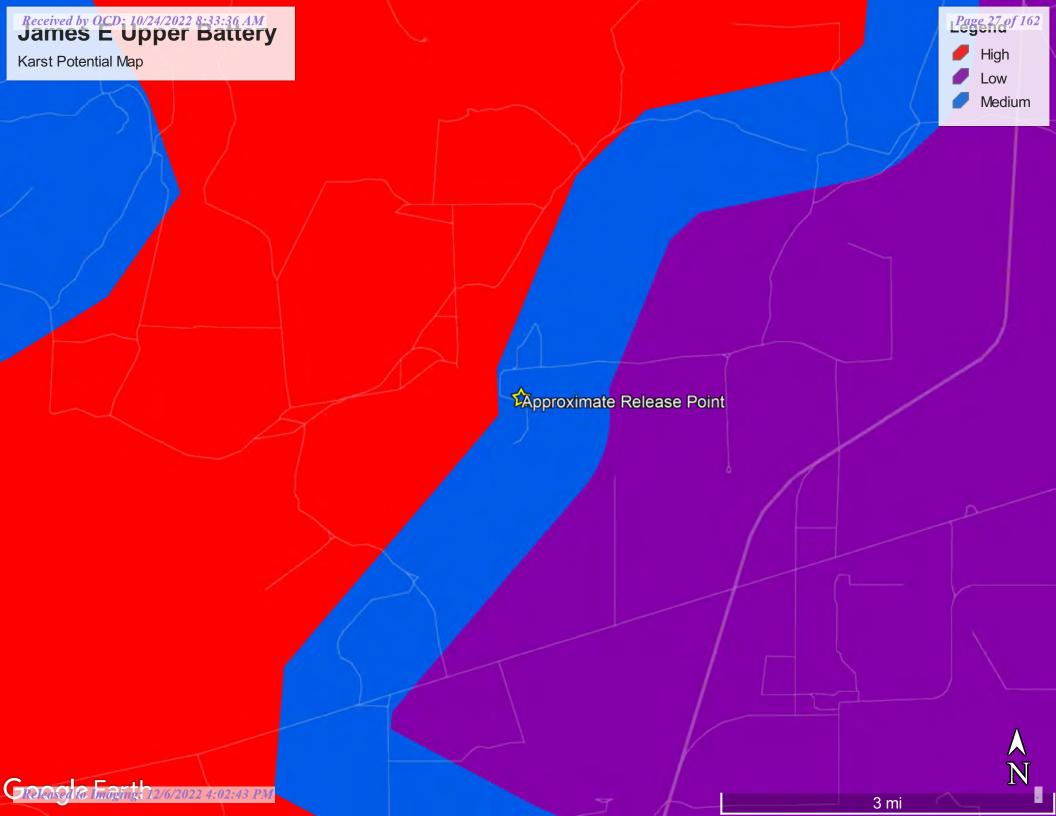
**Record Count: 17** 

**UTMNAD83 Radius Search (in meters):** 

Easting (X): 609053.88 Northing (Y): 3586308.39 Radius: 5000

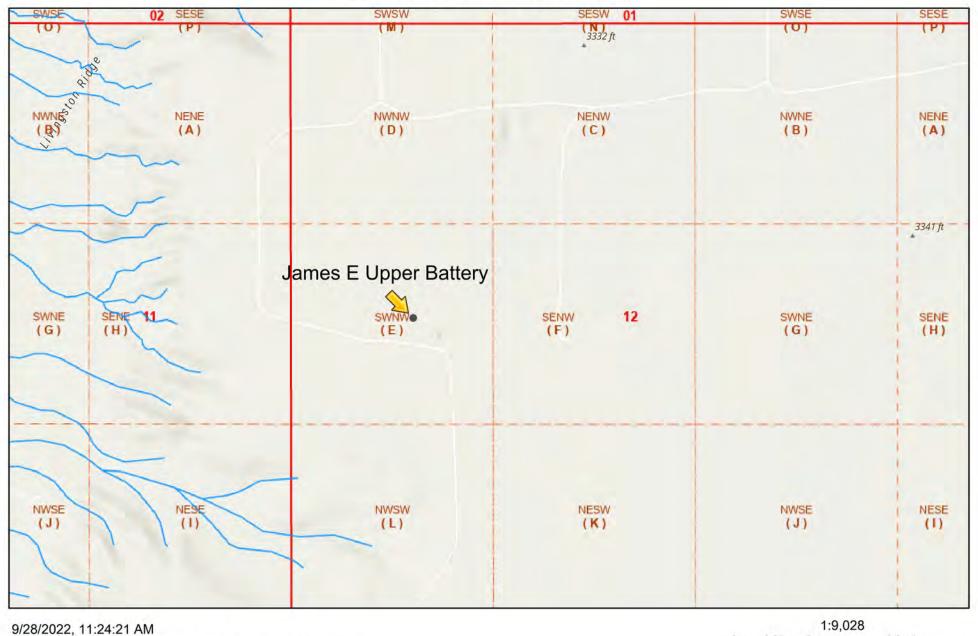
#### \*UTM location was derived from PLSS - see Help

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



Received by OCD: 10/24/2022 8:33:36 AM

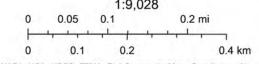
# NMOCD Waterbodies Map



Override 1

OSE Streams

PLSS First Division

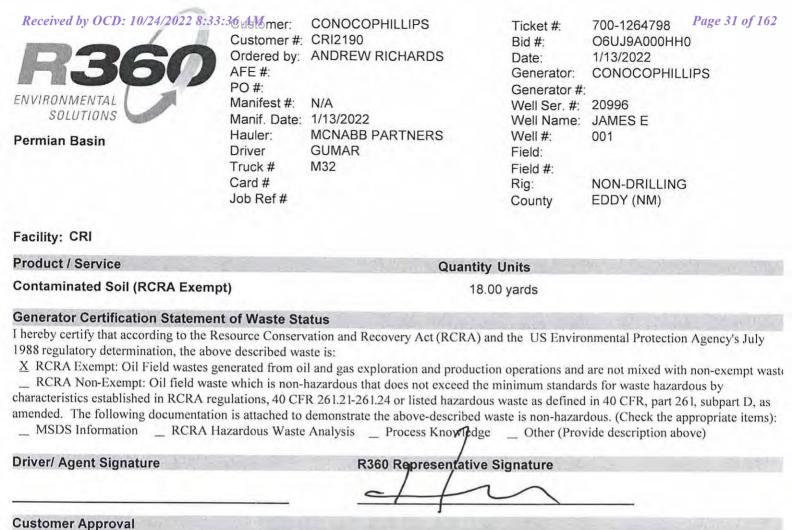


Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap,

New Mexico Oil Conservation Division

212C-MD-02793	TE TETRA T	TECH	LOG OF BORING DTW Boring	Page 1 of 1	
Project Name: James E Upper Battery Release					
Borehole Location: 0	Borehole Location: GPS Coordinates: 32.408324°, -103.841301°  Surface Elevation: 3311 ft				
Borehole Number: [	DTW Boring	Bore	shole neter (in.): 8 Date Started: 9/8/2022 Date Finished:	9/8/2022	
PE ELD (qpm)	(ppm) /ERY (%) TENT (%)	EX	WATER LEVEL OBSERVATIONS While Drilling	RY_ft	
DEPTH (ft)  OPERATION TYPE  SAMPLE  CHLORIDE FIELD  SCREENING (ppm)		PRY DENSITY (pcf)    LIQUID LIMIT   PLASTICITY INDEX   MINUS NO. 200 (%)	MATERIAL DESCRIPTION  (#)  HE DESCRIPTION	REMARKS	
10   15   20   25   30   35   35   40			-SM- SILTY SAND: Reddish brown, medium dense, dry occasional caliche @ 0-1'.  -SM- SILTY SAND: Tan, medium dense, with occasional caliche gravel, drySP- SAND: Red, loose, dry.  -SP- SAND: Red, medium dense, with occasional caliche pebbles, drySP- SAND: Light red, medium dense, with occasional caliche, dry.  -SW- SAND: Red, medium dense, dry.		
45 50 55			-CL- SILTY CLAY: Reddish brown, dense, dry.  45  -SM- SILTY SAND: Tan, dense, dry.		
Bottom of borehole at 55.0 feet.					
Sampler Types: Spling Spon She Bulk Sam Gra Sam	Vane Shear Discrete Sample	Operation Types:  Mud Rotary Continuous Flight Auger Wash Rotary  Drilling Equipment:	Hand Auger Air Rotary Direct Push Core Barrel  Driller: Scarborough Drilling	ogle Earth	

# **APPENDIX C Initial Response Waste Manifests**



THIS IS NOT AN INVOICE!

Date:

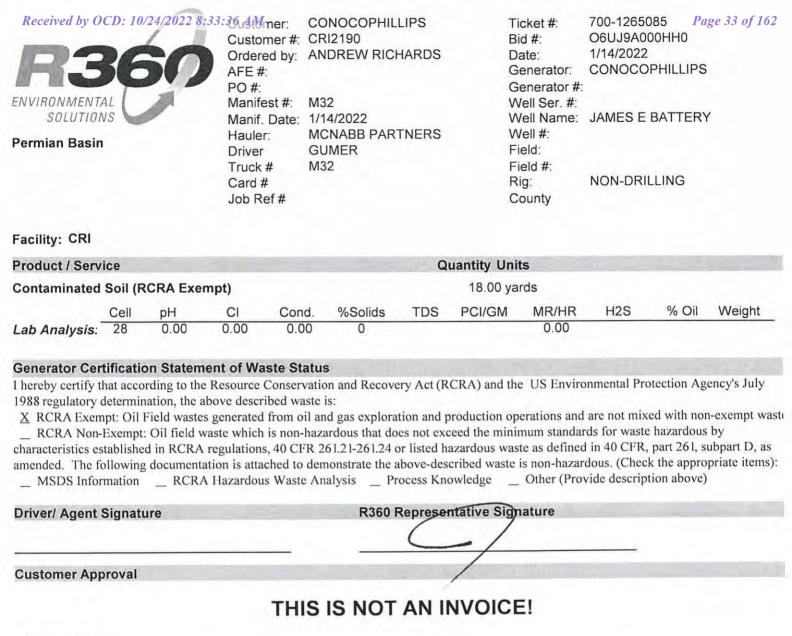
t6UJ9A01LW9D

Received by OCD: 10/24/2022 8:33:36 AMmer: Page 32 of 162 CONOCOPHILLIPS 700-1265043 Ticket #: Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS Date: 1/14/2022 AFE #: Generator: CONOCOPHILLIPS PO # Generator #: Manifest #: NA Well Ser. #: SOLUTIONS Manif. Date: 1/14/2022 Well Name: JAMES E BATTERY Hauler: MCNABB PARTNERS Well #: Permian Basin Driver **GUMAR** Field: Truck # M32 Field #: Card # Rig: NON-DRILLING Job Ref# County Facility: CRI Product / Service **Quantity Units** Contaminated Soil (RCRA Exempt) 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: X 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** 

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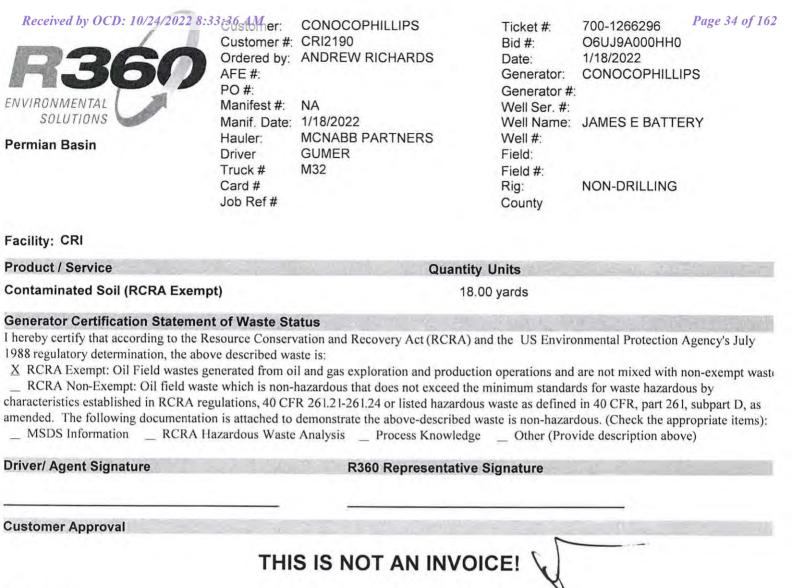
Date:

t6UJ9A01LWP7

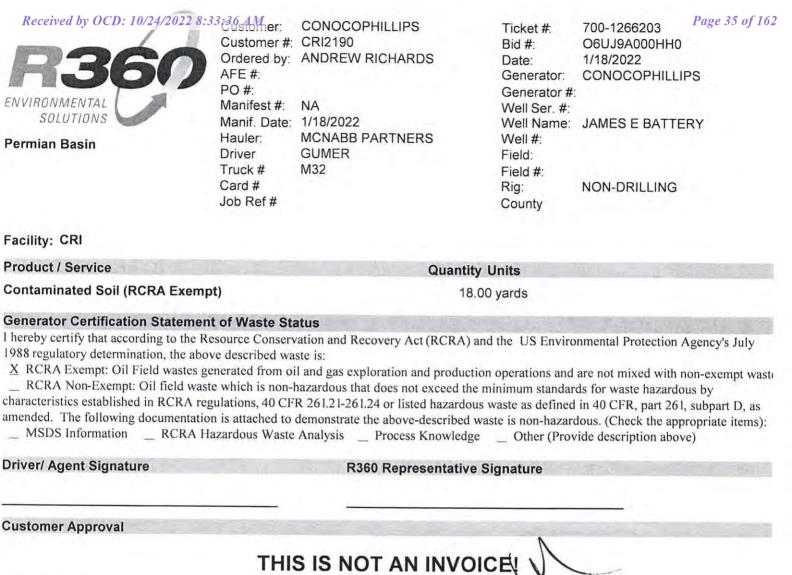


Date:

t6UJ9A01LWRD 1/14/2022 12:16:22PM



Date:



Date:

Received by OCD: 10/24/2022 8:33:36 As Momer: Page 36 of 162 CONOCOPHILLIPS 700-1266137 Ticket #: Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS Date: 1/18/2022 AFE #: Generator: CONOCOPHILLIPS PO #: Generator #: Manifest #: NA Well Ser. #: SOLUTIONS Manif. Date: 1/18/2022 Well Name: JAMES E BATTERY MCNABB PARTNERS Hauler: Well #: Permian Basin Driver GUMAR Field: Truck # M32 Field #: Card # Rig: NON-DRILLING

Facility: CRI

Product / Service	Quantity Units	
Contaminated Soil (RCRA Exempt)	18.00 yards	

County

#### **Generator Certification Statement of Waste Status**

Job Ref#

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:

X 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:	

Received by OCD: 10/24/2022 8:33:36 AMmer: Page 37 of 162 CONOCOPHILLIPS 700-1266730 Ticket #: Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS Date: 1/19/2022 AFE #: Generator: CONOCOPHILLIPS PO #: Generator #: Manifest #: NA Well Ser #: SOLUTIONS Manif. Date: 1/19/2022 Well Name: JAMES E BATTERY Hauler: MCNABB PARTNERS Well #: Permian Basin Driver DANNY Field: Truck # M02 Field #: Card # Rig: NON-DRILLING Job Ref# County Facility: CRI Product / Service **Quantity Units** Contaminated Soil (RCRA Exempt) 10.00 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: X 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

THIS IS NOT AN INVO

Date:

t6UJ9A01LZPO

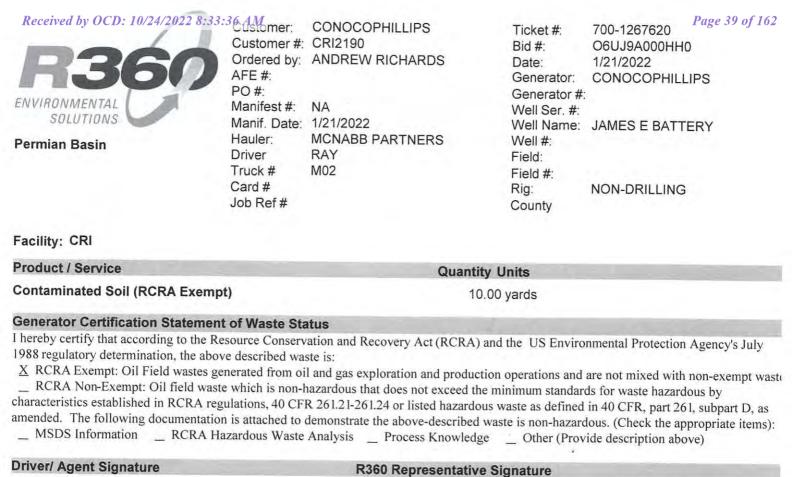
**Customer Approval** 

Approved By:

Received by OCD: 10/24/2022 8:33:36 AM Customer: Page 38 of 162 CONOCOPHILLIPS Ticket #: 700-1266648 Customer #: CRI2190 O6UJ9A000HH0 Bid #: Ordered by: ANDREW RICHARDS 1/19/2022 Date: CONOCOPHILLIPS Generator: AFE #: PO #: Generator #: ENVIRONMENTAL Manifest #: NA Well Ser. #: SOLUTIONS Manif. Date: 1/19/2022 Well Name: JAMES E BATTERY Hauler: MCNABB PARTNERS Well #: Permian Basin Driver DANNY Field: Truck # M<sub>0</sub>2 Field #: Card # **NON-DRILLING** Rig: Job Ref# County Facility: CRI Product / Service **Quantity Units** Contaminated Soil (RCRA Exempt) 10.00 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: X 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:

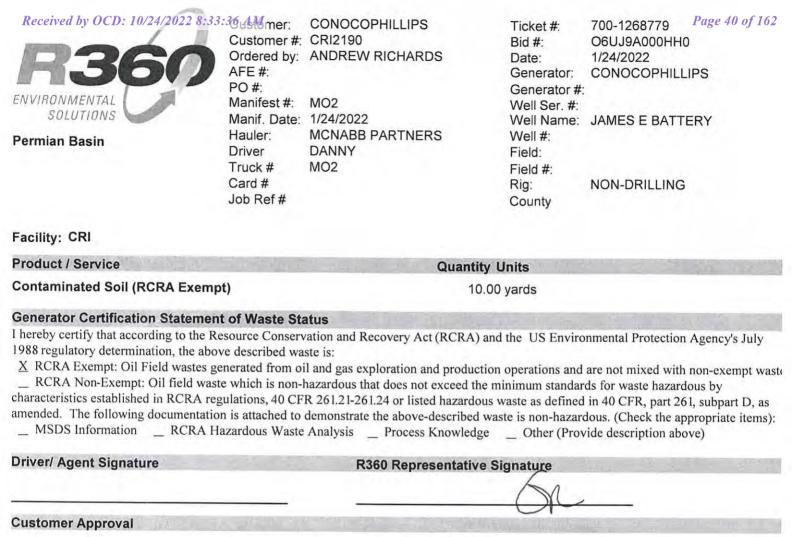


THIS IS NOT AN INVOICE!

Date:

**Customer Approval** 

Approved By:



THIS IS NOT AN INVOICE!

Date:

t6UJ9A01M2QD

Approved By:

Received by OCD: 10/24/2022 8:33:36 AMomer: Page 41 of 162 CONOCOPHILLIPS Ticket #: 700-1269227 Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS Date: 1/25/2022 AFE #: CONOCOPHILLIPS Generator: PO #: Generator #: Manifest #: NA Well Ser. #: SOLUTIONS Manif. Date: 1/25/2022 Well Name: JAMES E BATTERY MCNABB PARTNERS Hauler: Well #: Permian Basin Driver DANNY Field: Truck # M02 Field #: Card # Rig: NON-DRILLING Job Ref# County Facility: CRI Product / Service **Quantity Units** Contaminated Soil (RCRA Exempt) 10.00 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: X 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): \_ RCRA Hazardous Waste Analysis \_ Process Knowledge \_ Other (Provide description above) MSDS Information **Driver/ Agent Signature** 

R360 Representative Signature

**Customer Approval** 

## THIS IS NOT AN INVOICE!

Approved By: Date:

Received by OCD: 10/24/2022 8:33:36 As Momer: 700-1269900 Page 42 of 162 CONOCOPHILLIPS Ticket #: Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS 1/27/2022 Date: AFE #: Generator: CONOCOPHILLIPS PO #: Generator #: Manifest #: N/A Well Ser. #: SOLUTIONS Well Name: JAMES E BATTERY Manif. Date: 1/27/2022 Hauler: MCNABB PARTNERS Well #: Permian Basin Driver DANNY Field: Truck # M02 Field #: Card # NON-DRILLING Rig: Job Ref# County Facility: CRI Product / Service **Quantity Units** 

## **Generator Certification Statement of Waste Status**

Completion Fluids (NON-INJ)

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:

10.00 bbl

X 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:

t6UJ9A01M40E 1/27/2022 12:18:24PM

Received by OCD: 10/24/2022 8:33:36 A Momer: Page 43 of 162 CONOCOPHILLIPS 700-1269971 Ticket #: Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS Date: 1/27/2022 AFE #: Generator: CONOCOPHILLIPS PO #: Generator #: Manifest #: N/A Well Ser. # SOLUTIONS Manif. Date: 1/27/2022 JAMES E BATTERY Well Name: Hauler: MCNABB PARTNERS Well #: Permian Basin Driver DANNY Field: Truck # M<sub>0</sub>2 Field #: Card # Rig: NON-DRILLING Job Ref# County Facility: CRI Product / Service **Quantity Units** Contaminated Soil (RCRA Exempt) 10.00 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: X 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:

Received by OCD: 10/24/2022 8:33:36 AMmer: Page 44 of 162 CONOCOPHILLIPS 700-1274187 Ticket #: Customer #: CRI2190 Bid #: O6UJ9A000HH0 Ordered by: ANDREW RICHARDS Date: 2/11/2022 AFE #: Generator: CONOCOPHILLIPS PO #: Generator #: Manifest #: NA Well Ser. #: SOLUTIONS Manif. Date: 2/11/2022 Well Name: JAMES E BATTERY Hauler: MCNABB PARTNERS Well #: Permian Basin Driver JOE Field: M33 Truck # Field #: Card # NON-DRILLING Rig: Job Ref# County Facility: CRI Product / Service **Quantity Units** Contaminated Soil (RCRA Exempt) 3.00 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: X 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) **R360 Representative Signature** Driver/ Agent Signature **Customer Approval** 

### THIS IS NOT AN INVOICE!

Approved By: \_\_\_\_\_ Date: \_\_\_\_

# APPENDIX D Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View North. Southern portion of December 2021 release extent, NAPP2200639375.	1
	SITE NAME	ConocoPhillips James E Upper Battery Release	12/20/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View East. Southwestern extent of December 2021 release, NAPP2200639375.	2
	SITE NAME	ConocoPhillips James E Upper Battery Release	12/20/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View Northwest. December 2021 release extent south horizontal tanks, NAPP2200639375.	3
	SITE NAME	ConocoPhillips James E Upper Battery Release	12/20/2021



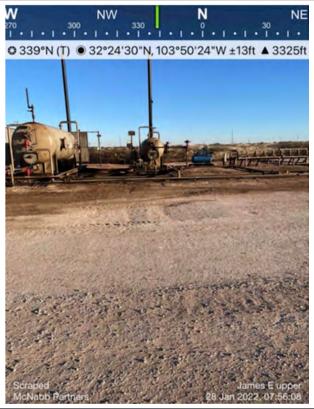
TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View West. Southern extent of January 2022 release in, NAPP2202446534.	4
	SITE NAME	ConocoPhillips James E Upper Battery Release	1/3/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View North-Northeast. January 2022 release area east of horizontal tank, NAPP2202446534.	5
	SITE NAME	ConocoPhillips James E Upper Battery Release	1/3/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View East-Northeast. January 2022 release area west of tank battery, NAPP2202446534.	6
	SITE NAME	ConocoPhillips James E Upper Battery Release	1/3/2022



	TETRA TECH, INC.	DESCRIPTION	View North. Release area south of horizontal tanks post- scrape.	7
PROJECT NO. 212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	1/28/2022	



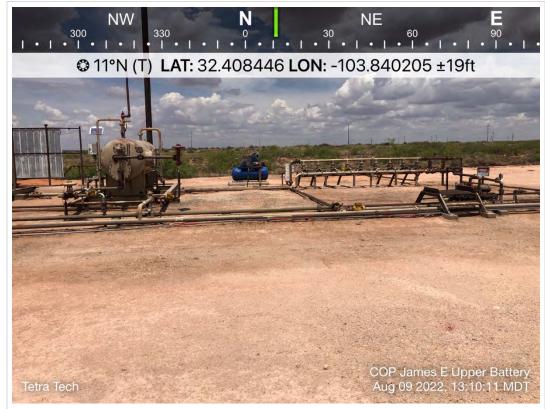
TETRA TECH, INC.	DESCRIPTION	View North. Release area southwest of horizontal tanks post-scrape.	8
PROJECT NO. 212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	1/28/2022



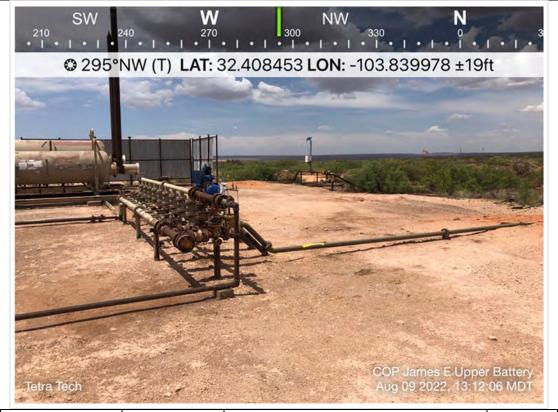
TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View North. Release area west of horizontal tanks post- scrape.	9
	SITE NAME	ConocoPhillips James E Upper Battery Release	1/28/2022



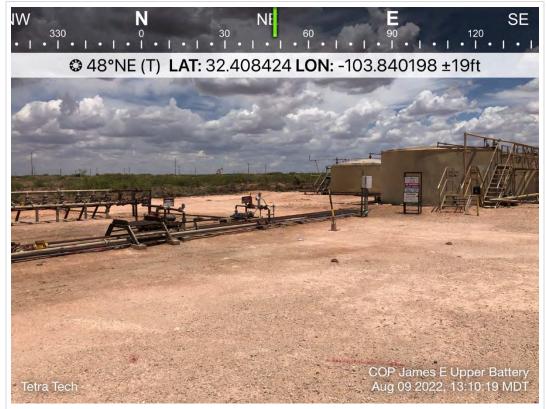
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West-Northwest. Current Site conditions. Release area on western pad post-scrape.	10
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02793	DESCRIPTION	View North. Current Site conditions. Release area east of horizontal tanks.	11
	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



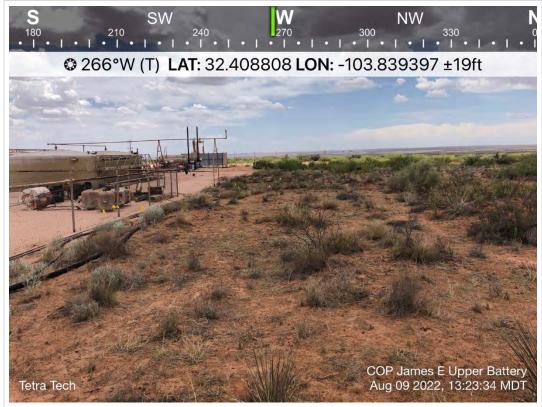
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West-Northwest. Current Site conditions. Release area north of horizontal tanks.	12
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West-Northwest. Current Site conditions. Release area west of tank battery.	13
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



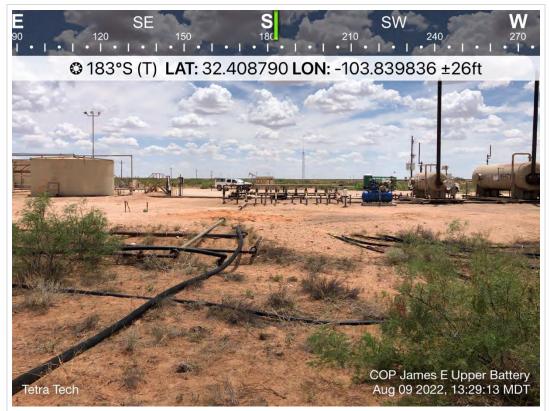
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West-Northwest. Current Site conditions. Release area west of tank battery.	14
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



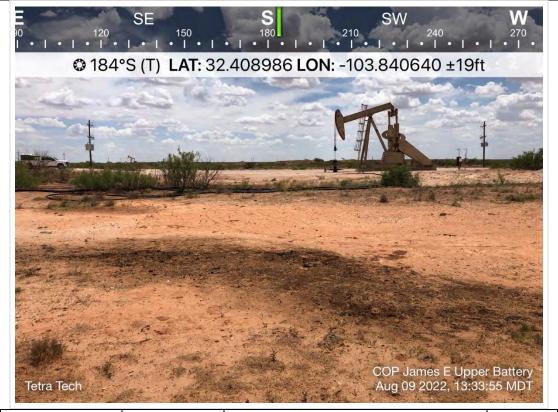
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West. Current Site conditions. January 2022 overspray area northeast of tank battery, NAPP2202446534.	15
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View East. Current Site conditions. January 2022 overspray area northwest of tank battery, NAPP2202446534.	16
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View South. Current Site conditions north of lease pad.	17
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West. Current Site conditions. Northwestern extent of release area.	18
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View Southeast. Current Site conditions. Northwestern extent of release area.	19
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View West. Current Site conditions. Northwestern extent of release area.	20
212C-MD-02793	SITE NAME	ConocoPhillips James E Upper Battery Release	8/9/2022

# **APPENDIX E Laboratory Analytical Data**



August 17, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND, TX 79701

RE: JAMES E UPPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/10/22 9:08.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2 Regulated VOCs and Total Trihalomethanes (TTHM)

Method EPA 552.2 Total Haloacetic Acids (HAA-5)

Celey D. Keene

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

17-Aug-22 09:31



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

#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH - 1 ( 0-1' )	H223573-01	Soil	09-Aug-22 12:35	10-Aug-22 09:08
AH - 1 ( 2-3' )	H223573-02	Soil	09-Aug-22 12:41	10-Aug-22 09:08
AH - 2 ( 0-1' )	H223573-03	Soil	09-Aug-22 12:45	10-Aug-22 09:08
AH - 2 ( 2-3' )	H223573-04	Soil	09-Aug-22 12:47	10-Aug-22 09:08
AH - 3 ( 0-1' )	H223573-05	Soil	09-Aug-22 12:49	10-Aug-22 09:08
AH - 3 ( 2-3' )	H223573-06	Soil	09-Aug-22 12:56	10-Aug-22 09:08
AH - 4 ( 0-1' )	H223573-07	Soil	09-Aug-22 13:01	10-Aug-22 09:08
AH - 4 ( 2-3' )	H223573-08	Soil	09-Aug-22 13:10	10-Aug-22 09:08
AH - 5 ( 0-1' )	H223573-09	Soil	09-Aug-22 13:13	10-Aug-22 09:08
AH - 5 ( 2-3' )	H223573-10	Soil	09-Aug-22 13:15	10-Aug-22 09:08
AH - 6 ( 0-1' )	H223573-11	Soil	09-Aug-22 13:18	10-Aug-22 09:08
AH - 6 ( 2-3' )	H223573-12	Soil	09-Aug-22 13:40	10-Aug-22 09:08
AH - 7 ( 0-1' )	H223573-13	Soil	09-Aug-22 13:45	10-Aug-22 09:08
AH - 7 ( 2-3' )	H223573-14	Soil	09-Aug-22 13:52	10-Aug-22 09:08
AH - 8 ( 0-1' )	H223573-15	Soil	09-Aug-22 13:59	10-Aug-22 09:08
AH - 8 ( 2-3' )	H223573-16	Soil	09-Aug-22 14:20	10-Aug-22 09:08
AH - 8 ( 4-5' )	H223573-17	Soil	09-Aug-22 14:25	10-Aug-22 09:08
AH - 9 ( 0-1' )	H223573-18	Soil	09-Aug-22 14:29	10-Aug-22 09:08
AH - 10 ( 0-1' )	H223573-19	Soil	09-Aug-22 14:40	10-Aug-22 09:08
AH - 11 ( 0-1' )	H223573-20	Soil	09-Aug-22 14:43	10-Aug-22 09:08
AH - 10 ( 0-1' )		Soil	-	10-Aug-22 09:08

Cardinal Laboratories \*=Accredited Analyte

Soil

Soil

Soil

Soil

Soil

Soil

Soil

09-Aug-22 14:46

09-Aug-22 14:50

09-Aug-22 14:55

09-Aug-22 15:00

09-Aug-22 15:03

09-Aug-22 15:04

09-Aug-22 15:06

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence are any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether succession arising out of or related to the performance of the services hereunder by Cardinal Laboratories.

Celey D. Keene

AH - 12 (0-1')

AH - 13 ( 0-1' )

AH - 14 ( 0-1' )

AH - 15 ( 0-1' )

AH - 16 (0-1')

AH - 17 ( 0-1' )

AH - 18 ( 0-1' )

Celey D. Keene, Lab Director/Quality Manager

H223573-21

H223573-22

H223573-23

H223573-24

H223573-25

H223573-26

H223573-27

10-Aug-22 09:08



### Analytical Results For:

TETRA TECH Project: JAMES E UPPER BATTERY Reported: 901 WEST WALL STREET, STE 100 Project Number: 212C-MD-02793 17-Aug-22 09:31

MIDLAND TX, 79701 Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 19 (0-1') H223573-28 Soil 09-Aug-22 15:09 10-Aug-22 09:08

08/17/22 - Client changed the sample IDs for 18-28 (see COC). This is the revised report and will replace the one sent on 08/15/22.

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine



#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL Fax To: (432) 682-3946 Reported: 17-Aug-22 09:31

AH - 1 ( 0-1' ) H223573-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	tories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081017	JН	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081017	ЈН	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PIL	D)		103 %	69.9	-140	2081017	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			96.2 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			113 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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

#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH-1 (2-3')

H223573-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2081017	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by GO	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			93.1 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			108 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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#### Analytical Results For:

**TETRA TECH** 

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 2 ( 0-1')

H223573-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081017	JН	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081017	JН	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081017	JН	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PL	D)		101 %	69.9	-140	2081017	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			101 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			117 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 2 ( 2-3' )

H223573-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081017	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		104 %	69.9	-140	2081017	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			96.8 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			111 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 3 ( 0-1' )

H223573-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	48.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		104 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			93.5 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			110 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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#### Analytical Results For:

TETRA TECH

 $901~\mbox{WEST}$  WALL STREET , STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH-3 (2-3')

H223573-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		104 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			102 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			119 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL Fax To: (432) 682-3946 Reported: 17-Aug-22 09:31

AH - 4 ( 0-1' )

H223573-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JН	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	11-Aug-22	8015B	
DRO >C10-C28*	279		10.0	mg/kg	1	2081010	MS	11-Aug-22	8015B	
<b>EXT DRO &gt;C28-C36</b>	220		10.0	mg/kg	1	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctane			84.4 %	43-	149	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			111 %	42.5	-161	2081010	MS	11-Aug-22	8015B	

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17-Aug-22 09:31



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#### Analytical Results For:

**TETRA TECH** 

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH-4 (2-3')

H223573-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	48.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JН	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		104 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	43.1		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	35.5		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			89.4 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			109 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

AH-5 (0-1')

H223573-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by Go	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			99.0 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			116 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

AH - 5 ( 2-3' )

H223573-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds l	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)	)		105 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by C	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			99.2 %	43	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			117 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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Celey D. Keene



#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL Fax To: (432) 682-3946 Reported: 17-Aug-22 09:31

AH - 6 ( 0-1' )

H223573-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	96.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)	)		101 %	69.9	-140	2081023	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by C	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			87.4 %	43	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			104 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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Celey D. Keene



#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

AH - 6 ( 2-3' )

H223573-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	tories					
Inorganic Compounds										
Chloride	96.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		102 %	69.9	-140	2081023	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			88.4 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			103 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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Celey D. Keine



#### Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

AH - 7 ( 0-1')

H223573-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2081023	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	22.5		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	11.7		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			97.4 %	43	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			113 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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

# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 7 ( 2-3')

H223573-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PI	D)		103 %	69.9	-140	2081023	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
DRO >C10-C28*	113		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	59.9		10.0	mg/kg	1	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			110 %	43-	149	2081010	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			131 %	42.5	-161	2081010	MS	10-Aug-22	8015B	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

17-Aug-22 09:31



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

# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 8 ( 0-1' )

H223573-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	tories					
Inorganic Compounds										
Chloride	352		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								S-04
Benzene*	< 0.500		0.500	mg/kg	500	2081023	JH	12-Aug-22	8021B	
Toluene*	< 0.500		0.500	mg/kg	500	2081023	JH	12-Aug-22	8021B	
Ethylbenzene*	4.05		0.500	mg/kg	500	2081023	JH	12-Aug-22	8021B	GC-NC1
Total Xylenes*	24.7		1.50	mg/kg	500	2081023	JH	12-Aug-22	8021B	GC-NC1
Total BTEX	28.7		3.00	mg/kg	500	2081023	JH	12-Aug-22	8021B	GC-NC1
Surrogate: 4-Bromofluorobenzene (PID)	)		190 %	69.9	-140	2081023	ЈН	12-Aug-22	8021B	
Petroleum Hydrocarbons by C	GC FID									S-06
GRO C6-C10*	3110		200	mg/kg	20	2081010	MS	11-Aug-22	8015B	
DRO >C10-C28*	32900		200	mg/kg	20	2081010	MS	11-Aug-22	8015B	
EXT DRO >C28-C36	6700		200	mg/kg	20	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctane			761 %	43-	149	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			1140 %	42.5	-161	2081010	MS	11-Aug-22	8015B	

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17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH-8 (2-3')

H223573-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	576		16.0	mg/kg	4	2081131	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								S-04
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JН	11-Aug-22	8021B	
Total Xylenes*	0.531		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	GC-NC1
Total BTEX	0.531		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	GC-NC1
Surrogate: 4-Bromofluorobenzene (PIL	0)		149 %	69.9	-140	2081023	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									S-06
GRO C6-C10*	< 50.0		50.0	mg/kg	5	2081010	MS	11-Aug-22	8015B	
DRO >C10-C28*	1470		50.0	mg/kg	5	2081010	MS	11-Aug-22	8015B	
EXT DRO >C28-C36	412		50.0	mg/kg	5	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctane			106 %	43-	149	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			176 %	42.5	-161	2081010	MS	11-Aug-22	8015B	

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17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH-8 (4-5')

H223573-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	544		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JН	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)	)		108 %	69.9-	-140	2081023	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by C	GC FID									S-06
GRO C6-C10*	< 50.0		50.0	mg/kg	5	2081010	MS	11-Aug-22	8015B	
DRO >C10-C28*	1040		50.0	mg/kg	5	2081010	MS	11-Aug-22	8015B	
EXT DRO >C28-C36	292		50.0	mg/kg	5	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctane			114 %	43-	149	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			175 %	42.5-	-161	2081010	MS	11-Aug-22	8015B	

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17-Aug-22 09:31



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# Analytical Results For:

**TETRA TECH** 

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 9 ( 0-1')

H223573-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds l	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)	)		103 %	69.9	-140	2081023	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by C	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081010	MS	11-Aug-22	8015B	
DRO >C10-C28*	12.8		10.0	mg/kg	1	2081010	MS	11-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctane			97.6 %	43	149	2081010	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			113 %	42.5	-161	2081010	MS	11-Aug-22	8015B	

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Celey D. Keene

17-Aug-22 09:31



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

# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

(102, 302 3

AH - 10 ( 0-1' ) H223573-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			106 %	69.9	-140	2081023	JH	12-Aug-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			102 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			101 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 11 ( 0-1' )

H223573-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			104 %	69.9	-140	2081023	JH	12-Aug-22	8021B	
Petroleum Hydrocarbons by GO	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			92.1 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			92.9 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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Celey D. Keene



# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL Fax To: (432) 682-3946 Reported: 17-Aug-22 09:31

AH - 12 (0-1')

H223573-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2081023	JH	12-Aug-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			95.9 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			98.3 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 13 ( 0-1' )

H223573-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	48.0		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compound	ls by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (P	PID)		107 %	69.9	-140	2081023	JH	12-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			99.2 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			102 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager

17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 14 (0-1')

H223573-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	2081132	GM	11-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JН	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JН	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2081023	JH	12-Aug-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	15-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	15-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	15-Aug-22	8015B	
Surrogate: 1-Chlorooctane			76.5 %	43-	149	2081021	MS	15-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			80.7 %	42.5	-161	2081021	MS	15-Aug-22	8015B	

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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 15 (0-1')

H223573-24 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2081132	GM	12-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081023	ЛН	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081023	JH	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PIL	D)		99.0 %	69.9	-140	2081023	JH	12-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	184		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	130		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			101 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			115 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 16 (0-1')

H223573-25 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	112		16.0	mg/kg	4	2081132	GM	12-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PI	D)		117 %	69.9	-140	2081031	ЈН	11-Aug-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	15.2		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			111 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			118 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 17 ( 0-1' )

H223573-26 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2081132	GM	12-Aug-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081031	JH	11-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			116 %	69.9	-140	2081031	JH	11-Aug-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			92.2 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			96.8 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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17-Aug-22 09:31



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# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

AH - 18 ( 0-1' )

H223573-27 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2081132	GM	12-Aug-22	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			92.5 %	69.9	-140	2081126	JH/	12-Aug-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctane			95.1 %	43-	149	2081021	MS	10-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			95.7 %	42.5	-161	2081021	MS	10-Aug-22	8015B	

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Celey D. Keine



# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

AH - 19 (0-1')

H223573-28 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	tories					
Inorganic Compounds										
Chloride	48.0		16.0	mg/kg	4	2081132	GM	12-Aug-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2081126	JH/	12-Aug-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID	)		92.6 %	69.9	-140	2081126	JH/	12-Aug-22	8021B	
Petroleum Hydrocarbons by C	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2081030	MS	11-Aug-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2081030	MS	11-Aug-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2081030	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctane			80.1 %	43-	149	2081030	MS	11-Aug-22	8015B	
Surrogate: 1-Chlorooctadecane			94.2 %	42.5	-161	2081030	MS	11-Aug-22	8015B	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL Fax To: (432) 682-3946 Reported: 17-Aug-22 09:31

# **Inorganic Compounds - Quality Control**

# **Cardinal Laboratories**

	D. Iv	Reporting	TT '4	Spike	Source	N/DEC	%REC	DDD	RPD	NT 4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081131 - 1:4 DI Water										
Blank (2081131-BLK1)				Prepared &	Analyzed:	11-Aug-22				
Chloride	ND	16.0	mg/kg	·			·			
LCS (2081131-BS1)				Prepared &	z Analyzed:	11-Aug-22				
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (2081131-BSD1)				Prepared &	Analyzed:	11-Aug-22				
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	
Batch 2081132 - 1:4 DI Water										
Blank (2081132-BLK1)				Prepared &	Analyzed:	11-Aug-22				
Chloride	ND	16.0	mg/kg							
LCS (2081132-BS1)				Prepared &	Analyzed:	11-Aug-22				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (2081132-BSD1)				Prepared &	Analyzed:	11-Aug-22				
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	

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Celey D. Keene



# Analytical Results For:

**TETRA TECH** 

Ethylbenzene

Total Xylenes

Total BTEX

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

# Volatile Organic Compounds by EPA Method 8021 - Quality Control

# **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081017 - Volatiles										
Blank (2081017-BLK1)				Prepared: 1	10-Aug-22	Analyzed: 1	1-Aug-22			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							

mg/kg

mg/kg

mg/kg

Surrogate: 4-Bromofluorobenzene (PID)	0.0501	mg/kg	0.0500	100	69.9-140
LCS (2081017-BS1)		I	Prepared: 10-Au	g-22 Analyzed: 1	1-Aug-22

0.050

0.150

0.300

ND

ND

ND

Benzene	1.81	0.050	mg/kg	2.00	90.6	83.4-122
Toluene	1.94	0.050	mg/kg	2.00	96.9	84.2-126
Ethylbenzene	1.84	0.050	mg/kg	2.00	91.8	84.2-121
m,p-Xylene	3.79	0.100	mg/kg	4.00	94.7	89.9-126
o-Xylene	1.91	0.050	mg/kg	2.00	95.4	84.3-123
Total Xylenes	5.70	0.150	mg/kg	6.00	94.9	89.1-124

Surrogate: 4-Bromofluorobenzene (PID)	0.0497	mg/kg	0.0500	99.5	69.9-140

LCS Dup (2081017-BSD1)				Prepared: 10-Au	ıg-22 Analyzed: 1	1-Aug-22			
Benzene	1.69	0.050	mg/kg	2.00	84.7	83.4-122	6.68	12.6	
Toluene	1.84	0.050	mg/kg	2.00	92.1	84.2-126	5.07	13.3	
Ethylbenzene	1.74	0.050	mg/kg	2.00	86.9	84.2-121	5.47	13.9	
m,p-Xylene	3.55	0.100	mg/kg	4.00	88.6	89.9-126	6.63	13.6	BS-3
o-Xylene	1.78	0.050	mg/kg	2.00	89.1	84.3-123	6.79	14.1	
Total Xylenes	5.33	0.150	mg/kg	6.00	88.8	89.1-124	6.68	13.4	BS-3

#### Surrogate: 4-Bromofluorobenzene (PID) 0.0494 0.0500 98.8 69.9-140 mg/kg

# Batch 2081023 - Volatiles

		Prepared: 10-Aug-22 Analyzed: 11-Aug-22
ND	0.050	mg/kg
ND	0.050	mg/kg
ND	0.050	mg/kg
ND	0.150	mg/kg
	ND ND	ND 0.050 ND 0.050

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Celey D. Keens

Celey D. Keene, Lab Director/Quality Manager



%REC

# Analytical Results For:

**TETRA TECH** 

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Spike

Source

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

RPD

# Volatile Organic Compounds by EPA Method 8021 - Quality Control

# **Cardinal Laboratories**

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081023 - Volatiles										
Blank (2081023-BLK1)				Prepared: 1	0-Aug-22	Analyzed:	11-Aug-22			
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0515		mg/kg	0.0500		103	69.9-140			
LCS (2081023-BS1)				Prepared: 1	0-Aug-22	Analyzed:	11-Aug-22			
Benzene	1.95	0.050	mg/kg	2.00		97.4	83.4-122			
Toluene	2.06	0.050	mg/kg	2.00		103	84.2-126			
Ethylbenzene	2.00	0.050	mg/kg	2.00		99.8	84.2-121			
m,p-Xylene	4.15	0.100	mg/kg	4.00		104	89.9-126			
o-Xylene	2.07	0.050	mg/kg	2.00		104	84.3-123			
Total Xylenes	6.22	0.150	mg/kg	6.00		104	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0518		mg/kg	0.0500		104	69.9-140			
LCS Dup (2081023-BSD1)				Prepared: 1	0-Aug-22	Analyzed:	11-Aug-22			
Benzene	1.93	0.050	mg/kg	2.00		96.4	83.4-122	0.950	12.6	
Toluene	2.04	0.050	mg/kg	2.00		102	84.2-126	1.22	13.3	
Ethylbenzene	1.96	0.050	mg/kg	2.00		98.0	84.2-121	1.83	13.9	
m,p-Xylene	4.08	0.100	mg/kg	4.00		102	89.9-126	1.67	13.6	
o-Xylene	2.00	0.050	mg/kg	2.00		100	84.3-123	3.35	14.1	
Total Xylenes	6.09	0.150	mg/kg	6.00		101	89.1-124	2.23	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0510		mg/kg	0.0500		102	69.9-140			

# Batch 2081031 - Volatiles

Blank (2081031-BLK1)				Prepared: 10-Aug-	-22 Analyzed: 1	1-Aug-22	
Benzene	ND	0.050	mg/kg				
Toluene	ND	0.050	mg/kg				
Ethylbenzene	ND	0.050	mg/kg				
Total Xylenes	ND	0.150	mg/kg				
Total BTEX	ND	0.300	mg/kg				
Surrogate: 4-Bromofluorobenzene (PID)	0.0576		mg/kg	0.0500	115	69.9-140	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



%REC

# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Spike

Source

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL Fax To: (432) 682-3946 Reported: 17-Aug-22 09:31

RPD

# Volatile Organic Compounds by EPA Method 8021 - Quality Control

# **Cardinal Laboratories**

Reporting

ND

ND

ND

ND

0.050

0.150

0.300

mg/kg

mg/kg

mg/kg

mg/kg

0.0500

92.2

69.9-140

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081031 - Volatiles										
LCS (2081031-BS1)				Prepared: 1	0-Aug-22	Analyzed:	11-Aug-22			
Benzene	1.95	0.050	mg/kg	2.00		97.3	83.4-122			
Toluene	2.07	0.050	mg/kg	2.00		103	84.2-126			
Ethylbenzene	2.11	0.050	mg/kg	2.00		105	84.2-121			
m,p-Xylene	4.35	0.100	mg/kg	4.00		109	89.9-126			
o-Xylene	2.09	0.050	mg/kg	2.00		105	84.3-123			
Total Xylenes	6.44	0.150	mg/kg	6.00		107	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0567		mg/kg	0.0500		113	69.9-140			
LCS Dup (2081031-BSD1)				Prepared: 1	0-Aug-22	Analyzed:	11-Aug-22			
Benzene	1.80	0.050	mg/kg	2.00		89.9	83.4-122	7.92	12.6	
Toluene	1.90	0.050	mg/kg	2.00		94.9	84.2-126	8.64	13.3	
Ethylbenzene	1.93	0.050	mg/kg	2.00		96.6	84.2-121	8.72	13.9	
m,p-Xylene	4.00	0.100	mg/kg	4.00		100	89.9-126	8.19	13.6	
o-Xylene	1.93	0.050	mg/kg	2.00		96.3	84.3-123	8.21	14.1	
Total Xylenes	5.93	0.150	mg/kg	6.00		98.9	89.1-124	8.20	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0563		mg/kg	0.0500		113	69.9-140			
Batch 2081126 - Volatiles										
Blank (2081126-BLK1)				Prepared: 1	1-Aug-22	Analyzed: 1	12-Aug-22			
Benzene	ND	0.050	mg/kg							

#### Cardinal Laboratories

Surrogate: 4-Bromofluorobenzene (PID)

Ethylbenzene

Total Xylenes

Total BTEX

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



%REC

# Analytical Results For:

TETRA TECH

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Spike

Source

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

RPD

# Volatile Organic Compounds by EPA Method 8021 - Quality Control

# **Cardinal Laboratories**

Reporting

		responding		opine	Source		, or the		1112	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081126 - Volatiles										
LCS (2081126-BS1)				Prepared: 1	11-Aug-22 A	Analyzed:	12-Aug-22			
Benzene	1.99	0.050	mg/kg	2.00		99.6	83.4-122			
Toluene	2.06	0.050	mg/kg	2.00		103	84.2-126			
Ethylbenzene	2.08	0.050	mg/kg	2.00		104	84.2-121			
m,p-Xylene	4.31	0.100	mg/kg	4.00		108	89.9-126			
o-Xylene	2.01	0.050	mg/kg	2.00		100	84.3-123			
Total Xylenes	6.32	0.150	mg/kg	6.00		105	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0457		mg/kg	0.0500		91.5	69.9-140			
LCS Dup (2081126-BSD1)				Prepared: 1	11-Aug-22 <i>A</i>	Analyzed:	12-Aug-22			
Benzene	2.05	0.050	mg/kg	2.00		103	83.4-122	3.02	12.6	
Toluene	2.11	0.050	mg/kg	2.00		105	84.2-126	2.10	13.3	
Ethylbenzene	2.15	0.050	mg/kg	2.00		108	84.2-121	3.30	13.9	
m,p-Xylene	4.44	0.100	mg/kg	4.00		111	89.9-126	3.05	13.6	
o-Xylene	2.08	0.050	mg/kg	2.00		104	84.3-123	3.56	14.1	
Total Xylenes	6.52	0.150	mg/kg	6.00		109	89.1-124	3.21	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0449		mg/kg	0.0500		89.8	69.9-140			

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Celeg D. Keene



# Analytical Results For:

**TETRA TECH** 

901 WEST WALL STREET, STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

# Petroleum Hydrocarbons by GC FID - Quality Control

# **Cardinal Laboratories**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081010 - General Prep - Organics										

Blank (2081010-BLK1)				Prepared & Anal	yzed: 10-Aug-22	2			
GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	46.3		mg/kg	50.0	92.5	43-149			
Surrogate: 1-Chlorooctadecane	53.6		mg/kg	50.0	107	42.5-161			
LCS (2081010-BS1)				Prepared & Anal	yzed: 10-Aug-22	2			
GRO C6-C10	183	10.0	mg/kg	200	91.4	78.5-128			
DRO >C10-C28	198	10.0	mg/kg	200	99.1	75.8-135			
Total TPH C6-C28	381	10.0	mg/kg	400	95.2	81.5-127			
Surrogate: 1-Chlorooctane	48.2		mg/kg	50.0	96.4	43-149			
Surrogate: 1-Chlorooctadecane	59.4		mg/kg	50.0	119	42.5-161			
LCS Dup (2081010-BSD1)				Prepared & Anal	yzed: 10-Aug-22	2			
GRO C6-C10	192	10.0	mg/kg	200	95.9	78.5-128	4.84	21.4	
DRO >C10-C28	204	10.0	mg/kg	200	102	75.8-135	2.86	17.9	
Total TPH C6-C28	396	10.0	mg/kg	400	98.9	81.5-127	3.81	17.6	
Surrogate: 1-Chlorooctane	50.4		mg/kg	50.0	101	43-149			
Surrogate: 1-Chlorooctadecane	62.0		mg/kg	50.0	124	42.5-161			

Batch 2081021 - General Prep -	- Organics
--------------------------------	------------

Blank (2081021-BLK1)				Prepared & Analy	yzed: 10-Aug-22	!	
GRO C6-C10	ND	10.0	mg/kg				
DRO >C10-C28	ND	10.0	mg/kg				
EXT DRO >C28-C36	ND	10.0	mg/kg				
Surrogate: 1-Chlorooctane	46.4		mg/kg	50.0	92.8	43-149	
Surrogate: 1-Chlorooctadecane	45.7		mg/kg	50.0	91.4	42.5-161	

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



%REC

# Analytical Results For:

TETRA TECH

 $901~\mbox{WEST}$  WALL STREET , STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Spike

Source

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

RPD

# **Petroleum Hydrocarbons by GC FID - Quality Control**

# **Cardinal Laboratories**

Reporting

		Reporting		Spike	Bource		/OKEC		KI D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2081021 - General Prep - Organics										
LCS (2081021-BS1)				Prepared &	& Analyzed:	: 10-Aug-2	2			
GRO C6-C10	211	10.0	mg/kg	200		105	78.5-128			
DRO >C10-C28	200	10.0	mg/kg	200		100	75.8-135			
Total TPH C6-C28	411	10.0	mg/kg	400		103	81.5-127			
Surrogate: 1-Chlorooctane	54.5		mg/kg	50.0		109	43-149			
Surrogate: 1-Chlorooctadecane	52.9		mg/kg	50.0		106	42.5-161			
LCS Dup (2081021-BSD1)				Prepared:	10-Aug-22	Analyzed:	11-Aug-22			
GRO C6-C10	202	10.0	mg/kg	200		101	78.5-128	3.96	21.4	
DRO >C10-C28	196	10.0	mg/kg	200		98.2	75.8-135	1.92	17.9	
Total TPH C6-C28	399	10.0	mg/kg	400		99.7	81.5-127	2.96	17.6	
Surrogate: 1-Chlorooctane	54.5		mg/kg	50.0		109	43-149			
Surrogate: 1-Chlorooctadecane	57.5		mg/kg	50.0		115	42.5-161			
Batch 2081030 - General Prep - Organics										
Blank (2081030-BLK1)				Prepared &	& Analyzed:	: 10-Aug-2	2			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	41.4		mg/kg	50.0		82.7	43-149			
Surrogate: 1-Chlorooctadecane	47.7		mg/kg	50.0		95.4	42.5-161			
LCS (2081030-BS1)				Prepared &	& Analyzed:	: 10-Aug-2	2			
GRO C6-C10	224	10.0	mg/kg	200		112	78.5-128			
DRO >C10-C28	209	10.0	mg/kg	200		104	75.8-135			
Total TPH C6-C28	433	10.0	mg/kg	400		108	81.5-127			

Cardinal Laboratories \*=Accredited Analyte

mg/kg

mg/kg

50.0

50.0

94.6

113

43-149

42.5-161

47.3

56.4

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Celey D. Keene

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane



%REC

Limits

RPD

# Analytical Results For:

TETRA TECH

Analyte

 $901~\mbox{WEST}$  WALL STREET , STE 100

MIDLAND TX, 79701

Project: JAMES E UPPER BATTERY

Spike

Level

Source

Result

%REC

Project Number: 212C-MD-02793

Project Manager: CHRISTIAN LLULL

Fax To: (432) 682-3946

Reported: 17-Aug-22 09:31

RPD

Limit

Notes

# Petroleum Hydrocarbons by GC FID - Quality Control

# **Cardinal Laboratories**

Units

Reporting

Limit

Result

Batch 2081030 - General Prep - Organics	<b>S</b>								
LCS Dup (2081030-BSD1)				Prepared & Ana	ılyzed: 10-Aug-2	2			
GRO C6-C10	227	10.0	mg/kg	200	113	78.5-128	1.27	21.4	
DRO >C10-C28	203	10.0	mg/kg	200	101	75.8-135	2.93	17.9	
Total TPH C6-C28	430	10.0	mg/kg	400	107	81.5-127	0.737	17.6	
Surrogate: 1-Chlorooctane	49.1		mg/kg	50.0	98.3	43-149			
Surrogate: 1-Chlorooctadecane	58.6		mg/kg	50.0	117	42.5-161			

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Celey D. Keine



# **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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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	Relinquished by:		Relinquished by.	122 8.	20 AH-11	19 AH-10	18 AH-9	17 AH-8	16 AH-8	1.5 AH-8	14 AH-7	13 AH-7	12 AH-6	// AH-6	( LABUSE )	7	H223577	Comments:	Receiving Laboratory:	invoice to:	(county, state)	Project Name:	Client Name:	Pa
	Date: Time:		Date: Time:	1 B-10-22 0410	(0-1')	0 (0-1')	(0-1')	AH-8 (4-5')	AH-8 (2-3")	AH-8 (0-1')	AH-7 (2-3")	AH-7 (0-1")	AH-6 (2-3')	AH-6 (0-1")		* SAMPLE IDENTIFICATION			Cardinal Laboratory	Tetra Tech, Inc. by email.	Eddy County, NM	James E Upper Battery	Conoco Phllips	Tetra Tech, Inc.
	Received by:		Received by:	neceived by.	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	DATE	YEAR: 2022	SAMPLING		Sampler Signature		Project #:		Site Manager:	
				ara de	14:43	14:40	14:29	14:25	14:20	13:59	13:52	13:45	13:40	13:18	TIME		LING		ture:			christian.llull@tetratech.com		
			9	What	×	×	×	×	×	×	×	×	×	×	SOIL	R	MATRIX		Miguel A.		212C-	ull@tetrat	Christian Llull	901 W V Midla Tel Fax
	Date: Time:		Date: Time:	1/0-	×	×	×	×	×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE		PRESERVATIVE METHOD		A. Flores		212C-MD-02793	tech.com	Llull	901 W Wall Street, Ste 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946
				22 0908											# CONT	AINE								
(Circle)	cu C	4	Samp	80	×	×	×	×	×	×	×	×	×	×	BTEX 8	021B	ВТЕ		3					
HAND	4° 4	00	Sample Temperature	AB USE	×	×	×	×	×	×	×	×	×	×	TPH TX TPH 80 PAH 82	15M (	_		ORO -	MRO)		=	2	
DELIVERED	¢1/3		ature												TOTAL Me TOLP Me TOLP Vo	etals /	Ag As			_			Circle	
D FEDEX	Spe	Rus	RUSH:	*Sanp											TCLP Se	emi Vo	platiles						ANALYSIS	
X UPS	Special Report Limits or TRRP Report	Rush Charges Authorized		2	-										GC/MS S GC/MS S PCB's 8	Semi.	Vol. 8	624 270C/62	5				RE	
Tracking	ort Limits	es Author	Same Day	to change	E								-		NORM PLM (As								REQUEST fv Method	
#.	or TRRF		24 hr 2	anger IAI DI	×	×	×	×	×	×	×	×	×	×	Chloride Chloride		ulfate	TDS	00 =11	abod "	int\		No	
	Rep		48 hr	2005											General Anion/C				ee atta	cried li	ist)	_		

Relinquished by:	0/2/4/1	Relinquished by:	Relinquished by:		200		26 A	35° A	A HE	SS	BA	21 A	( LABUSE )	LAB#	inana	Comments		Receiving Laboratory	(county, state)	Project Location:	Project Name:	Client Name:	Pa
		1 M	1 1		AH-19	AH-18	AH-17	AH-16	AH-15	AH-14	AH-13	AH-12					1	O.					
Date: Time:		8-10-22 0911	Date: Time:		(0-1')	(0-1')	(0-1')	(0-1')	(0-1')	(0.1.0)	(0.1')	(0-1)	7.	*SAMPLE IDENTIFICATION			Cardinal Laboratory	Tetra Tech, Inc. by email.	Eddy County, NM	James E Upper Battery	11	Conoco Phllips	Tetra Tech, Inc.
Received by		Received by	Received by:		8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	8/9/2022	DATE	YEAR: 2022	SAM		Sampler Signature		rioject #:		-	Site Manager:	
	,	roka o			15:09	15:06	15:04	15:03	15:00	14:55		14:46	TIME	11	SAMPLING		nature:			christian		77	
	(	lope	2		×	×	×	×	×	5 ×		6 ×	WATER		MATRIX		Mig		212	.llull@tet		Christia	901 M
Date:	Cole	1	Date:										HCL HNO <sub>3</sub>		$\neg$		Miguel A. Flo		212C-MD-027	christian.llull@tetratech.com		Christian Llull	901 W Wall Street, Ste 100 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946
Time:	,	22.01.8	Time:	+	×	×	×	×	×	×	×	×	ICE		PRESERVATIVE METHOD		Flores		793	m			Ste 100 9701 559 3946
		8990	-										# CONTA		-	N							
3.4° #113	Sample Temperature	1	LAB USE		×	×		×	×			×	FILTERE BTEX 80 TPH TX1 TPH 801 PAH 827 Total Met TCLP Me	21B 005 ( 5M ( 0 0C als Ag	BTE. Ext to GRO -	C35) DRO - (	DRO - Pb Se	Hg			(Circl		
Special	BushCh	*Sample ID	REMARKS:										TCLP Vol TCLP Ser RCI GC/MS V	mi Vol	260B /						le or Specify	ANALYSIS REQUEST	
Special Report Limits or TRRP Report	remos Authoriza	chang	Standard		×	×	×	×	×	×	×		GC/MS S PCB's 80 NORM PLM (Asb Chloride	82 / 6	808	2700/62				=	0	REQUEST	
TRRP Report	4	2016											Chloride General \ Anion/Ca	Water	Chen		ee atta	iched li	st)		No.)		
		122 C	-																				



September 13, 2022

CHRISTIAN LLULL
TETRA TECH
901 WEST WALL STREET , STE 100
MIDLAND, TX 79701

RE: JAMES E UPPER BATTERY RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 09/08/22 14:32.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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

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

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



# Analytical Results For:

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

Received: 09/08/2022 Sampling Date: 09/08/2022

Reported: 09/13/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY RELEASE Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: LEA COUNTY, NM

# Sample ID: AH - 21 (0-1') (H224131-01)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2022	ND	2.06	103	2.00	0.711	
Toluene*	<0.050	0.050	09/12/2022	ND	2.03	102	2.00	1.15	
Ethylbenzene*	<0.050	0.050	09/12/2022	ND	2.00	100	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/12/2022	ND	6.20	103	6.00	2.15	
Total BTEX	<0.300	0.300	09/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/13/2022	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2022	ND	201	101	200	2.15	
DRO >C10-C28*	<10.0	10.0	09/12/2022	ND	214	107	200	1.08	
EXT DRO >C28-C36	<10.0	10.0	09/12/2022	ND					
Surrogate: 1-Chlorooctane	93.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	95.5	% 46.3-17	8						

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Celeg & Freene



#### Analytical Results For:

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

Received: 09/08/2022 Sampling Date: 09/08/2022

Reported: Sampling Type: Soil 09/13/2022

Project Name: JAMES E UPPER BATTERY RELEASE Sampling Condition: Cool & Intact Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: LEA COUNTY, NM

#### Sample ID: AH - 22 (0-1') (H224131-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2022	ND	2.06	103	2.00	0.711	
Toluene*	<0.050	0.050	09/12/2022	ND	2.03	102	2.00	1.15	
Ethylbenzene*	<0.050	0.050	09/12/2022	ND	2.00	100	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/12/2022	ND	6.20	103	6.00	2.15	
Total BTEX	<0.300	0.300	09/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/13/2022	ND	400	100	400	3.92	
TPH 8015M	mg,	/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2022	ND	201	101	200	2.15	
DRO >C10-C28*	50.3	10.0	09/12/2022	ND	214	107	200	1.08	
EXT DRO >C28-C36	27.3	10.0	09/12/2022	ND					
Surrogate: 1-Chlorooctane	89.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	99.0	% 46.3-17	8						

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Celeg D. Keene



#### Analytical Results For:

TETRA TECH CHRISTIAN LLULL 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701

(432) 682-3946

Received: 09/08/2022 Sampling Date: 09/08/2022

Reported: 09/13/2022 Sampling Type: Soil

Fax To:

Project Name: JAMES E UPPER BATTERY RELEASE Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: LEA COUNTY, NM

#### Sample ID: AH - 23 (0-1') (H224131-03)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/12/2022	ND	2.06	103	2.00	0.711	
Toluene*	<0.050	0.050	09/12/2022	ND	2.03	102	2.00	1.15	
Ethylbenzene*	<0.050	0.050	09/12/2022	ND	2.00	100	2.00	1.21	
Total Xylenes*	<0.150	0.150	09/12/2022	ND	6.20	103	6.00	2.15	
Total BTEX	<0.300	0.300	09/12/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/13/2022	ND	400	100	400	3.92	
TPH 8015M	mg	/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/12/2022	ND	201	101	200	2.15	
DRO >C10-C28*	247	10.0	09/12/2022	ND	214	107	200	1.08	
EXT DRO >C28-C36	166	10.0	09/12/2022	ND					
Surrogate: 1-Chlorooctane	87.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	88.4	% 46.3-17	8						

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Celey D. Keene



#### **Notes and Definitions**

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	Phillips		BILL TO		ALIAI VOID DECLIEST
Project Manager: Ch	histan Will		P.O. #:		ANALISIS REGOES!
Address: christian	13		Company: Tela	The state of the s	
City:	State:	Zip:	harte	Class .	
Phone #:	Fax#:		Address:		
Project #: 8/20-MO-02793	0.3793 Project Owner:		City:		
Project Name: James	E Upper Bothery	6036	State: Zip:		
Project Location: Lea	Cearta, NM		#		
Sampler Name:	Tales		Fax #:		
FOR LAB USE ONLY	0	MATRIX	ESERV.	SAMPLING	
Lab I.D. S	Sample I.D.	(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER:	TPH BTEX Chbrides	
_	AH-21 (0'-1")	_ ×	× 1		
22	VI-93 62-11			Dee	
C	AH-23 (0'-1')	-	1	1940 × ×	
EASE NOTE: Liability and Damages. Cardinal's liability and lyses. All claims. including those for negligence and any ot lyses. All claims including those for negligence and any ot vice. In no event shall Cardinal be liable for incidental or co- lates or successors arising out of or related to the performa	her nse	y claim arising whether based in contract or t leemed walved unless made in writing and re- without limitation, business interruptions, loss ardinal, readdless of whether such claim is h	tort, shall be limited to the amount pail tort, shall be limited to the amount pail tort, shall be created by Cardinal within 30 days after so fuse, or loss of profits incurred by so due to the about a standard or the abou	by the client for the completion of the applicable subsidiaries,	
Relinquished By:		Date: Received By: Verbal Res	Mill Was	₽ □	lo Add'I Phone #: provide Email address:
elinquished By:	Date:	Received By:	may su	REMARKS:	e tetratich.com
Delivered By: (Circle One) ampler - UPS - Bus - Other:	Observed Temp. °C 5./	Sample Condition Cool Intact La Yes La Yes No In No	CHECKED BY: (Initials)	Turnaround Time: Standard Rush Thermometer ID #113 Correction Factor -0.5°C	rd Bacteria (only) Sample Condition Cool Intact Observed Temp. °C Pes Yes



September 21, 2022

CHRISTIAN LLULL
TETRA TECH
901 WEST WALL STREET , STE 100
MIDLAND, TX 79701

RE: JAMES E UPPER BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/15/22 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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

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

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



#### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022 Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyand By 14

Project Location: COP - LEA CO, NM

# Sample ID: BH - 1 (0-1) (H224289-01)

DTEV 0021D

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	128	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	76.7	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	83.8	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	91.7	% 46.3-17	8						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



#### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

#### Sample ID: BH - 1 (2-3) (H224289-02)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.5	% 69.9-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	13.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	69.9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	71.8	% 46.3-17	<i>'</i> 8						

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

### Sample ID: BH - 1 (4-5) (H224289-03)

BTEX 8021B

	<u> </u>								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.2	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1410	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	71.6	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	73.5	% 46.3-17	8						

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Celey & Keene



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 1 (6-7) (H224289-04)

BTEX 8021B	mg	/kg	Analyze	ed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.6	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1390	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	75.6	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	77.8	% 46.3-17	78						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: Sample Received By: 212C-MD-02793 Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 1 (9-10) (H224289-05)

BTEX 8021B	mg/	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.6	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1710	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	65.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	68.2	% 46.3-17	8						

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

### Sample ID: BH - 1 (14-15) (H224289-06)

BTEX 8021B

	<u> </u>								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.7	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1630	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	63.6	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	66.0	% 46.3-17	8						

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Celey D. Keene



### Analytical Results For:

TETRA TECH CHRISTIAN LLULL 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701

(432) 682-3946

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: 09/21/2022 Sampling Type: Soil

Fax To:

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

## Sample ID: BH - 1 (19-20) (H224289-07)

BTEX 8021B

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	73.2	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	75.3	% 46.3-17	8						

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Celey D. Keene



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Sample Received By: Project Number: 212C-MD-02793 Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 1 (24-25) (H224289-08)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.8	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	72.8	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	76.0	% 46.3-17	8						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/13/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: Sample Received By: 212C-MD-02793 Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 1 (29-30) (H224289-09)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.24	104	6.00	1.14	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	71.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	74.4	% 46.3-17	8						

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Celey D. Keine



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

### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 2 (0-1) (H224289-10)

BTEX 8021B	mg/	'kg	Analyze	d By: JH					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.11	106	2.00	1.10	
Toluene*	<0.050	0.050	09/18/2022	ND	2.09	104	2.00	1.38	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	2.03	101	2.00	1.60	GC-NC
Total Xylenes*	0.746	0.150	09/18/2022	ND	6.24	104	6.00	1.14	GC-NC1
Total BTEX	0.746	0.300	09/18/2022	ND					GC-NC1
Surrogate: 4-Bromofluorobenzene (PID	317 9	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	348	50.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	14100	50.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	3630	50.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	171 9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	278 9	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 2 (2-3) (H224289-11)

Analyte	Result	B							
		Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	GC-NC
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	125 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	31.5	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	1760	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	470	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	103 5	<sup>2</sup> / <sub>6</sub> 45.3-16	1						
Surrogate: 1-Chlorooctadecane	133 9	<sup>2</sup> / <sub>6</sub> 46.3-17	8						

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Celey & Keene



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Tamara Oldaker Project Number: 212C-MD-02793 Sample Received By:

Project Location: COP - LEA CO, NM

### Sample ID: BH - 2 (4-5) (H224289-12)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 %	69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	13.1	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	809	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	241	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	76.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	93.4	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

## Sample ID: BH - 2 (6-7) (H224289-13)

Analyte         Result         Reporting Limit         Analyzed         Method Blank         BS         % Recommendation           Benzene*         <0.050         0.050         0.9/18/2022         ND         2.04         10           Toluene*         <0.050         0.050         0.9/18/2022         ND         1.99         99           Ethylbenzene*         <0.050         0.050         0.9/18/2022         ND         1.94         97           Total Xylenes*         <0.150         0.150         0.9/18/2022         ND         6.00         10           Total BTEX         <0.300         0.300         0.9/18/2022         ND         ND         1.00           Surrogate: 4-Bromofluorobenzene (PID         134 %         69.9-140         69.9-140         69.9-140         69.9-140         Method Blank         BS         % Recommendation           Chloride, SM4500Cl-B         mg/kg         Analyzed         Method Blank         BS         % Recommendation           Chloride         1140         16.0         09/19/2022         ND         432         10           TPH 8015M         Method Blank         BS         % Recommendation           Analyzed         Method Blank <th>2.00 2.00 2.00 2.2 2.00</th> <th>4.11 4.04 3.65 3.99</th> <th>Qualifier  GC-NC  Oualifier</th>	2.00 2.00 2.00 2.2 2.00	4.11 4.04 3.65 3.99	Qualifier  GC-NC  Oualifier
Toluene* < 0.050	2.00 7.2 2.00	4.04 3.65 3.99	
Ethylbenzene* < 0.050	.2 2.00	3.65 3.99	
Total Xylenes*         < 0.150         0.150         09/18/2022         ND         6.00         10           Total BTEX         < 0.300		3.99	
Total BTEX         <0.300         0.300         09/18/2022         ND           Surrogate: 4-Bromofluorobenzene (PID         134 %         69.9-140           Chloride, SM4500Cl-B         mg/kg         Analyzed By: GM           Analyte         Result         Reporting Limit         Analyzed         Method Blank         BS         % Reco           Chloride         1140         16.0         09/19/2022         ND         432         10           TPH 8015M         mg/kg         Analyzed By: CK	00 6.00		Qualifier
Surrogate: 4-Bromofluorobenzene (PID         134 %         69.9-140           Chloride, SM4500Cl-B         mg/kg         Analyzed By: GM           Analyte         Result         Reporting Limit         Analyzed         Method Blank         BS         % Record           Chloride         1140         16.0         09/19/2022         ND         432         10           TPH 8015M         mg/kg         Analyzed By: CK			Qualifier
Chloride, SM4500Cl-B         mg/kg         Analyzed By: GM           Analyte         Result         Reporting Limit         Analyzed         Method Blank         BS         % Record		2 000	Qualifier
Analyte Result Reporting Limit Analyzed Method Blank BS % Rec Chloride 1140 16.0 09/19/2022 ND 432 10 TPH 8015M mg/kg Analyzed By: CK		2 000	Qualifier
Chloride         1140         16.0         09/19/2022         ND         432         10           TPH 8015M         mg/kg         Analyzed By: CK		2 000	Qualifion
TPH 8015M mg/kg Analyzed By: CK	covery True Value Q0	C RPD	Qualifiei
	08 400	3.77	
Applyto Bosult Beneding Limit Applytod Method Block BC 9/ Bos			
Analyte Result Reporting Limit Analyzed Method Blank BS % Rec	covery True Value Q0	C RPD	Qualifier
GRO C6-C10* <10.0 10.0 09/17/2022 ND 194 97.	.2 200	4.44	
<b>DRO &gt;C10-C28* 330</b> 10.0 09/17/2022 ND 202 10	01 200	8.10	
<b>EXT DRO &gt;C28-C36 97.3</b> 10.0 09/17/2022 ND			
Surrogate: 1-Chlorooctane 66.8 % 45.3-161			
Surrogate: 1-Chlorooctadecane 78.2 % 46.3-178			

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 2 (9-10) (H224289-14)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 69.9-14	10						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	164	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	54.2	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	75.1	% 45.3-16	51						
Surrogate: 1-Chlorooctadecane	80.5	% 46.3-17	78						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 3 (0-1) (H224289-15)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.3	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/19/2022	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	28.6	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	78.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	80.6	% 46.3-17	8						

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: Sample Received By: 212C-MD-02793 Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 3 (2-3) (H224289-16)

BTEX 8021B	mg/	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.7	% 69.9-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	77.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	79.8	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Sample Received By: Tamara Oldaker Project Number: 212C-MD-02793

Project Location: COP - LEA CO, NM

### Sample ID: BH - 3 (4-5) (H224289-17)

BTEX 8021B	mg/	'kg	Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.1	% 69.9-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	73.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	75.7	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 3 (6-7) (H224289-18)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.5	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/17/2022	ND	194	97.2	200	4.44	
DRO >C10-C28*	<10.0	10.0	09/17/2022	ND	202	101	200	8.10	
EXT DRO >C28-C36	<10.0	10.0	09/17/2022	ND					
Surrogate: 1-Chlorooctane	72.7	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	75.0	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

### Sample ID: BH - 3 (9-10) (H224289-19)

BTEX 8021B

	9/	9	7	7: 5::					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.4	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	'kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	88.2	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	102 9	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyzod By: 14

Project Location: COP - LEA CO, NM

### Sample ID: BH - 4 (0-1) (H224289-20)

RTFY 8021R

BIEX 8021B	mg	/ <b>kg</b>	Anaiyze	а ву: ЈН					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.2	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	157	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	42.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	90.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	123	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 4 (2-3) (H224289-21)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.2	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	19.9	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	100	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	115	% 46.3-17	<i>'</i> 8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 4 (4-5) (H224289-22)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.0	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	92.0	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	105	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

## Sample ID: BH - 4 (6-7) (H224289-23)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.0	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	89.2	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	101	% 46.3-17	78						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

mg/kg

### Sample ID: BH - 4 (9-10) (H224289-24)

BTEX 8021B

	9,	9	7	7: 5::					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.2	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	95.0	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	108	% 46.3-17	8						

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Celey D. Keene



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

### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Sample Received By: Project Number: 212C-MD-02793 Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (0-1) (H224289-25)

BTEX 8021B	mg/	kg	Analyze	d By: JH					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	GC-NC
Total Xylenes*	0.942	0.150	09/18/2022	ND	6.00	100	6.00	3.99	GC-NC1
Total BTEX	0.942	0.300	09/18/2022	ND					GC-NC1
Surrogate: 4-Bromofluorobenzene (PID	310 9	69.9-14	0						
Chloride, SM4500CI-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	225	100	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	6000	100	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	1100	100	09/19/2022	ND					
Surrogate: 1-Chlorooctane	146 9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	145 9	6 46.3-17	8						

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Celeg D. Freene



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

## Sample ID: BH - 5 (2-3) (H224289-26)

BTEX 8021B	mg	/kg	Analyze	ed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	55.8	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	17.3	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	100	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	120	% 46.3-17	78						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (4-5) (H224289-27)

BTEX 8021B	mg	/kg	Analyze	ed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.8	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	82.5	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	20.4	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	99.6	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	122	% 46.3-17	<i>'8</i>						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyzod By: 14

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (6-7) (H224289-28)

RTFY 8021R

BIEX 8021B	mg	/кд	Anaiyze	a By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.2	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	17.7	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	92.1	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	107	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyzod By: 14

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (9-10) (H224289-29)

RTFY 8021R

BIEX 8021B	mg	/ <b>kg</b>	Anaiyze	a By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.3	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	87.0	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	101	% 46.3-17	78						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (14-15) (H224289-30)

BTEX 8021B

	9/	9	71.14.1, = 0	,					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/18/2022	ND	2.04	102	2.00	4.11	
Toluene*	<0.050	0.050	09/18/2022	ND	1.99	99.4	2.00	4.04	
Ethylbenzene*	<0.050	0.050	09/18/2022	ND	1.94	97.2	2.00	3.65	
Total Xylenes*	<0.150	0.150	09/18/2022	ND	6.00	100	6.00	3.99	
Total BTEX	<0.300	0.300	09/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.2	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	40.1	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	98.6	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	115	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyzod By: 14

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (19-20) (H224289-31)

RTFY 8021R

BIEX 8021B	mg,	/ <b>kg</b>	Anaiyze	а ву: ЈН					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	< 0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	< 0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.6	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	94.2	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	111 9	% 46.3-17	<i>'8</i>						

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: Sample Received By: 212C-MD-02793 Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 5 (24-25) (H224289-32)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	'kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2040	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	91.9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	108 9	% 46.3-17	8						

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

## Sample ID: BH - 5 (29-30) (H224289-33)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	93.8	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	110 9	% 46.3-17	8						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine



### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 6 (0-1) (H224289-34)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.1	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4240	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	2060	50.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	615	50.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	83.8	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	119	% 46.3-17	78						

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

\*=Accredited Analyte



### Analytical Results For:

TETRA TECH CHRISTIAN LLULL 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701

(432) 682-3946

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Fax To:

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 6 (2-3) (H224289-35)

BTEX 8021B	mg	/kg	Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.1	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	09/19/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/20/2022	ND	201	100	200	2.08	
DRO >C10-C28*	397	10.0	09/20/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	172	10.0	09/20/2022	ND					
Surrogate: 1-Chlorooctane	94.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	140	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyzod By: 14

Project Location: COP - LEA CO, NM

### Sample ID: BH - 6 (4-5) (H224289-36)

RTFY 8021R

BIEX 8021B	mg	/ kg	Anaiyze	a By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.4	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	179	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	37.5	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	91.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	124	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 6 (6-7) (H224289-37)

BTEX 8021B	mg	/kg	Analyze	ed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.6	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	44.0	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	10.3	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	83.6	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	99.9	% 46.3-17	8						

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### Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

### Sample ID: BH - 6 (9-10) (H224289-38)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.9	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	201	100	200	2.08	
DRO >C10-C28*	45.3	10.0	09/19/2022	ND	189	94.5	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	88.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	107	% 46.3-17	<i>'</i> 8						

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## Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Applyzod By: 14

Project Location: COP - LEA CO, NM

## Sample ID: BH - 7 (0-1) (H224289-39)

RTFY 8021R

BIEX 8021B	mg	/ kg	Anaiyze	a By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2022	ND	2.17	109	2.00	2.79	
Toluene*	<0.050	0.050	09/19/2022	ND	2.09	105	2.00	2.14	
Ethylbenzene*	<0.050	0.050	09/19/2022	ND	2.02	101	2.00	1.85	
Total Xylenes*	<0.150	0.150	09/19/2022	ND	6.25	104	6.00	1.82	
Total BTEX	<0.300	0.300	09/19/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	190	94.9	200	0.671	
DRO >C10-C28*	64.0	10.0	09/19/2022	ND	175	87.6	200	5.06	
EXT DRO >C28-C36	11.8	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	83.2	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	88.2	% 46.3-17	8						

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## Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

## Sample ID: BH - 7 (2-3) (H224289-40)

BTEX 8021B

	9/	9	7	7: 5::					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/16/2022	ND	1.97	98.5	2.00	2.77	
Toluene*	<0.050	0.050	09/16/2022	ND	1.99	99.6	2.00	3.42	
Ethylbenzene*	<0.050	0.050	09/16/2022	ND	2.02	101	2.00	3.19	
Total Xylenes*	<0.150	0.150	09/16/2022	ND	6.22	104	6.00	3.62	
Total BTEX	<0.300	0.300	09/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	190	94.9	200	0.671	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	175	87.6	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	87.1	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	90.1	% 46.3-17	8						

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Celey D. Keene



## Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Project Location: COP - LEA CO, NM

## Sample ID: BH - 7 (4-5) (H224289-41)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/16/2022	ND	1.97	98.5	2.00	2.77	
Toluene*	<0.050	0.050	09/16/2022	ND	1.99	99.6	2.00	3.42	
Ethylbenzene*	<0.050	0.050	09/16/2022	ND	2.02	101	2.00	3.19	
Total Xylenes*	<0.150	0.150	09/16/2022	ND	6.22	104	6.00	3.62	
Total BTEX	<0.300	0.300	09/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	190	94.9	200	0.671	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	175	87.6	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	87.2	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	91.4	% 46.3-17	8						

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## Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: Sampling Type: Soil 09/21/2022

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact Sample Received By: Tamara Oldaker Project Number: 212C-MD-02793

Project Location: COP - LEA CO, NM

## Sample ID: BH - 7 (6-7) (H224289-42)

BTEX 8021B	mg/	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/16/2022	ND	1.97	98.5	2.00	2.77	
Toluene*	<0.050	0.050	09/16/2022	ND	1.99	99.6	2.00	3.42	
Ethylbenzene*	<0.050	0.050	09/16/2022	ND	2.02	101	2.00	3.19	
Total Xylenes*	<0.150	0.150	09/16/2022	ND	6.22	104	6.00	3.62	
Total BTEX	<0.300	0.300	09/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	190	94.9	200	0.671	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	175	87.6	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	77.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	79.5	% 46.3-17	8						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine



## Analytical Results For:

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

Received: 09/15/2022 Sampling Date: 09/14/2022

Reported: 09/21/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY Sampling Condition: Cool & Intact
Project Number: 212C-MD-02793 Sample Received By: Tamara Oldaker

Analyzed By: JH

Project Location: COP - LEA CO, NM

## Sample ID: BH - 7 (9-10) (H224289-43)

BTEX 8021B

DIEX GOZID	ıııg,	<u>ng</u>	Allulyzo	.u by. 311					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/16/2022	ND	1.97	98.5	2.00	2.77	
Toluene*	<0.050	0.050	09/16/2022	ND	1.99	99.6	2.00	3.42	
Ethylbenzene*	<0.050	0.050	09/16/2022	ND	2.02	101	2.00	3.19	
Total Xylenes*	<0.150	0.150	09/16/2022	ND	6.22	104	6.00	3.62	
Total BTEX	<0.300	0.300	09/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	09/19/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2022	ND	190	94.9	200	0.671	
DRO >C10-C28*	<10.0	10.0	09/19/2022	ND	175	87.6	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	09/19/2022	ND					
Surrogate: 1-Chlorooctane	82.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	86.6	% 46.3-17	8						

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Celey D. Keene



## **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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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Celeg D. Freene

## CARDINAL Laboratories 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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(57	575) 393-2326 FAX (575) 393-2476	393-2476	מד נוום	N.Y.	ANALYSIS REQUEST	
Company Name: (	Cowaro Phillips		BILL 10		- 1	
roject Manager:	Christian Unl	7.00	1	•		
Address: Christ	Christian. Itall @ tetratech.com		Company: letra lech	02		
		Zip: Attn:	1: Christian Llul			
Phone #:	Fax #:	Ado	Address:			
	313C-M0-03793 Projec	Project Owner: City:	7.			
_	James E Upper Bottery		te: Zip:			
9	County		Phone #:			
Sampler Name:	7	Fax				
FOR LAB USE ONLY	C	MATRIX	PRESERV.			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	ACID/BASE: ICE / COOL OTHER :	BTEX		
TUTCO	BH-1 (0-1)	×		1300 × ×		
111	(4-3)			1310		
£0	(6-4)			13/5		- 1
· W,	(9-10)			548		
16	(6,15)			1330		+
N-	(34.76)			1350		1
00	(34-50)			1430		
PLEASE NOTE: Liability and Dan	SH-3 $(O-I)$ nages. Cardinar's liability and client's exclusi	10 SH-3 (C-1)  PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or fort, shall be limited to the amount poid by the client for the pLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or fort, shall be limited to the amount poid by the client for the pLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or fort, shall be limited to the amount poid by the client for the pLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or fort, shall be limited to the amount poid by the client for the place.	rt, shall be limited to the amount pair eived by Cardinal within 30 days after	d by the client for the or completion of the applicable		
service. In no event shall Cardinal affiliates or successors arising out	shall Cardinal be liable for incidental or consequental dar ors arising out of or related to the performance of services	atiliayes, nu varia is involving or the control of consequential damages, including without limitation, business interruptions, loss of use, or loss of profess incurred your service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profess incurred your services. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business interruptions, loss of use, or loss of profess naturally consequential damages, including without limitation, business and limitation business naturally consequential damages, and limitation business naturally consequential damages, including without limitation business.	sed upon any of the above stated re	Verbal Result: Yes No A	Add'l Phone #:	
Relinquished By:	Time	Time: Paris 1	The Lo	All Results are emailed. Please provide Email aduress-	e Email address.	
Relinquished By:	Date:	Received By:	The same	REMARKS:		
Delivered By: (Circle One)	e One) Observed Temp. °C	U.8 Sai	CHECKED BY:	Standard	Bacteria (only) Sample Condition     Cool Intact Observed Temp. °C	
Sampler - UPS - Bus -	Other: Corrects	Corrected Temp. °C / 4 Yes Yes	40	Correction Factor -0.5°C	□ Nc □ No Corrected Temp. °C	
FORM-000 K	+ (	Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinaliabsiiii.com	es. Please email cha	anges to celey.keene@cardinaliabs	III.com	

## CARDINAL Laboratories 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page I of 5

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

## 101 East Marland, Hobbs, NM 88240

1	(575) 393-2326 FAX (575) 393-2476	2476				
Company Name:	Course Millions		BILL TO		ANALYSIS	SIS REQUEST
Project Manager:	Challe Organ	P.O. #:				
Address:	Chustan Com	Company:	Tetra 1	rech		
City:	State:	Zip: Attn:	Christian W	May		
Phone #:	Fax #:	Address	88:			
386	MD- 63793 Project Owner:	er: City:			_	
ame:	James Eller Bottera	State:	Zip:			
n:	County N	Phone #:	*			
Sampler Name:	The	Fax #:				
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	ING		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMI # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE:	OTHER:	TPH BTEX Chbrides		
12	BH-4 (2-3)		x 9-14-33	1105 x x X		
22	(45)	-		1110		
23	(6-7)			1115		
24	4 (9-10)			1130		
25	BH-5 (0-1)			1130		
24				1135		
27	(4-5)			1140		
25	(6-7)			1/45		
29	(9-10)			1150		
N.	(14/5)	<b>*</b>	*	1188 A M N	_	
PLEASE NOTE: Liability and D analyses. All claims including the	amages. Cardina's liability and client's exclusive remedy hose for negligence and any other cause whatsoever sha hat be liable for incidental or consequental damages, inc	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be doesned waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service in no event thall Cardinal be leable for incidental or consequental darmages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,	Il be limited to the amount paid by Cardinal within 30 days after or loss of profits incurred by cli	by the client for the completion of the applicable completion of the applicable ent, its subsidiaries,		
Relinquished By:	Inquished By:  Time:  Time:	Received By:  Verbal Res All Results	Miller	ılt: □ Yes ıre emailed. Ple	☐ No Add'I Phone #: ase provide Email addre	one#: address:
Relinquished By:	140 Date:	Received By:	June June	REMARKS:		
Delivered By: (Circle One) Sampler UPS - Bus - Other:	sle One)  Observed Temp. °C  Oscillation  Observed Temp. °C  Oscillation	°C 0 8 Sample Condition Cool Intact Cool Pres Pres	CHECKED BY: (Initials)	Turnaround Time: Stand Rush Thermometer ID #113 Correction Factor -0.5°C	ard □⊠	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C  Yes Yes  No No Corrected Temp. °C
Countries Joseph		11	4	Correction ractor -0.5 C		INC. INC. COLLECTION COLLECTION

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## P C A P C 101 East Marland, Hobbs, NM 88240

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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ompany Name:	(5/5) 393-2326 FAX (5/5) 393-24/6		BILL TO		AN	ANALYSIS REQUEST	
oject Manager:	Christian Uni	2.5	P.O. #:				
dress:		Co	Company: Total Te	Tech			
ty:	State:	Zip: Attn:	in: Christian Uni	4			
none #:	Fax #:	Ad	Address:				
	8BC-MO-09793 Project Owner:	vner: City:	y:				
3	about		State: Zip:				
on:	Courta	Ph	Phone #:				
ampler Name:	74/00	Fax	Fax #:		_		
OR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	PLING			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	ACID/BASE: ICE / COOL OTHER:	TPH B TEX	Chlorides		
2	BH-5 (19-20)	- ×	EE-11-9	1300 X X	^	+	
52			-	1305 1 1		-	
S	V (39-30)			1310		+	
34	BH-6 (0-1)			1330		H	
\rac{1}{2}				1935		-	
200	(4-5)			onel		-	
70	(6-3)			1345		+	
w.	(9-10)			1250		+	
2000	RH-7 (0-1)	•		1300		-	
4	(2-3)	<u> </u>	\ \	1305 W W	4	H	
EASE NOTE: Liability and Da lyses. All claims including the	mages. Cardinal's liability and client's exclusive remose for negligence and any other cause whatsoever of the liable for incidental or consequential damages.	EASE NOTE: Lability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the alyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable alyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable alyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal's liability and Cardinal's liability and client's exclusive remedy for any claim arising whether besed in contract or tort, shall be limited to the amount paid by the client for the	ort, shall be limited to the amount pa served by Cardinal within 30 days after of use, or loss of profits incurred by	id by the client for the er completion of the applicable client, its subsidiaries,			
iliates or successors arising ou ellinquished By:	is arising out of or related to the performance of services hereund Bv:  Date:	of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated  Date:	ased upon any of the above stated it	Verbal Result:	Yes   No A	Add'l Phone #:	one #:
A Danishinding	Time:	10 Samora &	Makes	All Results are emailed. Please provide Email address:	d. Please provide	Email a	address:
elinquished By:	Date:	Received By:		REMARKS:			
Delivered By: (Circle One)		-		Turnaround Time: Thermometer ID #113	Standard Rush		Bacteria (only) Sample Condition Cool Intact Observed Temp.    Yes   Yes   Corrected Temp.
sampler - UPS - Bus - Other:	s - Other: Corrected Temp. °C	1,4	16	Correction Factor -0.6°C	.,		No No

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

	(575) 393-2326 FAX (575) 393-2476	BILL TO		ANALYSIS REQUEST
Project Manager: Classicau	a Llad	Company: Tels	o s	
City:	State: Zip:	harshar	Stall	
Phone #:		Address:		
Project #: \$IAC-MD-63793		City:		
ame	Upper Bollery	State: Zip:		
n:	3	Phone #:		
2	Control Control	Fax #:		
FOR LAB USE ONLY	MATRIX	PRESERV.	SAMPLING	
Lab I.D. Samp	(G)RAB OR (C)OMF # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:	TPH BTEX Chlordes	
-H.S.H.	7 (4-8) 6 1 X	K 9-14-33		
the	(6-7)			
43	(9-10)	<	1330 4 4 4	
PLEASE NOTE: Liability and Darnages. Cardinal's liabil analyses. All claims including those for negligence and a service. In no event shall Cardinal be liable for incidental	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or furt, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries.	contract or tort, shall be limited to the amount p riting and received by Cardinal within 30 days at upbons, loss of use, or loss of profits incurred by	paid by the client for the completion of the applicable ty client. Its subsidiaries,	
Relinquished By;	Date: 22 Received By:	Make	Verbal Result:	Add'I Phone #: ide Email address:
Relinquished By:		(	KEMAKNO	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 0, 8 Sample Condition Coop Intact Corrected Temp. °C 1, 4 Yes © Yes	checked By: (Initials) (Initials)	Turnaround Time: Standard Rush Thermometer ID #113 Correction Factor -0.6°C	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C Yes Yes No Corrected Temp. °C



September 27, 2022

CHRISTIAN LLULL
TETRA TECH
901 WEST WALL STREET , STE 100
MIDLAND, TX 79701

RE: JAMES E UPPER BATTERY RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 09/26/22 15:11.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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

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

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



## Analytical Results For:

TETRA TECH CHRISTIAN LLULL 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701

Fax To: (432) 682-3946

Received: 09/26/2022 Sampling Date: 09/26/2022

Reported: 09/27/2022 Sampling Type: Soil

Project Name: JAMES E UPPER BATTERY RELEASE Sampling Condition: \*\* (See Notes)
Project Number: 212C-MD-02793 Sample Received By: Shalyn Rodriguez

Analyzed By: JH

Project Location: LEA COUNTY, NM

mg/kg

## Sample ID: AH - 20 (0-1') (H224459-01)

BTEX 8021B

BIEX GOEED	9/	119	Anaryzo	a 2 y : 3 : 1					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2022	ND	1.88	94.2	2.00	9.74	
Toluene*	<0.050	0.050	09/27/2022	ND	1.83	91.4	2.00	9.07	
Ethylbenzene*	<0.050	0.050	09/27/2022	ND	1.76	88.1	2.00	10.2	
Total Xylenes*	<0.150	0.150	09/27/2022	ND	5.43	90.4	6.00	10.2	
Total BTEX	<0.300	0.300	09/27/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.5	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2022	ND	218	109	200	6.55	
DRO >C10-C28*	<10.0	10.0	09/27/2022	ND	216	108	200	6.75	
EXT DRO >C28-C36	<10.0	10.0	09/27/2022	ND					
Surrogate: 1-Chlorooctane	95.1	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	101	% 46.3-17	8						

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Celey & Keene



## **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Freene

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



101 East Marland, Hobbs, NM 88240

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Relinquished By: Relinquished By:	PLEASE NOTE: Liability and analyses. All claims including service. In no event shall Cannot saffillates or successors arising	-	Lab I.D.	FOR LAB USE ONLY	Project Location:	Project Name:	Project #:2/2C	Phone #:	City:	Address:	Project Manager:	Company Name:	
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°C W. Scample Condition °C W. Scample Condition Cool Intact Cool Intact No II No	Received By:	int's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid rause whistoever shall be deemed watered unless made in writing and received by Cardinal within 30 days after quental damages, including without firmitation, business intemptions, loss of use, or loss of profits incurred by claim as profits of services between the cardinal, regardless of whether such claim is based upon any of the above stated raw	×	(G)RAB OR (C)OME # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	MATRIX		tray Release	/ner:		Zip:				3-2476
CHECKED BY: (Initials)	Combine	or tort, shall be limited to the amount paid of exceived by Cardinal within 30 days after loss of use, or loss of profits incurred by distance to the above state of rea	×	OTHER: ACID/BASE: ICE / COOL OTHER:	PRESERV. SAMPLING	Phone #:	State: Zip:	City:	Address: by enail	Attn: Chostin L	Company: Teffs .	P.O. #:	BILL TO	
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Standard Description  Bacteria (only) Sample Condition  Cool Intact Observed Temp. °C  Yes Yes  No Corrected Temp. °C	ase provide Email address:  etttsteck.com  k: 0.48			Chloride									ANALYSIS REQUEST	
														-

## **APPENDIX F Seed Mixture Details**

(27)

BLM Serial #:

Company Reference:

## 3.2 Seed Mixture for LPC Sand/Shinnery Sites

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

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

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

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

<sup>\*</sup>Pounds of pure live seed: Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

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

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 152840

## **CONDITIONS**

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue Midland, TX 79701	Action Number: 152840
	Action Type: [C-141] Release Corrective Action (C-141)

## CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release, regardless of depth to groundwater. Variance has been approved: composite confirmation samples will be collected from the bottom of the excavation from areas representing no more than four hundred (400) square feet; sidewalls no more than two hundred (200) square feet. App ID# 147029 has been rejected as it was replaced and approved by APP ID # 152840.	12/6/2022