

SITE INFORMATION

Report Type: Closure Report NAB1924840999

General Site Information:

Site:	Patron 23 Federal 4H				
Company:	ConocoPhillips				
Section, Township and Range	Unit Letter K	Sec. 14	T 25S	R 29E	
Lease Number:	N/A				
County:	Eddy				
Release GPS:	32.12651°			-103.95606°	
Surface Owner:	Federal (BLM)				
Mineral Owner:	N/A				
Directions:	From Malaga, NM (US Hwy 285/Co Rd 720): head south on US Hwy 285 for 12.4 miles. Turn left on White horn rd. Head east for 2.4 miles. Turn left onto Longhorn rd. Head east for 1.8 miles. Turn left on Pipeline Rd Number 1. Head northeast for 1.8 miles. Turn left on lease road. Head northwest for 2.2 miles. Turn right on lease road. Head east for 1.9 miles. Turn right on lease road 570 ft. Site is on the east and west of the lease road.				

Release Data:

Date Discovered:	8/8/2019
Type Release:	Produced Water
Source of Contamination:	Flowline Leak
Fluid Released:	250 bbls
Fluids Recovered:	10 bbls

Official Communication:

Name:	Ike Tavarez	Shelly Tucker	Christian M. Llull, P.G.
Company:	ConocoPhillips	BLM	Tetra Tech
Address:	925 N. Eldridge Pkwy.	620 E. Green St	8911 North Capital of Texas Hwy. Building 2, Suite 2310
City:	Houston, TX 77079	Carlsbad, NM 88220	Austin, Texas 78759
Phone number:	1-432-701-8630	575.234.5706 - Direct	(512) 338-2861
Fax:			
Email:	ike.tavarez@conocophillips.com	stucker@blm.gov	christian.llull@tetrattech.com

Site Characterization

Depth to Groundwater:	>100' below surface
Impact to groundwater or surface water:	No
Extents within 300 feet of a watercourse:	No
Extents within 200 feet of lakebed, sinkhole, or playa lake:	No
Extents within 300 feet of an occupied structure:	No
Extents within 500 horizontal feet of a private water well:	No
Extents within 1000 feet of any water well or spring:	No
Extents within incorporated municipal well field:	No
Extents within 300 feet of a wetland:	No
Extents overlying a subsurface mine:	No
Karst Potential:	Low
Extents within a 100-year floodplain:	No
Impact to areas not on a production site:	No

Recommended Remedial Action Levels (RRALs)

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



May 31, 2022

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

**Re: Closure Report
ConocoPhillips
Heritage Concho
Patron 23 Federal 4H Release
Unit Letter K, Section 14, Township 25 South, Range 29 East
Eddy County, New Mexico
2RP-5609
Incident ID# NAB1924840999**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release and subsequent remedial actions taken at the Patron 23 Federal 4H. The release footprint is located on Bureau of Land Management (BLM) land in Public Land Survey System (PLSS) Unit Letter K, Section 14, Township 25 South, Range 29 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.12651°, -103.95606°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on August 8, 2019. The C-141 reports that the release was caused by high pressure within a flowline resulting in a rupture of the flowline. Approximately 250 barrels (bbls) of produced water were released, of which approximately 10 bbls of produced water were recovered. The release was within pastureland. The New Mexico Oil Conservation District (NMOCD) approved the initial C-141 on August 13, 2019 and subsequently assigned the release the remediation permit (RP) number 2RP-5609. Incident ID NAB1924840999. The initial C-141 form is included in Appendix A.

SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). There are stream bodies located less than ½-mile from the release location. The Site is in an area of low karst potential.

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE database located within approximately ½ mile (800 meters) of the site. According to data from one (1) water well listed in the NMOSE database within approximately 1.24 miles (2,000 meters) of the site, the depth to groundwater is 85 feet below ground surface (bgs).

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The remediation action levels proposed for the site are largely dependent upon depth to groundwater. As such, the NMOCD focuses upon depth to water estimation. Thus, 19.15.11(A)(2) NMAC allows for various means of determining depth to groundwater. For this release, as the available water level information was from wells further than ½ mile away from the site, Heritage Concho drilled a boring as a means for determining depth to groundwater in the vicinity of the NAB1924840999 release area.

One boring (BH-1) drilled as a portion of the release characterization drilled within roughly a ½-mile radius of the release footprint. A review of the associated boring log indicates that boring BH-1 does not define depth to groundwater but was dry to a depth of 105 feet bgs. The borehole was plugged with 3/8-inch bentonite chips on February 24, 2021. The borehole coordinates are 32.122593°, -103.949262°. Thus, based on this data, ConocoPhillips proposes to use the least stringent remediation limits (>100 feet) listed in Table I of 19.15.29.12 NMAC. The boring log from investigation is included in Appendix B. The remainder of the site characterization data is also 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, established depth to groundwater, and in accordance with Table I of 19.15.29.12 NMAC, the RRALs for the Site are as follows:

Constituent	Site RRALs
Chloride	20,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

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

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg

INITIAL ASSESSMENT AND ANALYTICAL RESULTS

On August 20, 2020, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of nine auger holes (AH-1 through AH-9) were installed in the release footprint to total depths ranging from 0-1 foot to 4.5 feet below surface. Deeper samples could not be collected, utilizing the hand auger, due to a dense formation in the area. Also, ten (10) horizontal delineation samples were collected (H-1 through H-10). Soil samples were collected and submitted to Eurofins Xenco Laboratory in Midland, Texas (Xenco) to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. The sample locations are shown on Figure 3.

On September 3, 2020, Tetra Tech personnel were onsite to further evaluate and sample the release area. A total of seven trenches (T-1 through T-7) were excavated and samples collected between 0 to 12 feet maximum depth below the ground surface. Soil samples were collected and submitted to Xenco for chloride analysis by EPA method 300.0. The sample locations are shown on Figure 3.

Analytical results from the August and September 2020 assessment activities are presented in Table 1. Analytical results indicate samples from locations AH-1 through AH-7 and AH-9, as well as trenched locations T-1 through T-7, did not exceed site RRAL for chlorides (600 mg/kg) but did exceed site reclamation limits for chloride (20,000 mg/kg) in the top 4 feet. Laboratory analytical results from horizontal delineation samples did not exceed site RRALs or reclamation limits for chlorides.

REMEDIATION WORK PLAN AND NMOCD REJECTION

A Work Plan summarizing the assessment results and proposed remedial actions was prepared by Tetra Tech on behalf of ConocoPhillips and application [11098] was submitted to NMOCD for review on November 5, 2020. The report described the assessment activities and results. The (02/18/2021, C-141) application [11098] was rejected by NMOCD. The operator was emailed with details of this event. The submittal was rejected via email by Chad Hensley on February 18, 2021.

Reasons for denial included in the email include:

"If you feel the depth to groundwater is >100', a shallow borehole can be drilled to 105' allowing for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, sample points would be allowed for remediation. We would just need a copy of the driller's log.

Additional horizontal delineation samples will need to be established on the boundaries at AH-1, AH-2, AH-3, and AH-4. Preferably along the lease road."

The NMOCD rejection is included in this report as Appendix C.

ADDITIONAL SITE DELINEATION AND SAMPLING RESULTS

As noted in the previous Site Characterization section, a single borehole was drilled to establish depth to water, per NMOCD direction. The boring was drilled within roughly a ½-mile radius of the release footprint. A review of the associated boring log indicates that boring BH-1 does not establish depth to groundwater but was dry to a depth of 105 feet bgs. The borehole was plugged with 3/8-inch bentonite chips on February 24, 2021. The borehole coordinates are 32.122593°, -103.949262°.

On December 27, 2021, Tetra Tech personnel were onsite to further evaluate and install additional auger holes to delineate the release west of the dirt road. A total of three additional hand auger sampling locations were installed (H-11 through H-13) to a bottom depth of 4 feet below the ground surface. Soil samples were collected and submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by method SM4500Cl-B. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The sample locations are shown on Figure 3.

Results for laboratory analytical tests performed on samples collected in December 2021 are presented in Table 2. Analytical results on samples collected from H-11 through H-13 did not exceed site established RRALs or site reclamation limits.

REVISED REMEDIATION WORK PLAN AND ALTERNATIVE CONFIRMATION SAMPLING PLAN

The revised Release Characterization Work Plan (Work Plan) was prepared by Tetra Tech on behalf of ConocoPhillips and submitted to NMOCD on January 24, 2022, with fee application payment PO Number 371PX-220124-C-1410. The Work Plan described the results of the additional release assessment activities performed at the site. The Work Plan was approved via email by Chad Hensley on Wednesday, February 9, 2022. Mr. Hensley also executed page 4 of the C-141 form included with the Work Plan. A copy of the NMOCD correspondence is included as Appendix C.

REMEDATION ACTIVITIES AND CONFIRMATION SAMPLING

From April 20 to May 11, 2022, Tetra Tech personnel were onsite to supervise the remediation activities proposed in the approved Work Plan, including excavation, disposal, and confirmation sampling. The Bureau of Land Management (BLM) was notified of the proposed remediation activities via email on March 25, 2022. Prior to confirmation sampling, on April 22, 2022, the NMOCD division district office was notified via email in accordance with Subsection D of 19.15.29.12 NMAC. Documentation of associated regulatory correspondence is included in Appendix C.

Impacted soils were excavated until a representative sample from the walls and bottom of the excavation had a field screening value inferred as lower than the RRALs for the Site. Once field screening was completed, confirmation floor and sidewall samples were collected for laboratory analysis to verify that the impacted materials were properly removed. Each confirmation sample laboratory analytical result was directly compared to the proposed reclamation requirements/RRALs to demonstrate compliance. Per the approved Alternative Confirmation Sampling Plan, confirmation samples were collected such that each discrete sample (sidewall and floor) were representative of no more than 500 square feet of excavated area. A total of twenty-one (21) floor sample locations and thirty-three (33) sidewall sample locations were used during the remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with "FS"-#. Excavated areas, depths and confirmation sample locations are indicated in Figure 4.

Initial confirmation soil sampling analytical results associated with location ESW-3 exceeded the RRAL of 600 mg/kg for chlorides. After this area was expanded 2 feet to the east, iterative confirmation samples were collected to encompass the original sample locations that triggered removal (nomenclature defined in Table 3) post-additional excavation.

Collected confirmation samples to be submitted for analysis were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal Laboratories in Hobbs, New Mexico. The soil samples were analyzed for TPH (GRO, DRO and ORO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by SM4500Cl-B. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D.

Per the approved Work Plan and laboratory analytical results, the impacted area was excavated to 4 feet below pre-release grade. The portion of the release area in the road was sampled from trenched locations and based on the analytical results this area was not excavated. All final confirmation soil samples (floor and sidewall) were below the respective RRALs and reclamation requirements for chloride, BTEX, and TPH. The results of the April and May 2022 confirmation sampling event are summarized in Table 3.

All the excavated material was transported offsite for proper disposal. Approximately 1,090 cubic yards of material were transported to the R360 Red Bluff facility in Orla, Texas for disposal. Once confirmation sampling activities were completed and associated analytical results were below the RRALs, the excavated areas were backfilled with clean material to surface grade. Photographs from the excavated areas prior to and immediately following placement of backfill are provided in Appendix E. Due to the number and large file size associated with the waste manifests, they are not included in this report; however, waste manifests can be uploaded to the portal separately at NMOCD request.

As prescribed in the Work Plan, the backfilled areas were seeded in May 2022 to aid in revegetation. Based on soils at the site and the approved Work Plan, the New Mexico State Land Office (NMSLO) Sandy (S) Sites Seed Mixture was used for seeding and planted in the amount specified in the pounds pure live seed (PLS) per acre.

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 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.

Release Characterization and Remediation Work Plan
May 31, 2022

ConocoPhillips

CONCLUSION

ConocoPhillips respectfully requests closure of the incident based on the confirmation sampling results and remediation activities performed. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the remediation activities for the Site, please call me at (512) 739-7874 or Christian at (512) 338-2661.

Sincerely,
Tetra Tech, Inc.



Samantha K. Abbott, P.G.
Project Manager



Christian M. Llull, P.G.
Program Manager

cc:
Mr. Ike Tavarez, RMR – ConocoPhillips

LIST OF ATTACHMENTS

Figures:

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

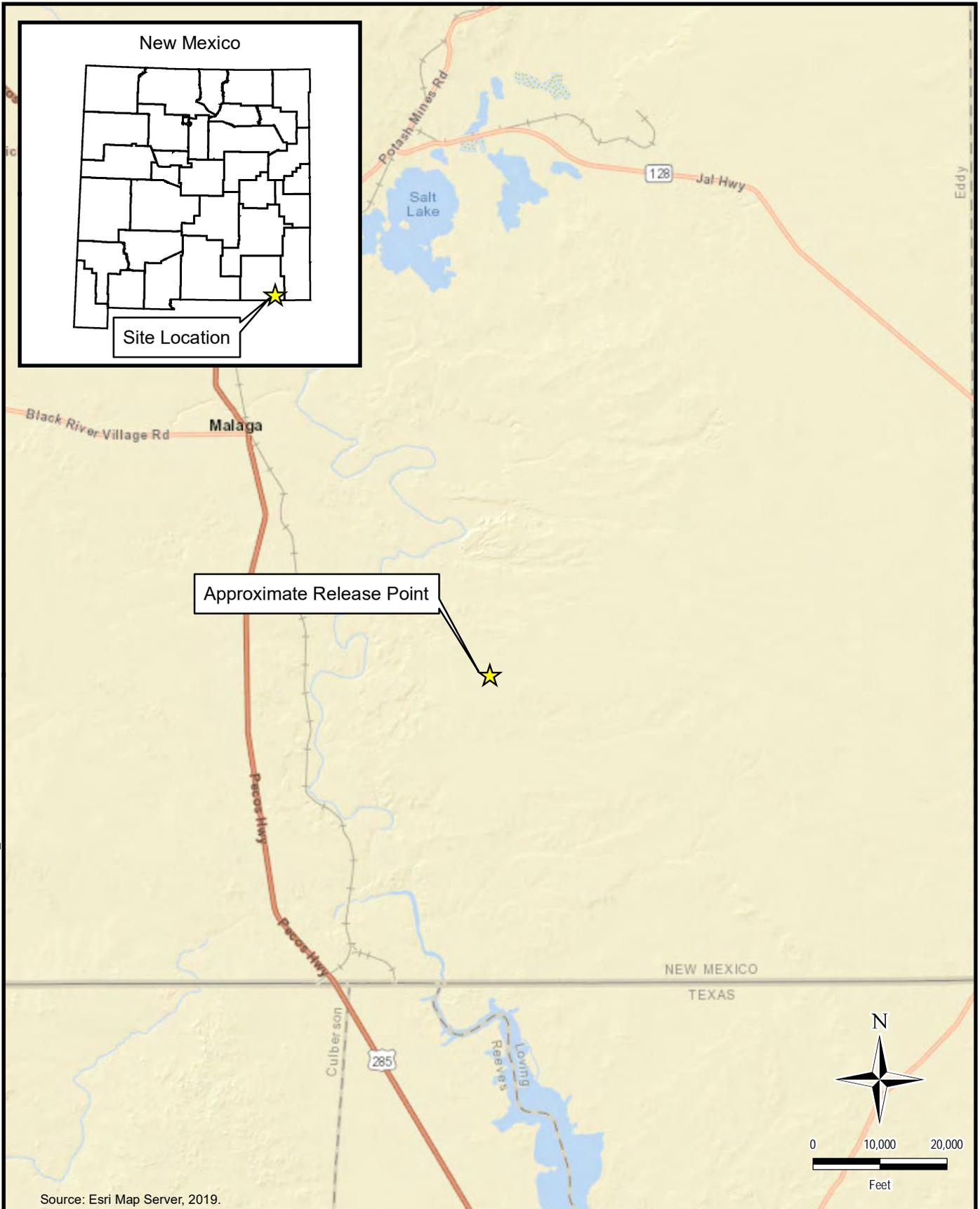
Tables:

- Table 1 – Summary of Analytical Results – Initial Soil Assessment
- Table 2 – Summary of Analytical Results – Additional Soil Assessment
- Table 3 – Summary of Analytical Results – Soil Remediation

Appendices:

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

FIGURES



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\PATRON 23 FED 4H\Figure 1 Overview Map_PATRON 23 FEDERAL 4H.MXD

Source: Esri Map Server, 2019.



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CONOCOPHILLIPS

2RP-5609 / NAB1924840999
 (32.126086°, -103.955787°)
 EDDY COUNTY, NEW MEXICO

**PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 OVERVIEW MAP**

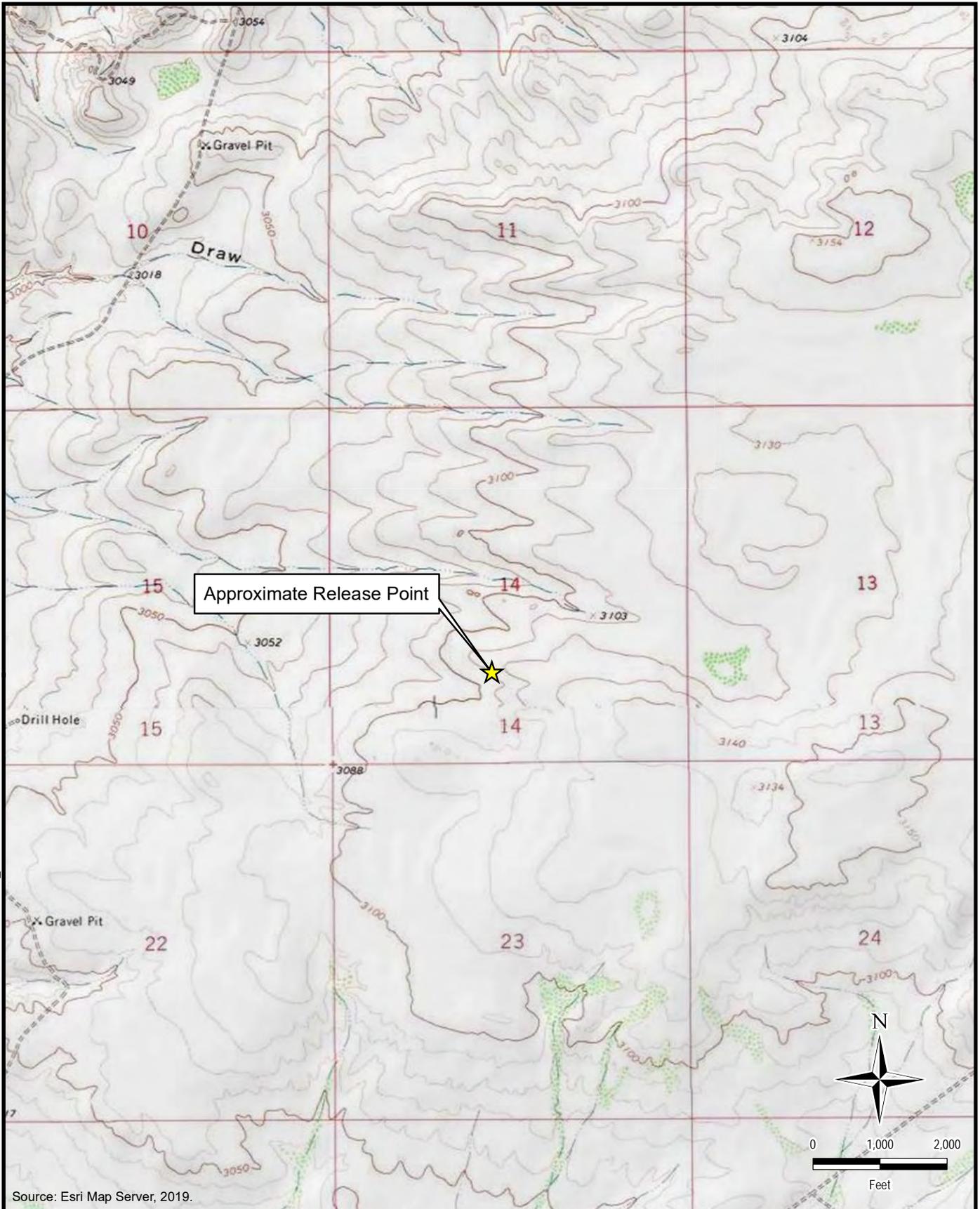
PROJECT NO.: 212C-MD-02646

DATE: JANUARY 19, 2022

DESIGNED BY: AAM

Figure No.

1



Source: Esri Map Server, 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\PATRON 23 FED 4H\FIGURE 2 TOPO MAP PATRON 23 FEDERAL 4H.MXD



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 (32.126086°, -103.955787°)
 EDDY COUNTY, NEW MEXICO

**PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 TOPOGRAPHIC MAP**

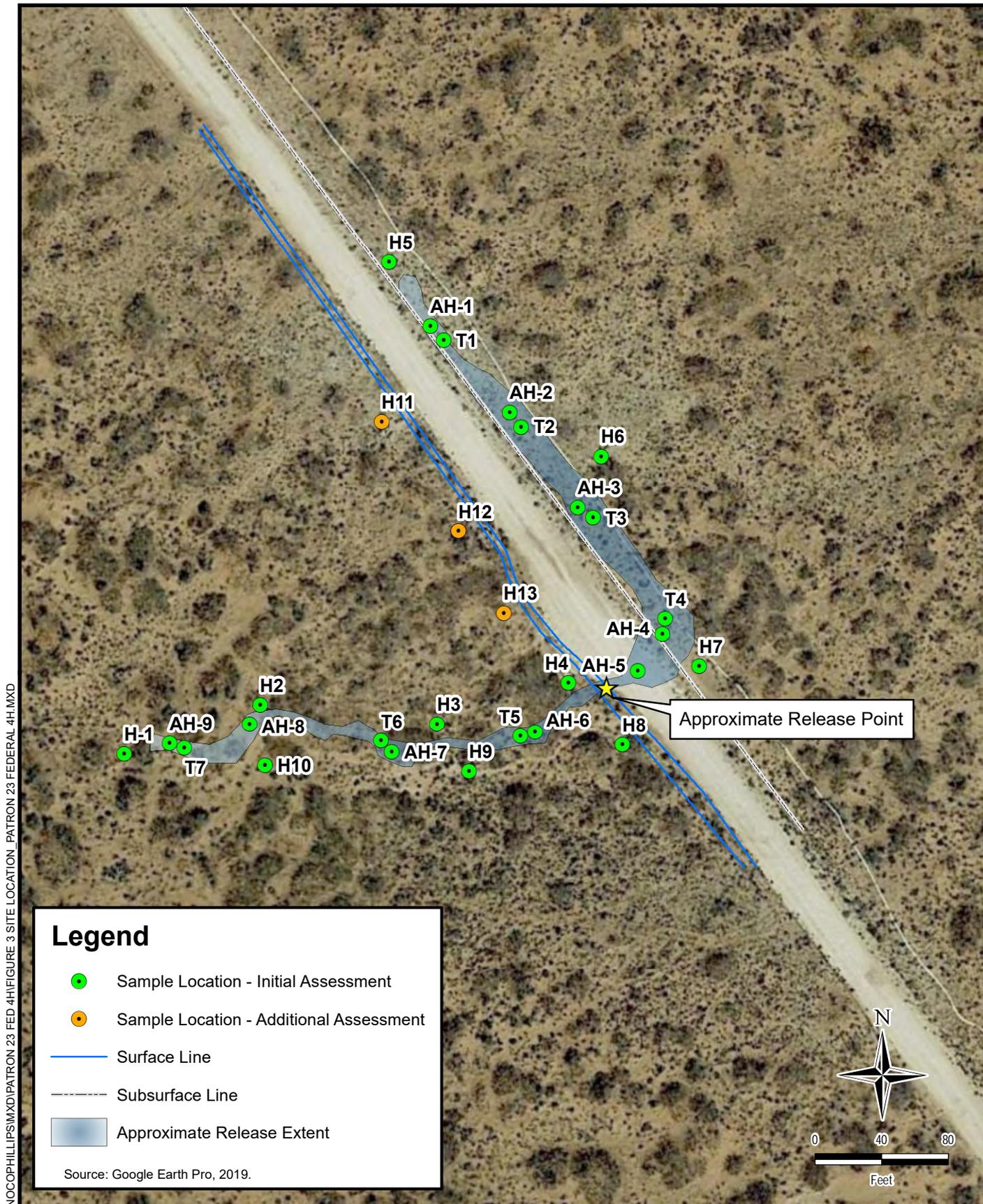
PROJECT NO.: 212C-MD-02646

DATE: JANUARY 19, 2022

DESIGNED BY: IM

Figure No.

2



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\PATRON 23 FED 4H\FIGURE 3 SITE LOCATION_PATRON 23 FEDERAL 4H.MXD

Legend

- Sample Location - Initial Assessment
- Sample Location - Additional Assessment
- Surface Line
- - - Subsurface Line
- Approximate Release Extent

Source: Google Earth Pro, 2019.

Tt TETRA TECH

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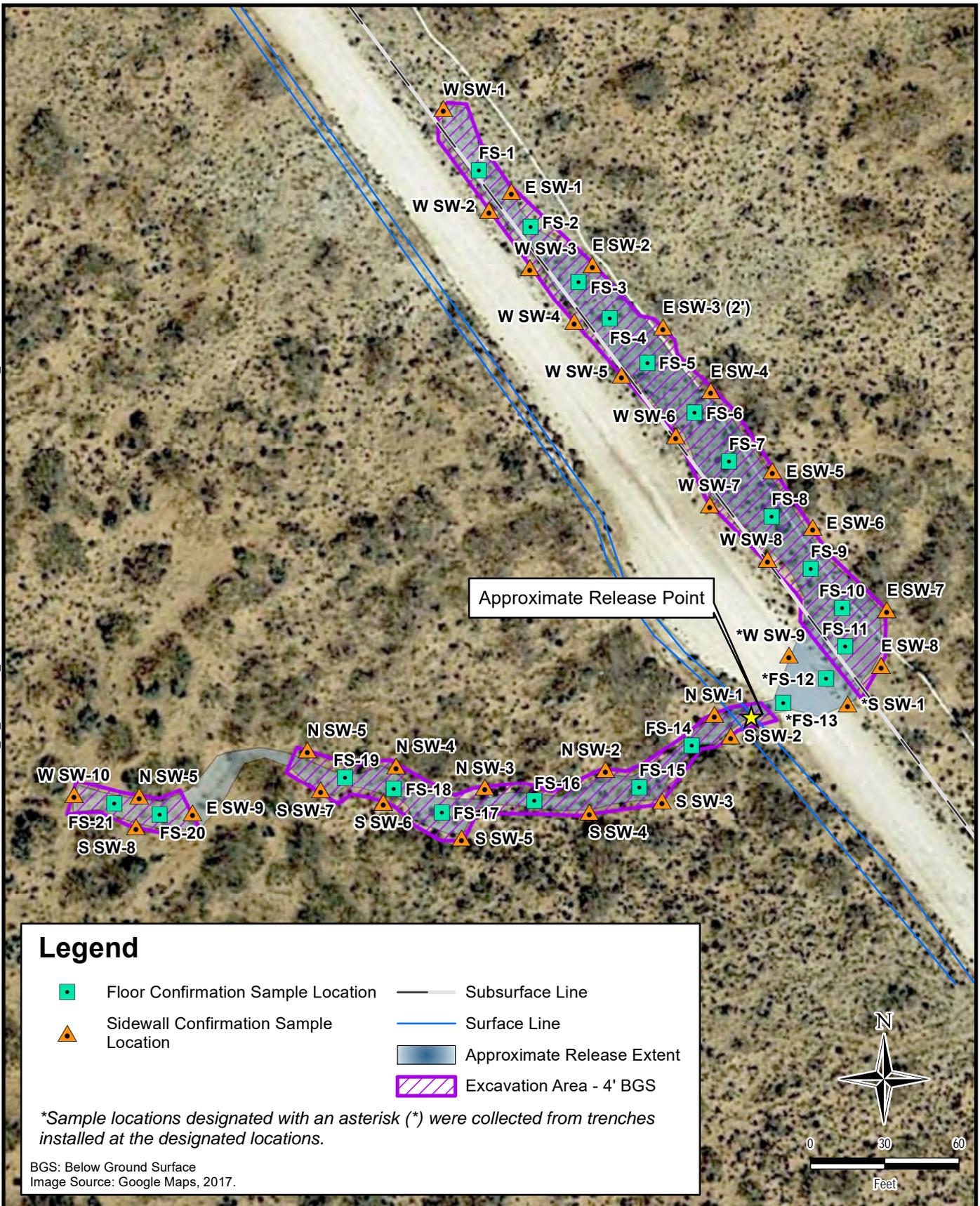
CONOCOPHILLIPS

2RP-5609 / NAB1924840999
 (32.126086°, -103.955787°)
 EDDY COUNTY, NEW MEXICO

**PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 APPROXIMATE RELEASE EXTENT AND ASSESSMENT MAP**

PROJECT NO.:	212C-MD-02646
DATE:	JANUARY 21, 2022
DESIGNED BY:	AAM
Figure No.	
3	

DOCUMENT PATH: C:\USERS\LISSA.VILLAMINONE\DRIVE - TETRA TECH\INC\DOCUMENTS\ILLU\CORPATRON 23_FEDERAL_4H\MXD\FIGURE 4 REMEDIATION AND CONFIRMATION_PATRON 23 FEDERAL #4H.MXD



Legend

- Floor Confirmation Sample Location
- ▲ Sidewall Confirmation Sample Location
- Subsurface Line
- Surface Line
- Approximate Release Extent
- Excavation Area - 4' BGS

**Sample locations designated with an asterisk (*) were collected from trenches installed at the designated locations.*

BGS: Below Ground Surface
Image Source: Google Maps, 2017.



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2RP-5609 / NAB192480999
(32.126086°, -103.955787°)
EDDY COUNTY, NEW MEXICO

**PATRON 23 FEDERAL #4H FLOWLINE RELEASE
REMEDATION EXTENT AND CONFIRMATION SAMPLE LOCATIONS**

PROJECT NO.: 212C-MD-02646

DATE: MAY 16, 2022

DESIGNED BY: LMV

Figure No.

4

TABLES

TABLE 1
 SUMMARY OF ANALYTICAL RESULTS
 INITIAL SOIL ASSESSMENT - 2RP-5609
 HERITAGE CONCHO
 PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²										TPH ³											
					Benzene		Toluene		Ethylbenzene		m,p-Xylenes		o-Xylene		Total Xylenes		Total BTEX		GRO		DRO		MRO		Total TPH	
					ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-1	8/20/2020	0-1	363		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 49.9		< 49.9		< 49.9		< 49.9			
		1-1.5	2,280		-		-		-		-		-		-		-		-		-		-			
Trench-1	9/3/2020	0-1	1,260		-		-		-		-		-		-		-		-		-		-			
		1-1.5	1,900		-		-		-		-		-		-		-		-		-		-			
AH-2	8/20/2020	0-1	3,320		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 50.0		< 50.0		< 50.0		< 50.0			
		1-1.5	5,220		-		-		-		-		-		-		-		-		-		-			
Trench-2	9/3/2020	0-1	1,220		-		-		-		-		-		-		-		-		-		-			
		1-1.5	1,430		-		-		-		-		-		-		-		-		-		-			
AH-3	8/20/2020	0-1	22.8		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 50.0		< 50.0		< 50.0		< 50.0			
		1-1.5	28.2		-		-		-		-		-		-		-		-		-		-			
		2-2.5	170		-		-		-		-		-		-		-		-		-		-			
		2.5-3	1,770		-		-		-		-		-		-		-		-		-		-			
Trench-3	9/3/2020	0-1	21.5		-		-		-		-		-		-		-		-		-		-			
		1	20.3		-		-		-		-		-		-		-		-		-		-			
		2	4,220		-		-		-		-		-		-		-		-		-		-			
		3	4,350		-		-		-		-		-		-		-		-		-		-			
AH-4	8/20/2020	0-1	49.5		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 49.9		< 49.9		< 49.9		< 49.9			
		1-1.5	53.8		-		-		-		-		-		-		-		-		-		-			
		2-2.5	1,190	X	-		-		-		-		-		-		-		-		-		-			
		3-3.5	9,080		-		-		-		-		-		-		-		-		-		-			
		4-4.5	12,500		-		-		-		-		-		-		-		-		-		-			
Trench-4	9/3/2020	0-1	43.8		-		-		-		-		-		-		-		-		-		-			
		1	19.7		-		-		-		-		-		-		-		-		-		-			
		2	22.2		-		-		-		-		-		-		-		-		-		-			
		3	114		-		-		-		-		-		-		-		-		-		-			
		4	7,400		-		-		-		-		-		-		-		-		-		-			
		5	10,100		-		-		-		-		-		-		-		-		-		-			
AH-5	8/20/2020	0-1	6,680		< 0.00201		< 0.00201		< 0.00201		< 0.00402		< 0.00201		< 0.00201		< 49.8		< 49.8		< 49.8		< 49.8			
		1-1.5	3,610		-		-		-		-		-		-		-		-		-		-			
		2-2.5	4,420		-		-		-		-		-		-		-		-		-		-			
		3-3.5	2,090		-		-		-		-		-		-		-		-		-		-			
		4-4.5	139		-		-		-		-		-		-		-		-		-		-			
AH-6	8/20/2020	0-1	51.4		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 50.0		< 50.0		< 50.0		< 50.0			
		1-1.5	85.9		-		-		-		-		-		-		-		-		-		-			
		2-2.5	2,100		-		-		-		-		-		-		-		-		-		-			
		3-3.5	3,700		-		-		-		-		-		-		-		-		-		-			
Trench-5	9/3/2020	0-1	1,010		-		-		-		-		-		-		-		-		-		-			
		1	1,130		-		-		-		-		-		-		-		-		-		-			
		2	1,290		-		-		-		-		-		-		-		-		-		-			
		3.5	4,380		-		-		-		-		-		-		-		-		-		-			

TABLE 1
 SUMMARY OF ANALYTICAL RESULTS
 INITIAL SOIL ASSESSMENT - 2RP-5609
 HERITAGE CONCHO
 PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²										TPH ³											
					Benzene		Toluene		Ethylbenzene		m,p-Xylenes		o-Xylene		Total Xylenes		Total BTEX		GRO		DRO		MRO		Total TPH	
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
AH-7	8/20/2020	0-1	18.0		< 0.00200		< 0.00200		< 0.00200		< 0.00400		< 0.00200		< 0.00200		< 49.9		< 49.9		< 49.9		< 49.9			
		1-1.5	21.7		-		-		-		-		-		-		-		-		-		-			
		2-2.5	441		-		-		-		-		-		-		-		-		-		-			
		3-3.5	4,190		-		-		-		-		-		-		-		-		-		-			
Trench-6	9/3/2020	0-1	24.2		-		-		-		-		-		-		-		-		-		-			
		1	30.3		-		-		-		-		-		-		-		-		-		-			
		2	237		-		-		-		-		-		-		-		-		-		-			
		3	9,590		-		-		-		-		-		-		-		-		-		-			
		4	9,580		-		-		-		-		-		-		-		-		-		-			
		5	16,700		-		-		-		-		-		-		-		-		-		-			
		6	12,700		-		-		-		-		-		-		-		-		-		-			
		7	7,280		-		-		-		-		-		-		-		-		-		-			
		8	4,330		-		-		-		-		-		-		-		-		-		-			
		9	5,190		-		-		-		-		-		-		-		-		-		-			
		10	1,750		-		-		-		-		-		-		-		-		-		-			
		11	130		-		-		-		-		-		-		-		-		-		-			
12	124		-		-		-		-		-		-		-		-		-		-					
AH-8	8/20/2020	0-1	17.2		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 50.0		< 50.0		< 50.0		< 50.0			
		1-1.5	16.1		-		-		-		-		-		-		-		-		-		-			
		2-2.5	21.9		-		-		-		-		-		-		-		-		-		-			
		3-3.5	34.2		-		-		-		-		-		-		-		-		-		-			
AH-9	8/20/2020	0-1	17.9		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 49.8		< 49.8		< 49.8		< 49.8			
		1-1.5	23.9		-		-		-		-		-		-		-		-		-		-			
		2-2.5	42.3		-		-		-		-		-		-		-		-		-		-			
		3-3.5	1,030		-		-		-		-		-		-		-		-		-		-			
		4-4.5	4,530		-		-		-		-		-		-		-		-		-		-			
Trench-7	9/3/2020	0-1	61.6		-		-		-		-		-		-		-		-		-		-			
		1	58.4		-		-		-		-		-		-		-		-		-		-			
		2	73.3		-		-		-		-		-		-		-		-		-		-			
		3	344		-		-		-		-		-		-		-		-		-		-			
		4	2,690		-		-		-		-		-		-		-		-		-		-			
		5	8,340		-		-		-		-		-		-		-		-		-		-			
		6	1,830		-		-		-		-		-		-		-		-		-		-			
		7	6,400		-		-		-		-		-		-		-		-		-		-			
		8	2,740		-		-		-		-		-		-		-		-		-		-			
		9	206		-		-		-		-		-		-		-		-		-		-			
10	36.0		-		-		-		-		-		-		-		-		-		-					
Horizontal-1	8/20/2020	0-1	15.9		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 50.0		< 50.0		< 50.0		< 50.0			
Horizontal-2	8/20/2020	0-1	9.01		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 50.0		< 50.0		< 50.0		< 50.0			
Horizontal-3	8/20/2020	0-1	14.8		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 49.9		< 49.9		< 49.9		< 49.9			
Horizontal-4	8/20/2020	0-1	10.4		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 49.8		< 49.8		< 49.8		< 49.8			

TABLE 1
 SUMMARY OF ANALYTICAL RESULTS
 INITIAL SOIL ASSESSMENT - 2RP-5609
 HERITAGE CONCHO
 PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²										TPH ³											
					Benzene		Toluene		Ethylbenzene		m,p-Xylenes		o-Xylene		Total Xylenes		Total BTEX		GRO		DRO		MRO		Total TPH	
					ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
Horizontal-5	8/20/2020	0-1	9.20		< 0.00198		< 0.00198		< 0.00198		< 0.00397		< 0.00198		< 0.00198		< 50.0		< 50.0		< 50.0		< 50.0			
Horizontal-6	8/20/2020	0-1	8.71		< 0.00198		< 0.00198		< 0.00198		< 0.00397		< 0.00198		< 0.00198		< 49.9		< 49.9		< 49.9		< 49.9			
Horizontal-7	8/20/2020	0-1	6.16		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 50.0		< 50.0		< 50.0		< 50.0			
Horizontal-8	8/20/2020	0-1	8.71		< 0.00200		< 0.00200		< 0.00200		< 0.00399		< 0.00200		< 0.00200		< 50.0		< 50.0		< 50.0		< 50.0			
Horizontal-9	8/20/2020	0-1	67.1		< 0.00200		< 0.00200		< 0.00200		< 0.00400		< 0.00200		< 0.00200		< 49.9		< 49.9		< 49.9		< 49.9			
Horizontal-10	8/20/2020	0-1	10.3		< 0.00198		< 0.00198		< 0.00198		< 0.00397		< 0.00198		< 0.00198		< 49.8		< 49.8		< 49.8		< 49.8			

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- MRO Motor Oil range organics
- (-) Sample not analyzed for constituent
- 1 EPA Method 300.0
- 2 EPA Method 8021B
- 3 Method SW8015 Mod

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

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

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

TABLE 2
 SUMMARY OF ANALYTICAL RESULTS
 ADDITIONAL SOIL ASSESSMENT - NAB1924840999
 CONOCOPHILLIPS
 PATRON 23 FEDERAL 4H RELEASE
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Chloride ¹		BTEX ²							TPH ³										
					Benzene		Toluene		Ethylbenzene		Total Xylenes			Total BTEX		GRO		DRO		EXT ORO		Total TPH (GRO+DRO+ORO)
					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	
H-11	12/27/2021	0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
		2-3	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
		3-4	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
H-12	12/27/2021	0-1	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
		2-3	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
		3-4	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
H-13	12/27/2021	0-1	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
		2-3	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		
		3-4	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-		

NOTES:

- ft. Feet
- bgs Below ground surface
- ppm Parts per million
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- ORO Oil range organics
- 1 Method SM4500CI-B
- 2 EPA Method 8021B
- 3 EPA Method 8015M

TABLE 3
 SUMMARY OF ANALYTICAL RESULTS
 SOIL REMEDIATION - 2RP-5609
 HERITAGE CONCHO
 PATRON 23 FEDERAL #4H FLOWLINE RELEASE
 EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth ft. bgs	Field Screening Results		Chloride ¹		BTEX ²								TPH ³								
			Chloride ppm	PID	mg/kg	Q	Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO C ₆ - C ₁₀		DRO > C ₁₀ - C ₂₈		EXT DRO > C ₂₈ - C ₃₆		Total TPH (GRO+DRO+EXT DRO) mg/kg
							mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	
FS-1	4/22/2022	4	1880	0.4	1,580	QM-07	< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-2	4/22/2022	4	3100	0.5	4,400		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-3	4/22/2022	4	3210	0.3	3,560		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-4	4/22/2022	4	4570	0.9	3,920		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-5	4/22/2022	4	1380	0.4	1,650		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-6	4/22/2022	4	3190	0.9	3,360		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-7	4/25/2022	4	3450	-	5,680		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-8	4/25/2022	4	7080	-	10,700		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-9	4/25/2022	4	5480	-	8,530		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-10	4/25/2022	4	3050	-	4,560		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-11	4/25/2022	4	650	-	944		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-12	5/2/2022	4	359	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-13	5/2/2022	4	370	-	336		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-14	4/27/2022	4	2410	-	3,040		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-15	4/27/2022	4	2790	-	4,160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-16	4/27/2022	4	2840	-	7,440		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-17	4/27/2022	4	7740	-	10,400		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-18	5/2/2022	4	2020	-	2,760		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-19	5/2/2022	4	1980	-	2,000		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-20	5/2/2022	4	2100	-	2,800		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-21	5/2/2022	4	2010	-	2,840		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
NSW-1	4/27/2022	-	32.2	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
NSW-2	4/27/2022	-	68.3	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
NSW-3	4/27/2022	-	238	-	256		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
NSW-4	4/27/2022	-	131	-	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
NSW-5	5/2/2022	-	30.2	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
NSW-6	5/2/2022	-	96.1	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-1	4/22/2022	-	398	0.7	496		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-2	4/22/2022	-	352	1.1	528		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-3	4/22/2022	-	458	0.4	704		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-3 (2)*	4/27/2022	-	358	-	368		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-4	4/22/2022	-	325	1.5	368		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-5	4/25/2022	-	50.1	-	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-6	4/25/2022	-	45.1	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-7	4/25/2022	-	51.3	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-8	4/25/2022	-	34.9	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
ESW-9	5/2/2022	-	108	-	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-1	5/2/2022	-	126	-	112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-2	4/27/2022	-	63.1	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-3	4/27/2022	-	39.5	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-4	4/27/2022	-	36	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-5	4/27/2022	-	41.6	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-6	5/2/2022	-	98.1	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-7	5/2/2022	-	75.2	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SSW-8	5/2/2022	-	86.4	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-1	4/22/2022	-	425	0.5	576		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-2	4/22/2022	-	153	0	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-3	4/22/2022	-	369	0.100	432		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-4	4/22/2022	-	358	0.200	448		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-5	4/22/2022	-	334	0.400	384		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-6	4/22/2022	-	347	0.100	384		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-7	4/25/2022	-	289	-	192		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-8	4/25/2022	-	115	-	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-9	5/2/2022	-	119	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
WSW-10	5/2/2022	-	46.5	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-

NOTES:

ft. Feet
 bgs Below ground surface
 mg/kg Milligrams per kilogram
 TPH Total Petroleum Hydrocarbons
 GRO Gasoline range organics
 DRO Diesel range organics
 1 Method SM4500CI-B
 2 Method 8021B
 3 Method 8015M

Bold and italicized values indicate exceedance of proposed Remediation RRLs and Reclamation Requirements.
 Gold highlight represents soil horizons that were removed during deepening of excavation floors.
 Green highlight represents soil intervals that were removed during horizontal expansion of excavation sidewalls.
 * These iterative samples are located to encompass the original sample location that triggered removal, with further excavation in each area indicated in ().

QUALIFIERS:
 QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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	NAB1924840999
District RP	2RP-5609
Facility ID	fAB1924840625
Application ID	pAB1924840732

Release Notification HEAJG-190821-C-1410

Responsible Party

Responsible Party	COG Production, LLC	OGRID	217955
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # (assigned by OCD)	NAB1924840999
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.12651 Longitude -103.95606
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Patron 23 Federal #004H Flowline	Site Type	Flowline
Date Release Discovered	August 8, 2019	API# (if applicable)	

Unit Letter	Section	Township	Range	County
K	14	25S	29E	Eddy

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 250	Volume Recovered (bbls) 10
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The release was caused by a ruptured flowline due to high pressure. The flowline is being repaired. The release was in the pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

Incident ID	NAB1924840999
District RP	2RP-5609
Facility ID	fAB1924840625
Application ID	pAB1924840732

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The volume released was greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given by DeAnn Grant via e-mail August 8, 2019 at 2:40 pm to Mike Bratcher and Jim Amos.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>DeAnn Grant</u>	Title: <u>HSE Administrative Assistant</u>
Signature: <u></u>	Date: <u>8/13/2019</u>
email: <u>agrant@concho.com</u>	Telephone: <u>(432) 253-4513</u>
<u>OCD Only</u> Received by: <u>Amalia Bustamante</u>	
Date: <u>9/5/2019</u>	

Incident ID	NAB1924840999
District RP	2RP-5609
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 _____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAB1924840999
District RP	2RP-5609
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: Ike Tavarez Title: Program Manager, Remediation

Signature:  Date: 1/24/2022

email: Ike.Tavarez@conocophillips.com Telephone: 432-685-2573

OCD Only

Received by: _____ Date: _____

Incident ID	NAB1924840999
District RP	2RP-5609
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Ike Tavarez Title: Program Manager, Remediation
 Signature:  Date: 1/24/2022
 email: Ike.Tavarez@conocophillips.com Telephone: 432-685-2573

OCD Only

Received by: Chad Hensley Date: 02/09/2022

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature:  Date: 02/09/2022

Incident ID	NAB1924840999
District RP	2RP-5609
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Ike Tavaréz Title: Program Manager, Remediation

Signature:  Date: 5/30/2022

email: Ike.Tavaréz@conocophillips.com Telephone: 432-701-8630

OCD Only

Received by: _____ Date: _____

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

Closure Approved by:  Date: 06/07/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

APPENDIX B

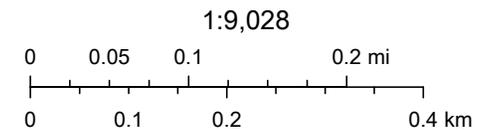
Site Characterization Data

OCD Water Bodies



12/23/2021, 3:38:57 PM

- ★ OCD District Offices
- PLJV Probable Plays
- OSE Water-bodies
- OSE Streams



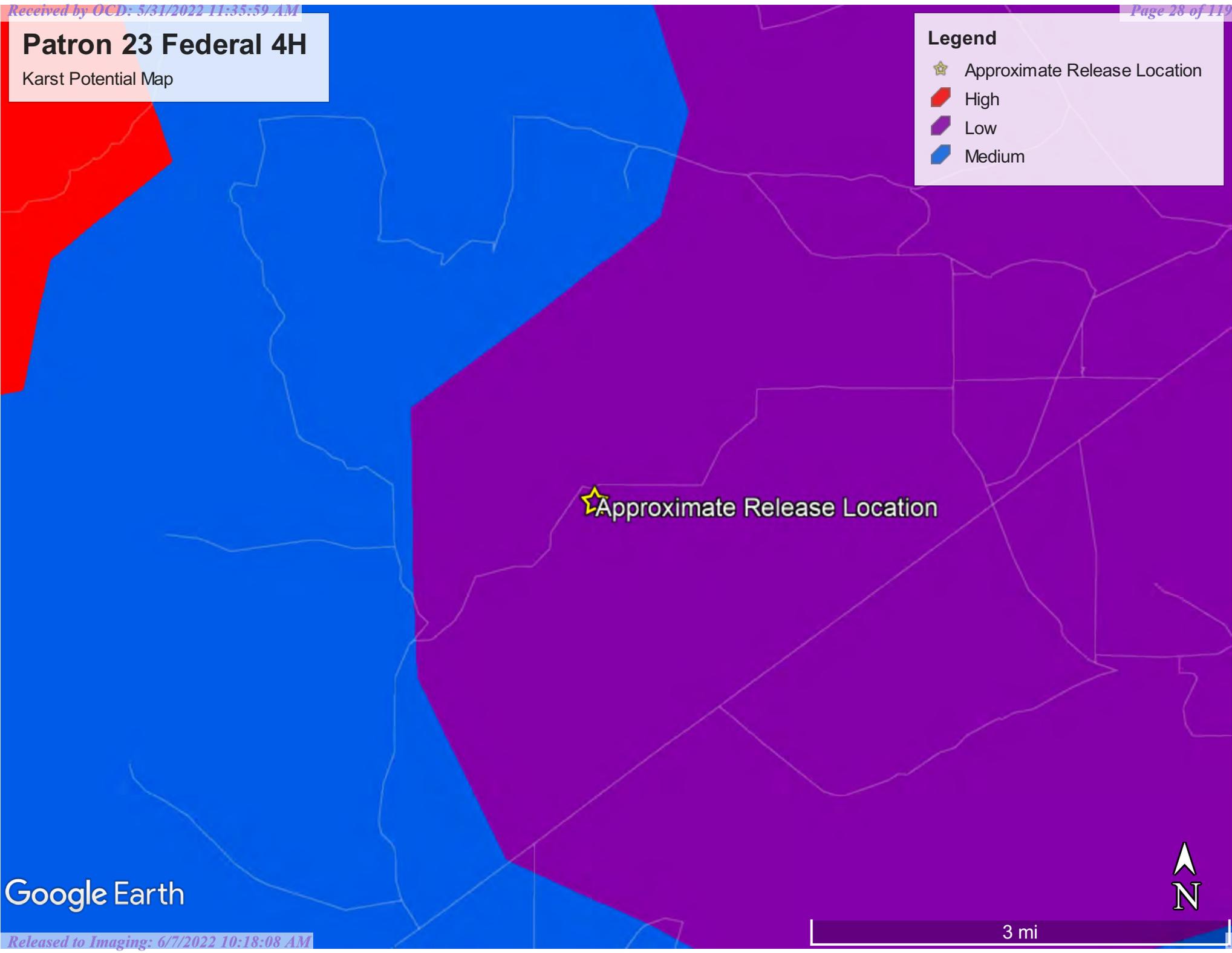
OCD, Esri, HERE, Garmin, IPC, Maxar

Patron 23 Federal 4H

Karst Potential Map

Legend

-  Approximate Release Location
-  High
-  Low
-  Medium



Google Earth





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

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

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

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

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C_02371	C	ED	ED	2	3	15	25S	29E	596741	3555106*		1739	200	60	140
C_02680	CUB	ED	ED	2	3	15	25S	29E	596741	3555106*		1739	200		
C_04558 POD1	CUB	ED	ED	3	4	3	23	25S	29E	598354	3553039		1900		

Average Depth to Water: **60 feet**
 Minimum Depth: **60 feet**
 Maximum Depth: **60 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 598472

Northing (Y): 3554936

Radius: 2000

*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.

12/23/21 2:32 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

212C-MD-02646	TETRA TECH	LOG OF BORING BH-1	Page 1 of 1
---------------	-------------------	---------------------------	----------------

Project Name: Patron 23 Federal 4H

Borehole Location: GPS: 32.122593, -103.949262 Surface Elevation: 3141 ft

Borehole Number: BH-1 Borehole Diameter (in.): 4 Date Started: 2/24/2021 Date Finished: 2/24/2021

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	DEPTH (ft)
												While Drilling <u>∇</u> DRY ft Upon Completion of Drilling <u>∇</u> DRY ft Remarks:		
5												-- CALICHE: Tan, dry, weakly cemented, fine to medium grained.	1	
10												-SC- CLAYEY SAND: Brown, dry, fine to medium grained, medium dense.	12	
15												-- CALICHE: Tan, dry, weakly to moderately cemented, fine to coarse grained, with occasional gravel.	26	
20														
25														
30												-SM- SILTY SAND: Brown, dry, medium dense, fine to coarse grained.	41	
35														
40														
45												-SC- CLAYEY SAND: Tan, dry, fine to medium grained, with occasional Sandy Shale seams.	66	
50														
55														
60														
65														
70												-SM- SILTY SAND: Tan, dry, medium dense, fine to medium grained.	81	
75														
80														
85												-SHALE- SHALE: Sandy shale, fissile, dry.		
90														
95														
100														
105														

Bottom of borehole at 105.0 feet.

Sampler Types: <input checked="" type="checkbox"/> Split Spoon <input type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> Discrete Sample <input type="checkbox"/> Test Pit	Operation Types: <input type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: "Surface elevation is an estimated value based on Google Earth data."
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

Logger: Lane Scarborough Drilling Equipment: Air Rotary Driller: Scarborough Drilling

APPENDIX C

Regulatory Correspondence

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[C-141] Release Corrective Action (C-141) Application

Submission Information

Submission ID:	11098	Districts:	Artesia
Operator:	[229137] COG OPERATING LLC	Counties:	Eddy
Description:	COG OPERATING LLC [229137] PATRON 23 FEDERAL #4H FLOWLINE nAB1924840999 {Discovery: 08/08/2019, Active, , Federal}		
Status:	REJECTED		
Status Date:	02/18/2021		
References (2):	fAB1924840625, nAB1924840999		

Forms

Attachments: [C-141](#)

Questions

This submission type does not have questions, at this time.

Acknowledgments

This submission type does not have acknowledgments, at this time.

Comments

Summary: *chensley (2/18/2021)*, If Company chooses not to drill a borehole to confirm the depth to groundwater, the site must be remediated to meet the Closure Criteria in Table 1 for groundwater at a depth of 50 feet or less.

Conditions

No conditions found for this submission.

Reasons

Summary: *chensley (2/18/2021)*, If you feel the depth to groundwater is >100', a shallow borehole can be drilled to 105' allowing for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, sample points would be allowed for remediation. We would just need a copy of the driller's log.

chensley (2/18/2021), Additional horizontal delineation samples will need to be established on the boundaries at AH-1, AH-2, AH-3, and AH-4. Preferably along the lease road.

[SIGN-IN](#) [HELP](#)

[Searches](#)

[Operator Data](#)

[Hearing Fee Application](#)

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012
1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220

[EMNRD Home](#) [OCD Main Page](#) [OCD Rules](#) [Help](#)

From: [Lull, Christian](#)
To: [Abbott, Sam](#)
Subject: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 74691
Date: Monday, February 28, 2022 11:04:07 PM

Patron closure is due 5/9

Christian

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, February 09, 2022 10:17 AM
To: Lull, Christian <Christian.Lull@tetrattech.com>
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 74691

 **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. 

To whom it may concern (c/o Christian Lull for COG PRODUCTION, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1924840999, with the following conditions:

- **Closure report due 05/09/2022.**
- **Variance for sampling approved for 500 sq/ft.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Chad Hensley
Environmental Science & Specialist
575-703-1723
Chad.Hensley@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [Hamlet, Robert, EMNRD](#)
To: [Lull, Christian](#); [Poole, Nicholas](#)
Cc: [Abbott, Sam](#); [Bratcher, Mike, EMNRD](#); [Nobui, Jennifer, EMNRD](#)
Subject: RE: [EXTERNAL] Incident ID: NAB1924840999 - Confirmation Sampling
Date: Friday, April 22, 2022 11:16:41 AM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

Christian,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Robert Hamlet • Environmental Specialist - Advanced
 Environmental Bureau
 EMNRD - Oil Conservation Division
 811 S. First Street | Artesia, NM 88210
 575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Lull, Christian <Christian.Llull@tetrattech.com>
Sent: Friday, April 22, 2022 9:29 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Poole, Nicholas <NICHOLAS.POOLE@tetrattech.com>
Cc: Abbott, Sam <Sam.Abbott@tetrattech.com>
Subject: [EXTERNAL] Incident ID: NAB1924840999 - Confirmation Sampling

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Robert:

There will be iterative confirmation sampling at the project site, there is an archaeologically sensitive area to the east which necessitates a phased approach to confirmation sampling.

That being said, we can attempt to refine the dates of confirmation sampling to:

Final confirmation sampling for the east side of the excavation area are expected to be conducted

from Tuesday, April 26 to Friday, April 29.

Final confirmation sampling for the west side of the excavation area are expected to be conducted from Tuesday, May 3 to Friday, May 6.

Christian

From: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Sent: Friday, April 22, 2022 9:57 AM
To: Poole, Nicholas <NICHOLAS.POOLE@tetrattech.com>
Cc: Llull, Christian <Christian.Llull@tetrattech.com>; Abbott, Sam <Sam.Abbott@tetrattech.com>
Subject: RE: [EXTERNAL] FW: Incident ID: NAB1924840999- Confirmation Sampling

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Nicholas,

Please, be more specific on dates and times you will be sampling. 20 days seems like a long time to be sampling.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Friday, April 22, 2022 8:09 AM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Subject: Fw: [EXTERNAL] FW: Incident ID: NAB1924840999- Confirmation Sampling

From: Poole, Nicholas <NICHOLAS.POOLE@tetrattech.com>
Sent: Friday, April 22, 2022 7:53 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Cc: Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; Llull, Christian <Christian.Llull@tetrattech.com>; Abbott, Sam <Sam.Abbott@tetrattech.com>
Subject: [EXTERNAL] FW: Incident ID: NAB1924840999- Confirmation Sampling

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

RE: Incident ID (n#) **NAB1924840999** (Patron 23 Federal #4H Release)

To whom it may concern,

In accordance with Subsection D of 19.15.29.12 NMAC, the responsible party must verbally notify the appropriate division district office prior to conducting confirmation sampling.

Remediation activities are beginning at the site starting April 22, 2022.

Thus, on behalf of ConocoPhillips for the above referenced incident, Tetra Tech is duly providing this communication which serves as notification that final confirmation sampling will be conducted at this site from April 22 through May11, 2022.

NOTE: If you have any questions regarding this sampling schedule, please contact me.

Nicholas Poole | Staff Geoscientist
Mobile +1 (512) 560-9064 | nicholas.poole@tetrattech.com

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From: [Lull, Christian](#)
To: [Tucker, Shelly J](#); [Arias, Arthur A](#)
Cc: [Abbott, Sam](#)
Subject: Request for Approval - Remediation (NAB1924840999)
Date: Friday, March 25, 2022 12:06:44 PM
Attachments: [Approved C-141 Patron 23 Fed 4H.pdf](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Art, Shelly:

On behalf of ConocoPhillips, Tetra Tech is assisting with remediation of a previously reported unplanned release with the NMOCD. In order to complete the remediation and the submittal process we are requesting verbal approval to proceed with cleanup at the location listed below.

Aerial image is attached and show the locations to be remediated.

We have Work Plan approval from OCD for remediation at the location indicated in the imagery below. WP attached.

We are also aware of a nearby archaeological site, and plan to have a cultural monitor onsite during all ground disturbance activities within the 100-ft buffer indicated in the image.

Please let me know if you require any other permitting or compliance items in addition to this email approval before we begin work.

Name of Release: Patron 23 Federal 4H Flowline Release

Incident Identification (ID) NAB1924840999

Eddy County, NM

Approximate Release Location(s): 32.12651°, -103.95606°

Date Release Discovered: 8/8/2019

The release reportedly consisted of 250 barrels (bbls) of produced water, of which 10 bbls were recovered.

The observed impacted area in the field is approximately 10,540 square feet; this area will be excavated to 4 feet bgs based on the assessment sampling results.



Please let me know at your earliest convenience that we can proceed. Thank you very much for your time on this request.

Christian
512-565-0190

Christian Llull, P.G. | Program Manager
Direct +1 (512) 338-2861 | Business +1 (512) 338-1667 | Fax +1 (512) 338-1331 | christian.llull@tetrattech.com

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APPENDIX D

Laboratory Analytical Data



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

April 25, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: PATRON 23 FED #4H

Enclosed are the results of analyses for samples received by the laboratory on 04/22/22 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" at the beginning.

Celey D. Keene

Lab Director/Quality Manager



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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 1 (H221672-01)

BTEX 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48		
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15		
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99		
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93		
Total BTEX	<0.300	0.300	04/25/2022	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	04/25/2022	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16		
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23		
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND						

Surrogate: 1-Chlorooctane 86.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 84.6 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 2 (H221672-02)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 80.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 80.8 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 3 (H221672-03)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 86.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 85.2 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 4 (H221672-04)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 89.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 89.9 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 1 (H221672-05)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 79.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 80.8 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 2 (H221672-06)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 78.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 77.3 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 3 (H221672-07)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 72.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 71.5 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 4 (H221672-08)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 76.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 75.1 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 5 (H221672-09)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 82.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 79.7 % 59.5-142

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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 6 (H221672-10)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	04/25/2022	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	222	111	200	9.16	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	201	100	200	9.23	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 73.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 71.5 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 1 (H221672-11)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1580	16.0	04/25/2022	ND	432	108	400	0.00	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	208	104	200	7.92	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	222	111	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 80.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 76.2 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 2 (H221672-12)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	04/25/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	208	104	200	7.92	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	222	111	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 88.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 84.8 % 59.5-142

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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 3 (H221672-13)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	04/25/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	208	104	200	7.92	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	222	111	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 93.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 87.7 % 59.5-142

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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 4 (H221672-14)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	04/25/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	208	104	200	7.92	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	222	111	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 88.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 83.3 % 59.5-142

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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 5 (H221672-15)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1650	16.0	04/25/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	208	104	200	7.92	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	222	111	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 89.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 83.5 % 59.5-142

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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:	04/22/2022	Sampling Date:	04/22/2022
Reported:	04/25/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 6 (H221672-16)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/25/2022	ND	1.95	97.5	2.00	8.48	
Toluene*	<0.050	0.050	04/25/2022	ND	1.93	96.5	2.00	9.15	
Ethylbenzene*	<0.050	0.050	04/25/2022	ND	1.85	92.6	2.00	8.99	
Total Xylenes*	<0.150	0.150	04/25/2022	ND	5.79	96.6	6.00	8.93	
Total BTEX	<0.300	0.300	04/25/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	04/25/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/25/2022	ND	208	104	200	7.92	
DRO >C10-C28*	<10.0	10.0	04/25/2022	ND	222	111	200	4.00	
EXT DRO >C28-C36	<10.0	10.0	04/25/2022	ND					

Surrogate: 1-Chlorooctane 81.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 75.5 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Conoco Phillips Project Manager: Christian Livi		P.O. #: _____ Company: Tetra Tech Attn: Christian Livi	
Address: _____ City: _____ State: _____ Zip: _____		Address: _____ City: _____ State: _____ Zip: _____	
Project #: 212C-MD-02L46 Project Owner: _____ Project Location: Patron 23 Federal 4H		State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Sampler Name: Andrew Garcia		Phone #: _____ Fax #: _____	
FOR LAB USE ONLY			
Lab I.D. 10311071	Sample I.D. _____	(G)RAB OR (C)OMP. _____ # CONTAINERS _____ GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____	MATRIX _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____
ESW-1 ESW-2 ESW-3 ESW-4 WSW-1 WSW-2 WSW-3 WSW-4 WSW-5 WSW-6	G 1 1 1 1 1 1 1 1 1	22 Apr 2022 22 Apr 2022	9:00 9:30 10:00 10:30 11:00 12:00 12:30 13:00 13:30 14:00
BTEX TPH Chlorides 4500		X X X	
REMARKS: RUSH! 24hr			
Date: 22 Apr 22 Time: 10:35 Relinquished By: Andrew Garcia		Received By: [Signature] Date: _____ Time: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____		Observed Temp. °C: 24.00 Corrected Temp. °C: 24.12	
Sample Condition Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		CHECKED BY: [Signature] (Initials)	
Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.5°C		Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Bacteria (only) <input type="checkbox"/> Sample Condition <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____	
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____		REMARKS: _____	

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Conoco Phillips Project Manager: Christian Livuli Address: City: State: Zip: Phone #: Fax #: Project #: 212C-MD-02L4L6 Project Owner: Project Name: Patton 23 Federal 4H Project Location: Eddy Co, NM Sampler Name: Andrew Garcia		BILL TO P.O. #: Company: Tetra Tech Attn: Christian Livuli Address: City: State: Zip: Phone #: Fax #:	
FOR LAB USE ONLY Lab I.D. Sample I.D. HQ211671 11 FS-1 12 FS-2 13 FS-3 14 FS-4 15 FS-5 16 FS-6		MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:	
(G)RAB OR (C)OMP # CONTAINERS DATE 22 Apr 2022 TIME 1430		PRESERV X DATE 22 Apr TIME 1445	
X DATE 22 Apr TIME 1500		X DATE 22 Apr TIME 1515	
X DATE 22 Apr TIME 1530		X DATE 22 Apr TIME 1530	
BTEX TPH Chlorides 4500			
X DATE 22 Apr TIME 1530			
X DATE 22 Apr TIME 1530			
X DATE 22 Apr TIME 1530			

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Relinquished By: Andrew Garcia
Date: 22 Apr 22
Time: 1035
Received By: Steadreyqueny
Date:
Time:

Delivered By: (Circle One) Observed Temp. °C: 24.06
 Corrected Temp. °C: 24.18
 Sample Condition: Intact
 Cool Intact: Yes
 Checked By: (Initials) SR

Sampler - UPS - Bus - Other: Corrected Temp. °C: 24.18
 Sample Condition: Intact
 Cool Intact: Yes
 Checked By: (Initials) SR

Turnaround Time: Standard Rush
 Bacteria (only) Sample Condition: Cool Intact Observed Temp. °C: Yes No
 Corrected Temp. °C: No No

REMARKS: PUSH! 24HR

Verbal Result: Yes No Add'l Phone #:
 All Results are emailed. Please provide Email address:
 Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinalabsonm.com



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

April 26, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: PATRON 23 FED #4H

Enclosed are the results of analyses for samples received by the laboratory on 04/25/22 16:42.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 7 (4') (H221691-01)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5680	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 92.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.5 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 8 (4') (H221691-02)

BTEX 8021B		mg/kg		Analyzed By: MS\						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93		
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88		
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30		
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76		
Total BTEX	<0.300	0.300	04/26/2022	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10700	16.0	04/26/2022	ND	416	104	400	0.00		

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	04/26/2022	ND	201	101	200	1.09		
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27		
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND						

Surrogate: 1-Chlorooctane 89.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 87.4 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 9 (4') (H221691-03)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8530	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 88.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 86.6 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 10 (4') (H221691-04)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 96.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.8 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 11 (4') (H221691-05)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 98.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 96.7 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 5 (H221691-06)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 102 % 66.9-136

Surrogate: 1-Chlorooctadecane 99.2 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 6 (H221691-07)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 99.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 96.8 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 7 (H221691-08)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 97.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 94.8 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 8 (H221691-09)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 95.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 93.7 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 7 (H221691-10)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 87.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 86.9 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/25/2022	Sampling Date:	04/25/2022
Reported:	04/26/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 8 (H221691-11)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/26/2022	ND	2.18	109	2.00	1.93	
Toluene*	<0.050	0.050	04/26/2022	ND	2.17	108	2.00	2.88	
Ethylbenzene*	<0.050	0.050	04/26/2022	ND	2.14	107	2.00	2.30	
Total Xylenes*	<0.150	0.150	04/26/2022	ND	6.62	110	6.00	1.76	
Total BTEX	<0.300	0.300	04/26/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/26/2022	ND	416	104	400	0.00	

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	04/26/2022	ND	201	101	200	1.09	
DRO >C10-C28*	<10.0	10.0	04/26/2022	ND	181	90.5	200	3.27	
EXT DRO >C28-C36	<10.0	10.0	04/26/2022	ND					

Surrogate: 1-Chlorooctane 101 % 66.9-136

Surrogate: 1-Chlorooctadecane 106 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Conoco Phillips</u> Project Manager: <u>Christian Lull</u> Address: City: State: Zip: Phone #: Fax #: Project #: <u>212C-MD-02646</u> Project Owner: Project Name: <u>Patron 23 Federal 4H</u> Project Location: <u>Eddy Co, NM</u> Sampler Name: <u>Andrew Garcia</u>		P.O. #: Company: Attn: <u>Christian Lull</u> Address: City: State: Zip: Phone #: Fax #: State: Zip:	
FOR LAB USE ONLY Lab I.D. Sample I.D.		BILL TO ANALYSIS REQUEST	
PLEASE NOTE: Liability and Damages: Cardinal's liability and clients' exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. 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 consequential damages, 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER MATRIX SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: PRESERV. SAMPLING	
1 2 3 4 5 6 7 8 9 10	FS-7 (4) FS-8 (4) FS-9 (4) FS-10 (4) FS-11 (4) ESW-5 ESW-6 ESW-7 ESW-8 NSW-7	1 1 1 1 1 1 1 1 1 1	2022 25 Apr 9:00 9:15 9:30 9:45 10:00 10:30 11:00 11:30 12:00 12:30
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C: <u>29.00</u> Corrected Temp. °C: <u>28.50</u> Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked By: (Initials)	
Relinquished By: <u>Andrew Garcia</u> Date: <u>4/25/22</u> Time: <u>10:42</u>		Received By: <u>Shontiquary</u> Date: _____ Time: _____	
Turnaround Time: <u>Standard</u> <input checked="" type="checkbox"/> <u>Rush</u> <input type="checkbox"/> Thermometer ID #113 Correction Factor -.5°C Bacteria (only) Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C: _____ Corrected Temp. °C: _____		REMARKS: <u>RUSH! 24hr!</u>	
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address:			

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Page 1 of 2



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

page 2 of 2

Company Name: <u>Conoco Phillips</u> Project Manager: <u>Christian Lull</u>		P.O. #: Company:	
Address: City: State: Zip:		Attn: <u>Christian Lull</u> Address: City: State: Zip:	
Phone #: Fax #: Project #: <u>212E-MD-02646</u> Project Owner:		City: State: Zip:	
Project Name: <u>Patron 23 Federal 4H</u> Project Location: <u>Eddy Co, NM</u>		Phone #: Fax #:	
Sampler Name: <u>Andrew Garcia</u>			
FOR LAB USE ONLY			
Lab I.D. <u>H3211491</u> <u>11</u>	Sample I.D. <u>WSW-8</u>	<input type="checkbox"/> (G)RAB OR (C)OMP <input checked="" type="checkbox"/> # CONTAINERS	
		MATRIX <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input checked="" type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER :	
		PRESERV <input type="checkbox"/> ACID/BASE <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER :	
		SAMPLING DATE: <u>2022</u> <u>25 Apr</u> TIME: <u>1300</u>	
		<input checked="" type="checkbox"/> TPH <input checked="" type="checkbox"/> BTX <input checked="" type="checkbox"/> Chlorides 4500	
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Relinquished By: <u>Andrew Garcia</u> Date: <u>4/25/22</u> Time: <u>1642</u>	Received By: <u>Shorriquis</u> Date: _____ Time: _____	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address:	REMARKS: <u>RUSH! 24hr!</u>
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: <u>29.00</u> Corrected Temp. °C: <u>28.50</u>	Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Yes Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <u>[Signature]</u>
Turnaround Time:	Standard <input checked="" type="checkbox"/> Rush	Bacteria (only) Sample Condition Cool Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Yes Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Observed Temp. °C: Corrected Temp. °C:

† Cardinal cannot accept verbal changes. Please email changes to cely.keene@cardinallabsnm.com



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

April 28, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: PATRON 23 FED #4H

Enclosed are the results of analyses for samples received by the laboratory on 04/27/22 16:48.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 2 (H221743-01)

BTEX 8021B		mg/kg		Analyzed By: MS\						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/28/2022	ND	2.16	108	2.00	3.24		
Toluene*	<0.050	0.050	04/28/2022	ND	2.13	107	2.00	3.02		
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	2.10	105	2.00	2.88		
Total Xylenes*	<0.150	0.150	04/28/2022	ND	6.51	109	6.00	2.25		
Total BTEX	<0.300	0.300	04/28/2022	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/28/2022	ND	432	108	400	0.00		

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	04/28/2022	ND	188	94.0	200	6.50		
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	184	91.8	200	2.15		
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND						

Surrogate: 1-Chlorooctane 94.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 92.0 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 3 (H221743-02)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.16	108	2.00	3.24	
Toluene*	<0.050	0.050	04/28/2022	ND	2.13	107	2.00	3.02	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	2.10	105	2.00	2.88	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	6.51	109	6.00	2.25	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.0	200	6.50	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	184	91.8	200	2.15	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 97.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.6 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 4 (H221743-03)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.16	108	2.00	3.24	
Toluene*	<0.050	0.050	04/28/2022	ND	2.13	107	2.00	3.02	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	2.10	105	2.00	2.88	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	6.51	109	6.00	2.25	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.0	200	6.50	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	184	91.8	200	2.15	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 92.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 91.6 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 5 (H221743-04)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.16	108	2.00	3.24	
Toluene*	<0.050	0.050	04/28/2022	ND	2.13	107	2.00	3.02	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	2.10	105	2.00	2.88	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	6.51	109	6.00	2.25	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.0	200	6.50	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	184	91.8	200	2.15	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 98.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.9 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: NSW - 1 (H221743-05)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.16	108	2.00	3.24	
Toluene*	<0.050	0.050	04/28/2022	ND	2.13	107	2.00	3.02	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	2.10	105	2.00	2.88	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	6.51	109	6.00	2.25	
Total BTEX	<0.300	0.300	04/28/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.0	200	6.50	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	184	91.8	200	2.15	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 91.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.8 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: NSW - 2 (H221743-06)

BTEX 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293		
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237		
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04		
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13		
Total BTEX	<0.300	0.300	04/28/2022	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/28/2022	ND	432	108	400	0.00		

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	04/28/2022	ND	188	94.2	200	2.69		
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58		
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND						

Surrogate: 1-Chlorooctane 99.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 112 % 59.5-142

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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: NSW - 3 (H221743-07)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 96.9 % 66.9-136

Surrogate: 1-Chlorooctadecane 112 % 59.5-142

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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: NSW - 4 (H221743-08)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 105 % 66.9-136

Surrogate: 1-Chlorooctadecane 120 % 59.5-142

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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 14 (4') (H221743-09)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 102 % 66.9-136

Surrogate: 1-Chlorooctadecane 117 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 15 (4') (H221743-10)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 102 % 66.9-136

Surrogate: 1-Chlorooctadecane 119 % 59.5-142

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 16 (4') (H221743-11)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7440	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 103 % 66.9-136

Surrogate: 1-Chlorooctadecane 119 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 17 (4') (H221743-12)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	16.0	04/28/2022	ND	432	108	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 98.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 115 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	04/27/2022	Sampling Date:	04/27/2022
Reported:	04/28/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 3 (2') (H221743-13)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2022	ND	2.05	103	2.00	0.293	
Toluene*	<0.050	0.050	04/28/2022	ND	2.04	102	2.00	0.237	
Ethylbenzene*	<0.050	0.050	04/28/2022	ND	1.93	96.3	2.00	1.04	
Total Xylenes*	<0.150	0.150	04/28/2022	ND	5.96	99.3	6.00	2.13	
Total BTEX	<0.300	0.300	04/28/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	04/28/2022	ND	416	104	400	0.00	

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	04/28/2022	ND	188	94.2	200	2.69	
DRO >C10-C28*	<10.0	10.0	04/28/2022	ND	212	106	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	04/28/2022	ND					

Surrogate: 1-Chlorooctane 97.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 110 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 2

BILL TO

ANALYSIS REQUEST

Company Name: Conoco Phillips
 Project Manager: Christian Livvy
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: 212C-MD-026416 Project Owner: _____
 Project Name: Patron 23 Fed 4H
 Project Location: Eddy Co, NM
 Sampler Name: Andrew Garcia
 P.O. #: _____
 Company: Petra Tech
 Attn: Christian Livvy
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	BTEX	TPH	Chlorides 4500
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
<u>H021743</u>															
1	SSW-2		61			X					2022	27 April	X	X	X
2	SSW-3												X	X	X
3	SSW-4												X	X	X
4	SSW-5												X	X	X
5	NSW-1												X	X	X
6	NSW-2												X	X	X
7	NSW-3												X	X	X
8	NSW-4												X	X	X
9	FS-14 (4')												X	X	X
10	FS-15 (4')												X	X	X

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Relinquished By: _____
 Relinquished Date: _____
 Relinquished Time: _____
 Received By: Shelley Keene
 Received Date: 4/27/22
 Received Time: 16:48
 Remarks: RUSH! 24HR.

Delivered By: (Circle One) _____
 Observed Temp. °C: 27.52
 Corrected Temp. °C: 27.02
 Sample Condition: Intact Cool Yes No Intact Cool Yes No
 Checked By: SK
 Turnaround Time: _____
 Thermometer ID #113
 Correction Factor -0.5°C
 Bacteria (only) Sample Condition Observed Temp. °C Corrected Temp. °C
 Cool Intact Yes No Cool Intact Yes No

† Cardinal cannot accept verbal changes. Please email changes to caley.keene@cardinallabsnm.com



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

May 03, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: PATRON 23 FED #4H

Enclosed are the results of analyses for samples received by the laboratory on 05/02/22 16:58.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 12 (4') (H221816-01)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 99.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 101 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 13 (4') (H221816-02)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 108 % 66.9-136

Surrogate: 1-Chlorooctadecane 112 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 18 (4') (H221816-03)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2760	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 97.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 101 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 19 (4') (H221816-04)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 98.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 103 % 59.5-142

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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 20 (4') (H221816-05)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 101 % 66.9-136

Surrogate: 1-Chlorooctadecane 103 % 59.5-142

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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: FS- 21 (4') (H221816-06)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2840	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 94.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 98.1 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 1 (H221816-07)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 99.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 102 % 59.5-142

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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 6 (H221816-08)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 98.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 59.5-142

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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 7 (H221816-09)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 101 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 59.5-142

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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: SSW - 8 (H221816-10)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	219	109	200	0.213	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	225	112	200	0.674	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 99.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 102 % 59.5-142

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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: NSW - 5 (H221816-11)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	201	100	200	0.437	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	190	95.2	200	0.284	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 94.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 100 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: NSW - 6 (H221816-12)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	201	100	200	0.437	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	190	95.2	200	0.284	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 99.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 104 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 9 (H221816-13)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	201	100	200	0.437	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	190	95.2	200	0.284	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 105 % 66.9-136

Surrogate: 1-Chlorooctadecane 110 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: WSW - 10 (H221816-14)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	201	100	200	0.437	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	190	95.2	200	0.284	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 108 % 66.9-136

Surrogate: 1-Chlorooctadecane 113 % 59.5-142

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Celey D. Keene, Lab Director/Quality Manager



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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:	05/02/2022	Sampling Date:	05/02/2022
Reported:	05/03/2022	Sampling Type:	Soil
Project Name:	PATRON 23 FED #4H	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02646	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - EDDY CO NM		

Sample ID: ESW - 9 (H221816-15)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2022	ND	1.99	99.4	2.00	4.19	
Toluene*	<0.050	0.050	05/03/2022	ND	1.99	99.3	2.00	4.66	
Ethylbenzene*	<0.050	0.050	05/03/2022	ND	1.89	94.3	2.00	4.62	
Total Xylenes*	<0.150	0.150	05/03/2022	ND	5.84	97.4	6.00	5.52	
Total BTEX	<0.300	0.300	05/03/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/03/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2022	ND	201	100	200	0.437	
DRO >C10-C28*	<10.0	10.0	05/03/2022	ND	190	95.2	200	0.284	
EXT DRO >C28-C36	<10.0	10.0	05/03/2022	ND					

Surrogate: 1-Chlorooctane 96.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 103 % 59.5-142

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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

page 1 of 2

BILL TO

ANALYSIS REQUEST

Company Name: Conoco Phillips
 Project Manager: Christian Livuli
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: Patron 23 Federal 4 H
 Project Location: Eddy County, NM
 Sampler Name: Andrew Garcia
 P.O. #: _____ Company: Extra Tech
 Attn: Christian Livuli
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	FOR LAB USE ONLY	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
10218 & 10	FS-12 (4)			1			X				05/02		BTEX
	FS-13 (4)			1									TPH
	FS-18 (4)			1									Chloride 4500
	FS-19 (4)			1									
	FS-20 (4)			1									
	FS-21 (4)			1									
	SSW-1			1									
	SSW-6			1									
	SSW-7			1									
	SSW-8			1									

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Relinquished By: Andrew Garcia
 Date: 02 May 2022
 Received By: Reed Kelligrew
 Date: 10/58

Delivered By: (Circle One)
 Observed Temp. °C: 28.18
 Corrected Temp. °C: 27.60
 Sample Condition: Intact Cool Yes No
 CHECKED BY: SR (Initials)

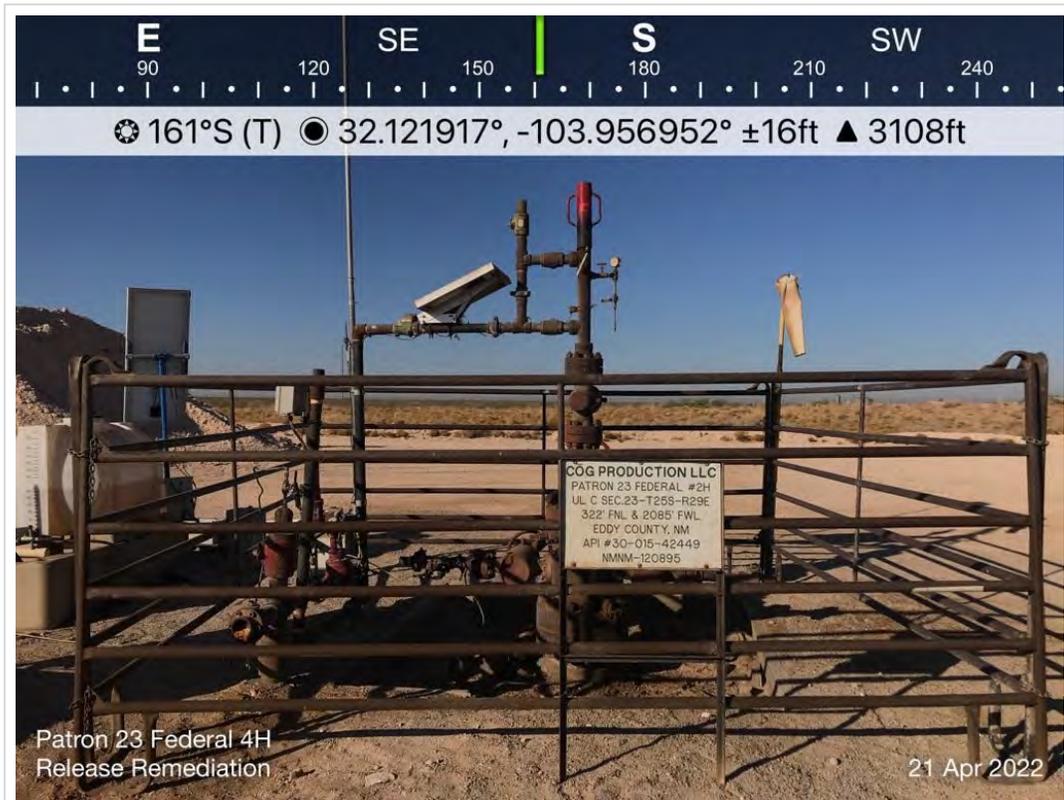
Sampler - UPS - Bus - Other: _____
 Turnaround Time: _____
 Thermometer ID #113
 Correction Factor -0.5°C
 Standard Bacteria (only) Sample Condition
 Cool Intact Yes No
 Observed Temp. °C: _____
 Corrected Temp. °C: _____

REMARKS: PUSH 1 24TH
 Verbal Result: Yes No Add'l Phone #: _____
 All Results are emailed. Please provide Email address: _____

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

APPENDIX E

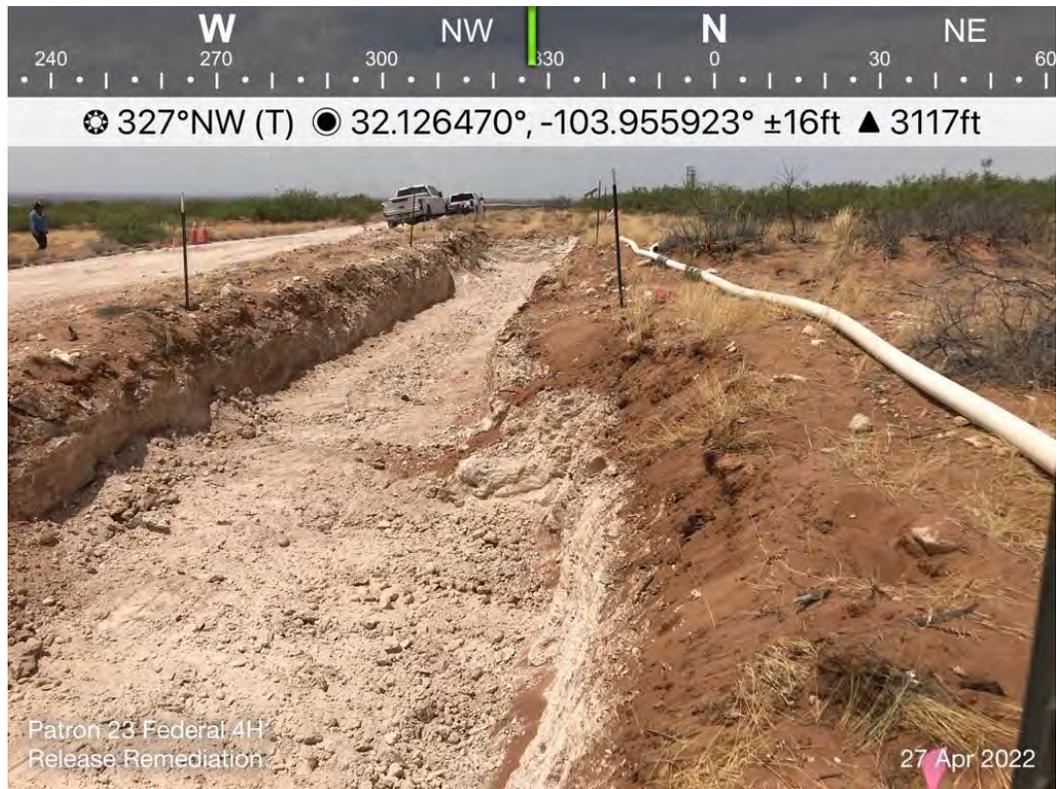
Photographic Documentation



Patron 23 Federal 4H Release Remediation

21 Apr 2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	Site Signage; Patron 23 Federal #2H and location information.	1
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	4/21/20212



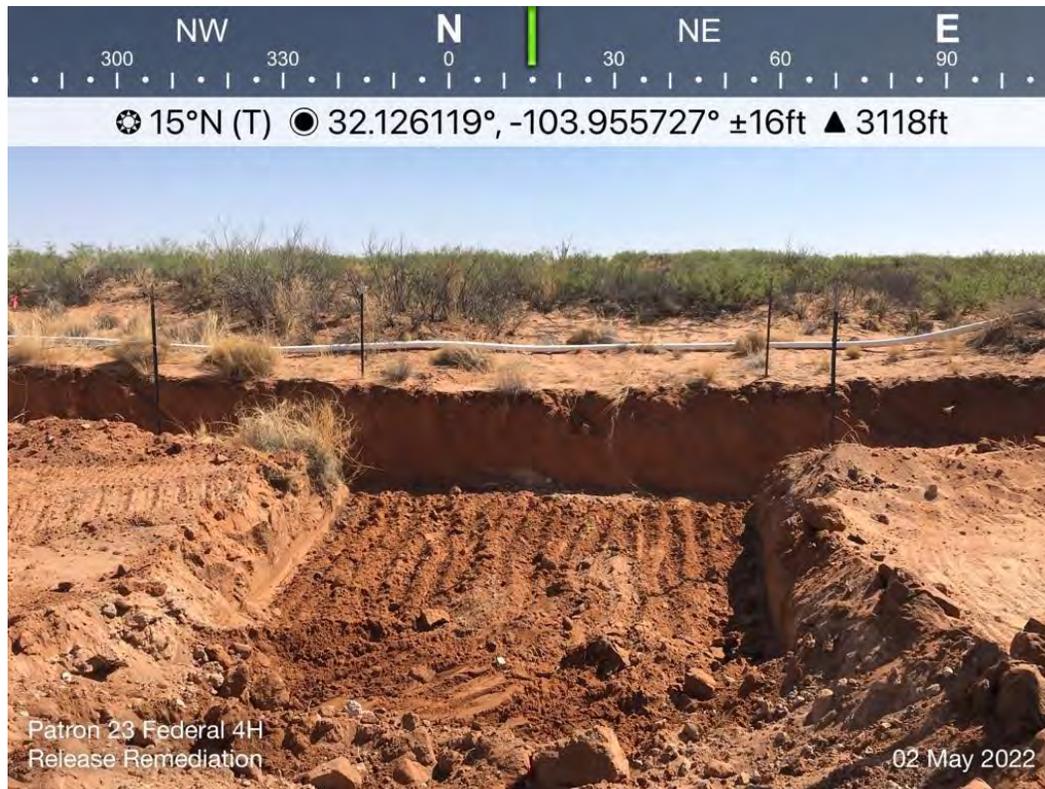
Patron 23 Federal 4H Release Remediation

27 Apr 2022

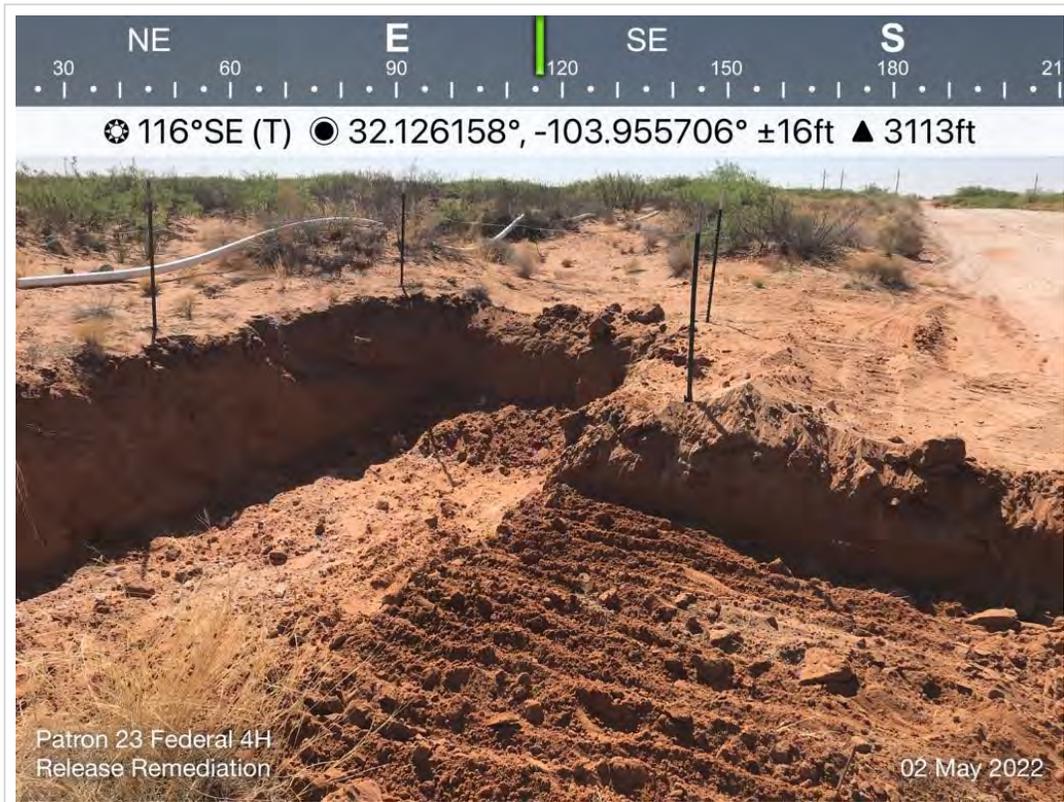
TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View northwest. East side of lease road, 4' BGS excavation and surface polyline.	2
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	4/27/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View west southwest from lease road. West side of lease road, 4' BGS excavation and surface steel line.	3
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/2/2022



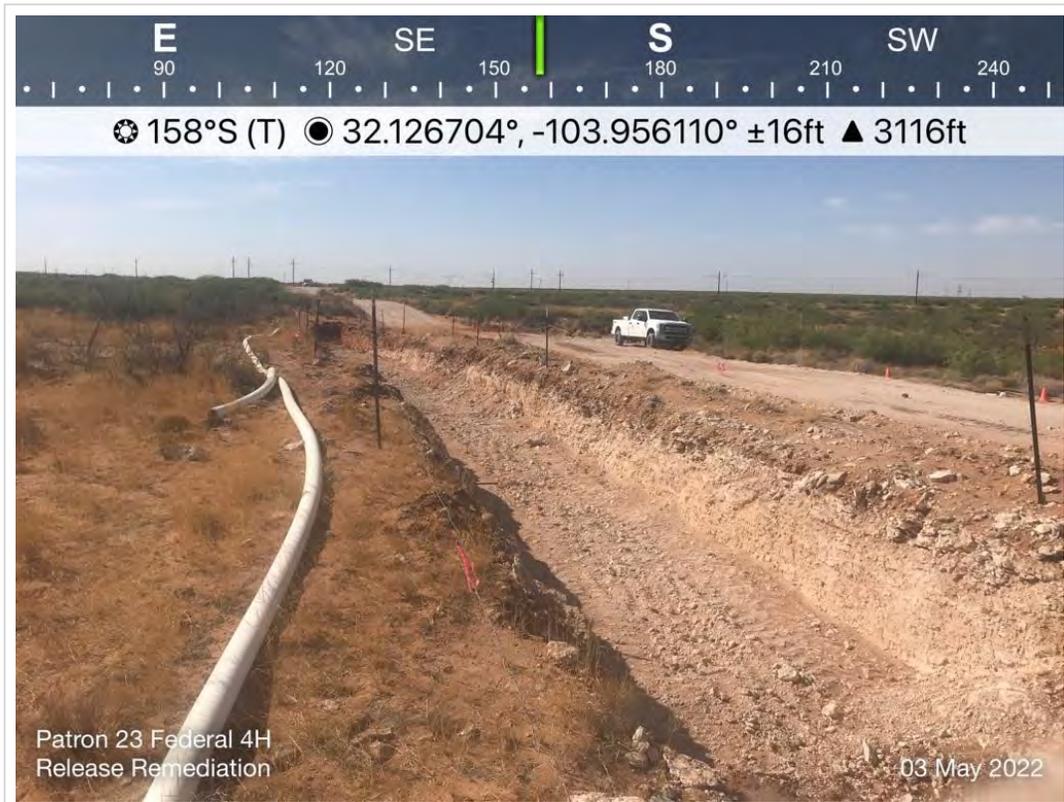
TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View north northeast from lease road. East side of lease road, 4' BGS excavation and surface polyline.	4
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/2/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View east southeast from edge of lease road. East side of lease road, 4' BGS excavation and surface polyline.	5
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/2/2022



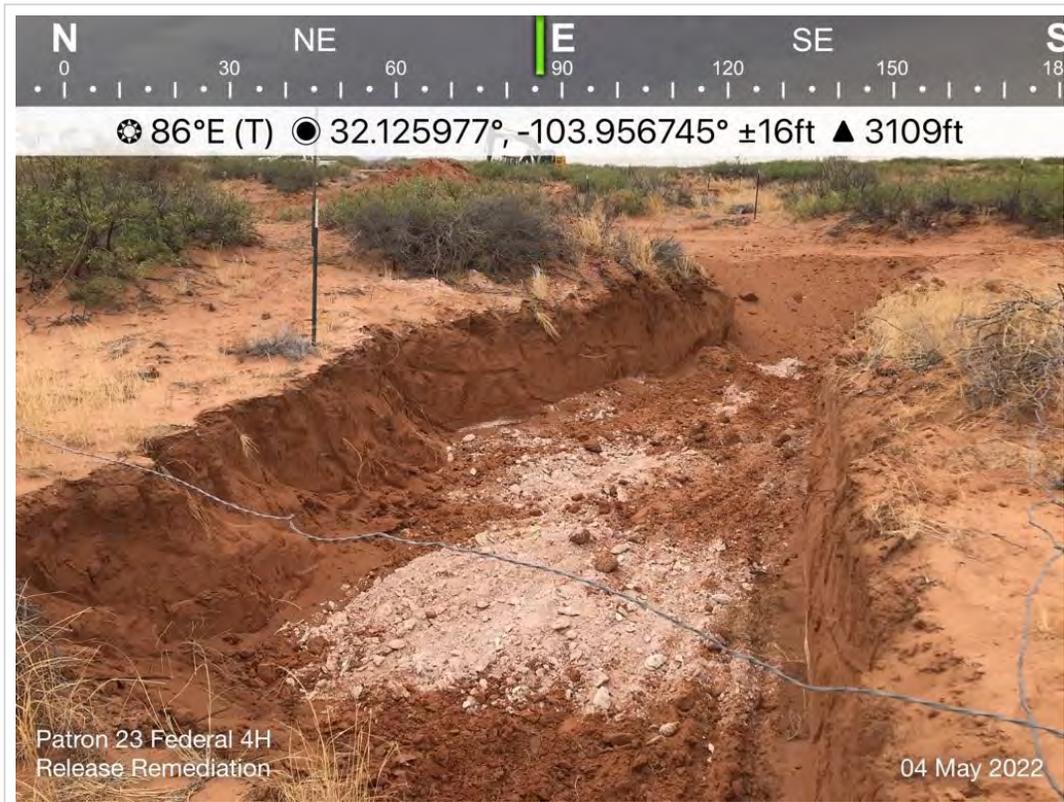
TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View northwest. East side of lease road, 4' BGS excavation and surface polyline.	6
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/3/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View south southeast. East side of lease road, 4' BGS excavation and surface polyline.	7
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/3/2022



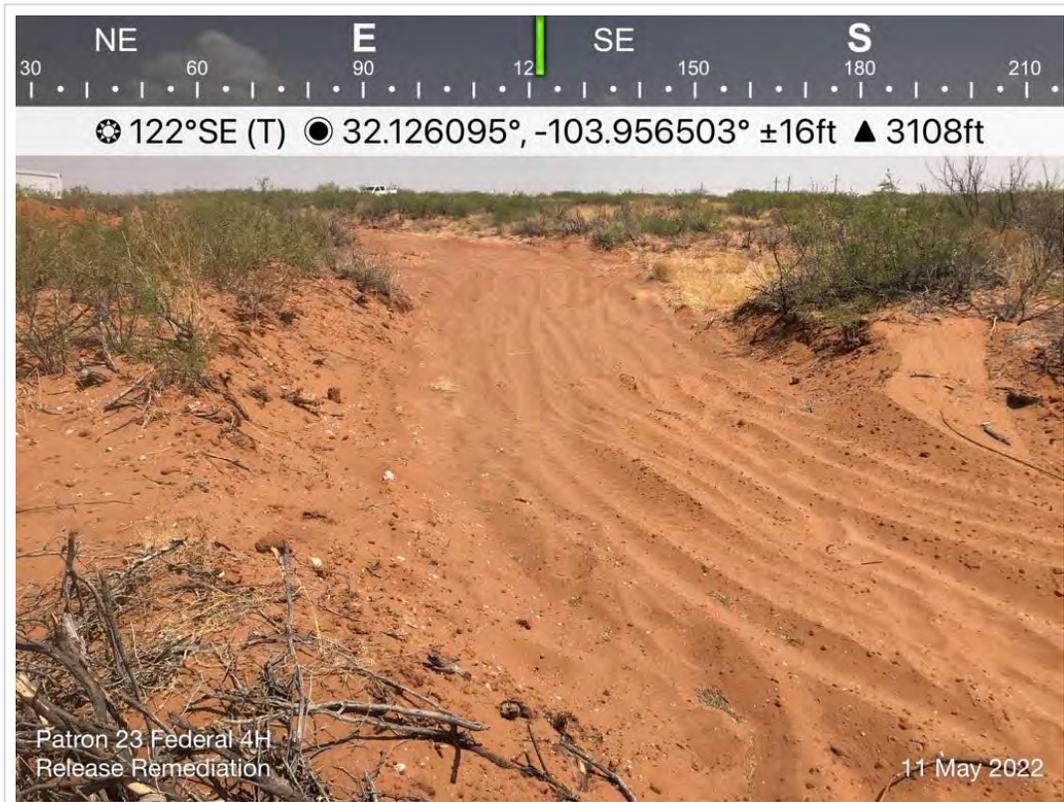
TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View east. West end of 4' BGS excavation.	8
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/4/2022



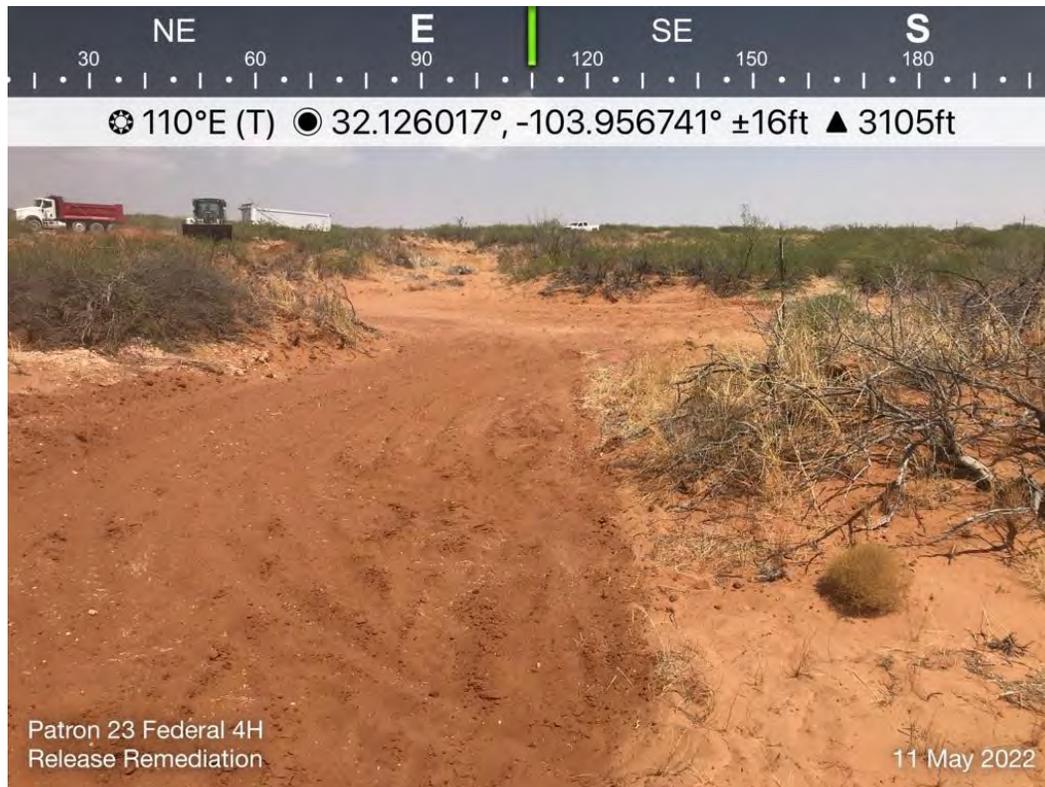
TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View east. Most western 4' BGS excavation.	9
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/4/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View southeast. Eastern 4' excavation, backfilled and seeded.	10
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/11/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View southeast. Western 4' excavation, backfilled and seeded	11
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/11/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02377	DESCRIPTION	View east southeast. Western 4' excavation, backfilled and seeded.	12
	SITE NAME	ConocoPhillips Patron 23 Federal 4H Release	5/11/2022

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 112023

CONDITIONS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 112023
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	6/7/2022