

April 28, 2022

District Supervisor Oil Conservation Division, District 1 1625 N. French Dr. Hobbs, NM 88240

RE: Closure Report ConocoPhillips MCA 470 Flowline Release Unit Letter H, Section 33, Township 17 South, Range 32 East Lea County, New Mexico Incident ID: NRM1935447155

Dear Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred from a flowline associated with the Maljamar Cooperative Agreement (MCA) Unit #470 well (API #30-025-39765), within Public Land Survey System (PLSS) Unit Letter H, Section 33, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The release site coordinates are 32.793141°, -103.768660°. The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), on October 26, 2019, a flowline leak was discovered by a multi-skilled operator (MSO) and traced back to the MCA #470. Approximately 6 barrels (bbls) of crude oil were release, of which 0 bbls were recovered. Immediate action was taken by ConocoPhillips to stop the release and secure the area in order to prevent any further contamination to the environment or potential hazards to humans. The C-141 describes the affected area as off-pad, tracing the broken line back to the MCA #470 site. The New Mexico Oil Conservation Division (NMOCD) received the C-141 report form for the release on November 4, 2019, and subsequently assigned the Site incident Identification (ID) NRM1935447155.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, lakebeds, sinkholes, playa lakes, residences schools, hospitals, institutions, churches, springs, private water wells, wetlands, incorporated municipal boundaries, subsurface mines or floodplains are located within the specified distances and the site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) database, there are four (4) water wells within ½ mile (800-meter) radius of the Site. The one well with available data was drilled in 2020 and has a depth to groundwater of 108 feet below ground surface (bgs). The site characterization is included in Appendix B.

REGULATORY FRAMEWORK

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

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

RRAL
20,000 mg/kg
2,500 mg/kg
1,000 mg/kg
50 mg/kg
10 mg/kg

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

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

INITIAL SITE ASSESSMENT AND SAMPLING RESULTS

Tetra Tech personnel conducted an initial soil assessment of the release area in November 2021. Seven (7) borings (AH-1 through AH-7 were installed to a total depth of 2 to 3 feet bgs to evaluate the vertical and horizontal extents of the release. A total of 15 samples were collected from the 7 boring locations on November 17, 2021 (Figure 3). The samples were submitted to Cardinal Laboratories for Testing & Innovation in Midland, Texas (Cardinal) for TPH, BTEX and chloride analysis.

Analytical data indicated elevated chloride concentrations at depths of two feet at AH-5 and elevated TPH levels in samples from AH-7. Analytical results associated with the interior borings (BH-1 and BH-4) did not exceed the delineation criteria for BTEX or TPH in the upper 2 ft. There were no detections of BTEX or TPH above their respective Site RRALs of 50 mg/kg and 2,500 mg/kg in any of the analyzed samples below 2 ft bgs. There were no results that exceeded the >4 ft bgs RRAL of 20,000 mg/kg for chlorides.

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

In order to more fully delineate the release area, Tetra Tech personnel conducted a subsurface investigation in December 2021. Three (3) borings (AH-5a, AH-7a, and AH-8) were installed using hand auger to a total depth of 2.5 feet bgs to evaluate the vertical and horizontal extents of the release. A total of 5 samples were collected from the 3 boring locations on December 1, 2021 (Figure 4). The samples were submitted to Cardinal for TPH, BTEX and chloride analysis.

Laboratory analytical results for samples from AH-5A and AH-8 were below reclamation requirement limits, according to 19.15.29 NMAC. Laboratory analytical results for samples from AH-7A exceeded reclamation requirement limits for chlorides and TPH. Horizontal delineation was achieved on the east side of the release extent by AH-8. Vertical delineation was not achieved through installation of AH-7A. There were no detections of BTEX or TPH above their respective Site RRALs of 50 mg/kg and 2,500 mg/kg in any of the additional samples that were analyzed. There were no results that exceeded the RRAL of 20,000 mg/kg for chlorides. Horizontal delineation was achieved at the release site.

REMEDIATION WORK PLAN AND ALTERNATIVE CONFIRMATION SAMPLING PLAN

The Release Characterization Work Plan (Work Plan) was prepared by Tetra Tech on behalf of ConocoPhillips and submitted to NMOCD on January 11, 2022, with fee application payment PO Number GSN89-220111-C-1410. The Work Plan described the results of the release assessment and provided characterization of the impact at the site. The Work Plan was approved via email by Chad Hensley of the NMOCD via email on February 1, 2022. The Closure report was noted as due May 2, 2022. Mr. Hensley also executed page 5 of the C-141 form included with the Work Plan.

REMEDIATION ACTIVITIES AND CONFIRMATION SAMPLING

From February 28 through March 2, 2022, ConocoPhillips personnel were onsite to excavate the release as proposed in the approved Work Plan, including excavation and disposal. Impacted soils were excavated from 1 to 4 feet bgs. Per the approved plan, the portion of the release extent that runs along buried lines were hand-dug to 4 feet bgs. Subcontractor personnel exercised caution while working around the energized lines in the release vicinity. All the excavated material was transported offsite for proper disposal. Approximately 172 cubic yards of material were transported to the R360 Halfway Facility in Hobbs, New Mexico. Copies of the waste manifests are included in Appendix C. Photographs from the excavated areas prior to backfill are provided in Appendix D.

Prior to confirmation sampling, in accordance with Subsection D of 19.15.29.12 NMAC, the NMOCD division district office was notified via email on March 3, 2022. Documentation of associated regulatory correspondence is included in Appendix E. On March 3, 2022, Tetra Tech personnel were onsite for confirmation sampling. 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 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 five (5) floor sample locations and six (6) sidewall sample locations were collected during the remedial activities. Confirmation sidewall sample locations were labeled with "SW"-#, and confirmation floor sample locations were labeled with "FS"-#.

Analytical results associated with sample locations SW-1 and SW-2 exceeded the reclamation requirement for TPH, as such, additional excavation was conducted at those locations. On April 4, 2022, Tetra Tech personnel returned to site to collect iterative confirmation samples. Iterative confirmation samples were located to encompass the original sample location that triggered removal (nomenclature defined in table 2) post-additional excavation. Thus, a total of two (2) additional sidewall samples were collected following the excavation work, and final laboratory analysis results confirmed constituents were below the established RRALs and/or reclamation requirement. After sampling and analysis, all final confirmation soil samples (floor and sidewall) were below the respective RRALs and/or reclamation requirement for chloride, BTEX, and TPH. The results of the March and April 2022 confirmation sampling events are summarized in Table 2. Laboratory analytical data is included in Appendix F. Excavated areas, depths and confirmation sample locations are shown in Figure 4.

As prescribed in the Work Plan, the backfilled areas located in the pasture were seeded in April 2022 to aid in revegetation. Based on the soils at the site and the approved Work Plan, the 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 NMSLO 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.

ConocoPhillips

CONCLUSION

ConocoPhillips respectfully requests closure of the release 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 Christian at (512)338-2861.

Sincerely, **Tetra Tech, Inc.**

Christian M. Llull, P.G. Program Manager

cc: Mr. Rahul Kaushik – GPBU - ConocoPhillips

List of Attachments

Figures:

Figure 1 – Site Overview Map

Figure 2 – Site Topographic Map

Figure 3 – Approximate Release Extent and Assessment Map

Figure 4 – Remediation Extent and Confirmation Sample Locations

Tables:

Table 1 – Summary of Analytical Results –Soil Assessment

Table 2 – Summary of Analytical Results – Soil Remediation

Appendices:

Appendix A – C-141 Forms

Appendix B – Site Characterization Data

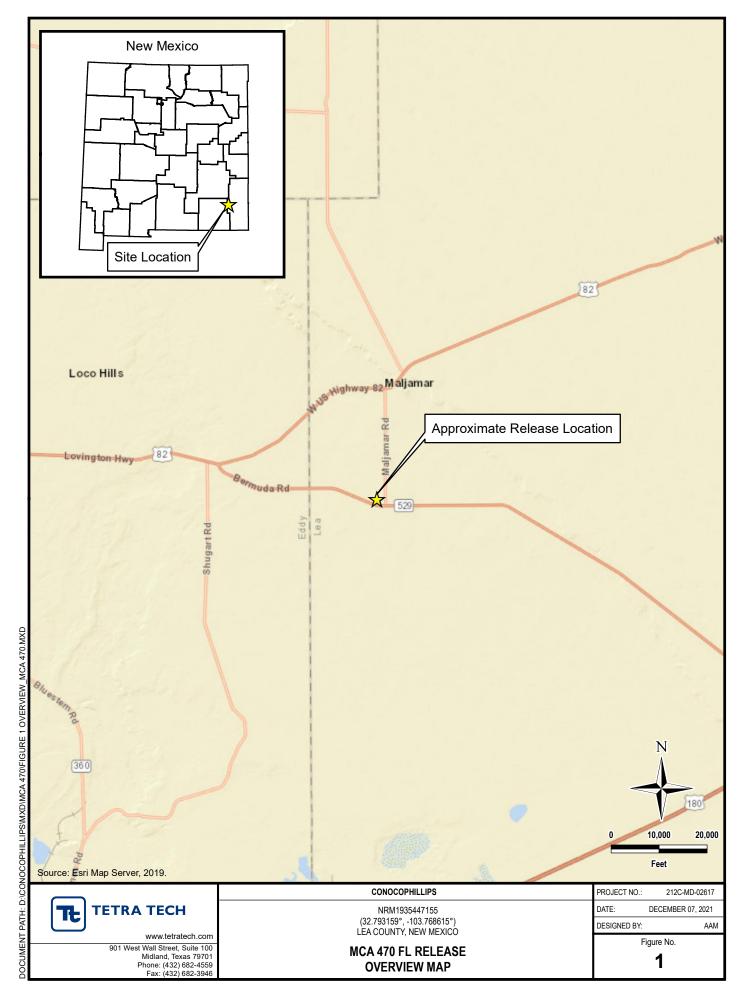
Appendix C – Waste Manifests

Appendix D – Photographic Documentation

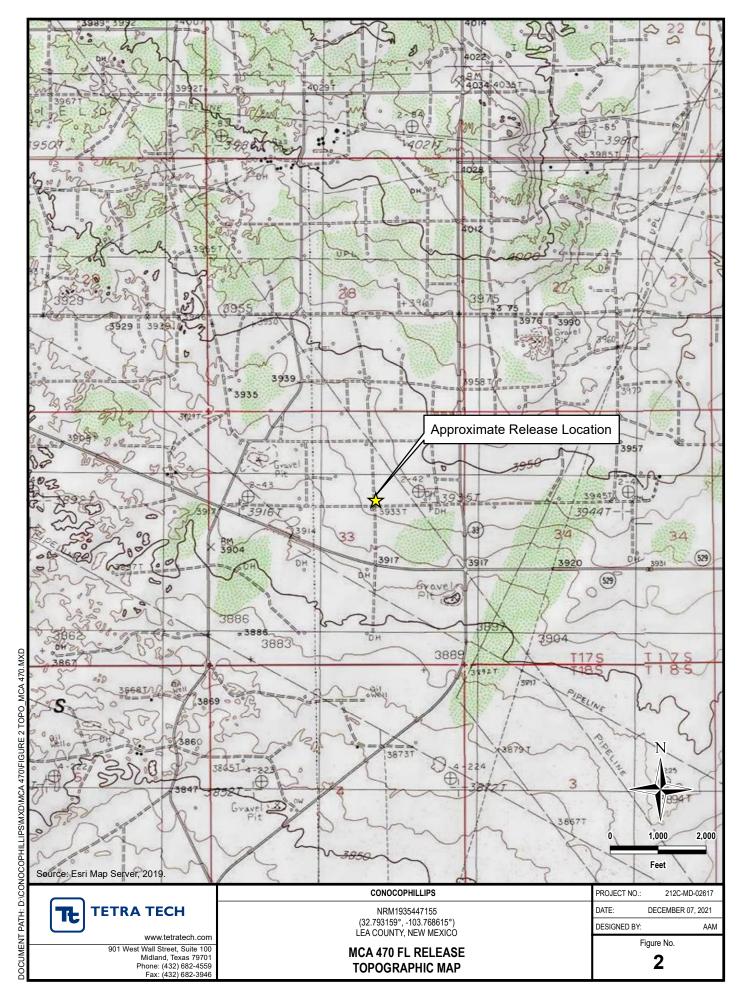
Appendix E – Regulatory Correspondence

Appendix F – Laboratory Analytical Reports

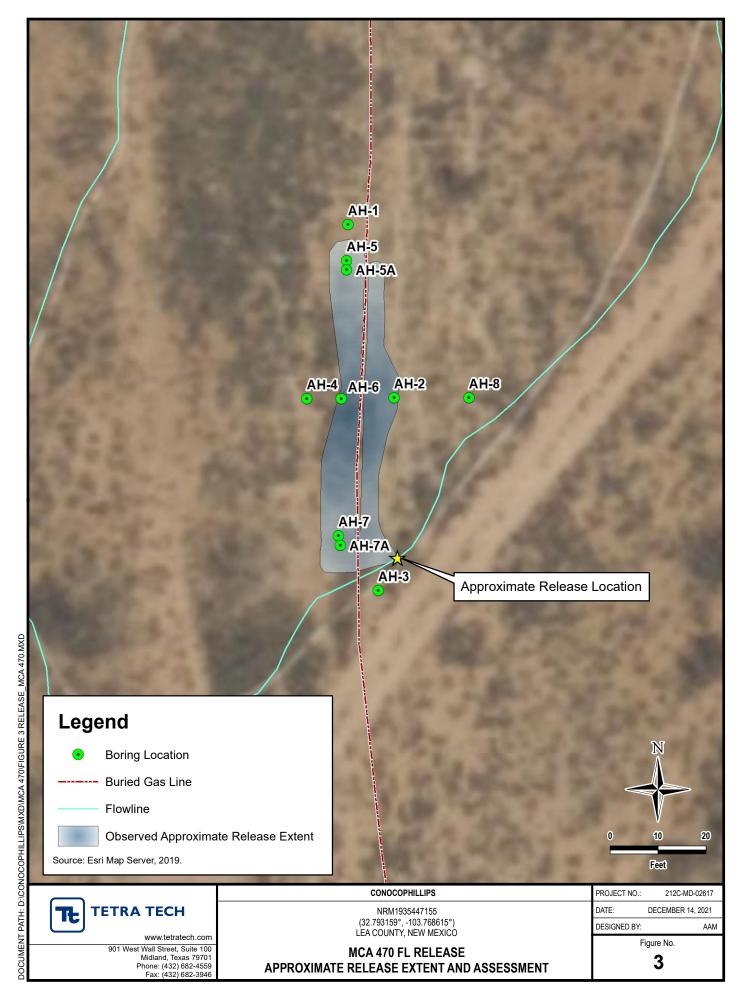
FIGURES

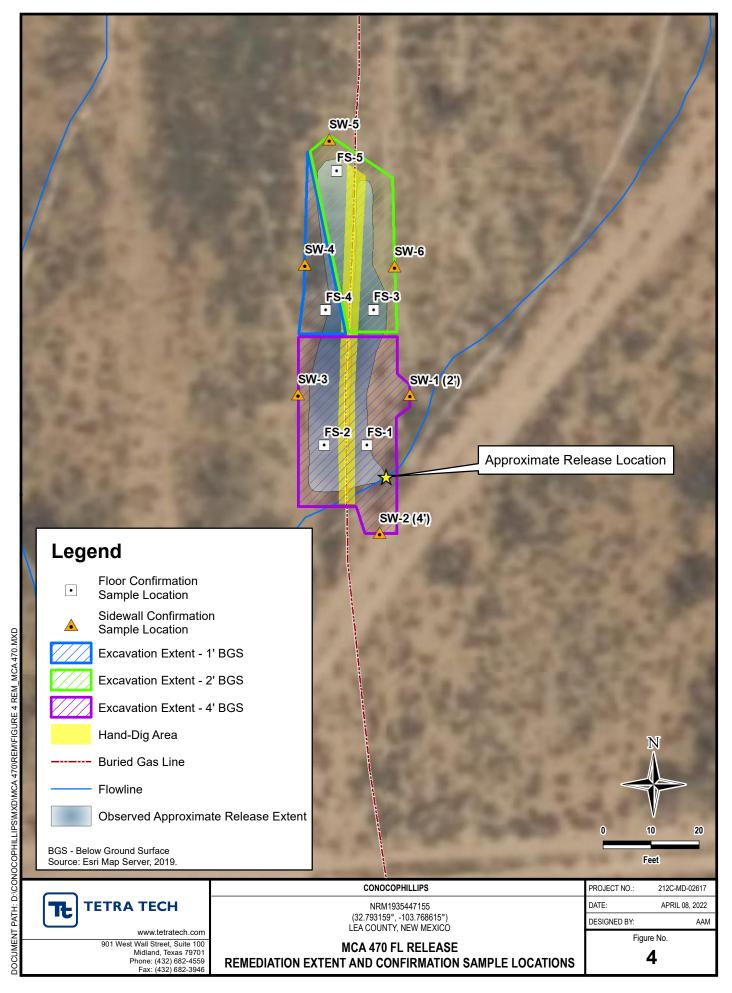


Released to Imaging: 5/20/2022 11:00:08 AM



Released to Imaging: 5/20/2022 11:00:08 AM





TABLES

TABLE 1 SUMMARY OF ANALYTICAL RESULTS SOIL ASSESSMENT CONOCOPHILLIPS MCA 470 FLOWLINE RELEASE - NRM1935447155 LEA COUNTY, NM

			Field Screening			BTEX ²							TPH ³							
Sample ID Sample Date Sa				Results Chloride ¹		Benzene	Toluei	ne	Ethylben	7ene	Total Xyl	enes	Total BTEX	GRO		DRO		EXT DF	RO	Total TPH
Sample is	Sumple Dute		Chloride			Denzene	Toraci		Ethylsen			ciics		C ₆ - C ₁	10	> C ₁₀ - 0	C ₂₈	> C ₂₈ -	C ₃₆	(GRO+DRO+EXT DRO)
		ft. bgs	ppm	mg/kg	Q	mg/kg Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-1	11/17/2021	0-1	128	160		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	, _, ,	1-2	119	176		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
		0-1	461	1280		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
AH-2	11/17/2021	1-2	725	736		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
		2-3	383	384		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
411.2	11/17/2024	0-1	35.1	< 16.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
AH-3	11/17/2021	1-2	36.8	< 16.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	44/47/2024	0-1	34.7	< 16.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
AH-4	11/17/2021	1-2	46.1	16.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
AH-5	11/17/2021	0-1	70	4320		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		29.0		< 10.0		29.0
с-пА	11/17/2021	1-2	163	608		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
AH-5A	12/1/2021	2-2.5	180	80.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	44/47/2024	0-1	1,080	2880	QM-07	< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
AH-6	11/17/2021	1-2	88.4	16.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
	44/47/2024	0-1	801	1800		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		493		310		803
AH-7	11/17/2021	1-2	130	96.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		311		209		520
AH-7A	12/1/2021	2-2.5	795	976		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		377		424		801
AH-8	12/1/2021	0-1	60.8	48.0		< 0.050	< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		< 10.0		-
Ai1-o	12/1/2021	2-2.5	141	176		< 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 SM4500Cl-B

2 Method 8021B

3 Method 8015M

Bold and italicized values indicate exceedance of proposed Remediation RRALs and/or Reclamation Requirements. Shaded rows indicate intervals proposed for excavation.

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.

TABLE 2 SUMMARY OF ANALYTICAL RESULTS SOIL REMEDIATION - NRM1935447155 CONOCOPHILLIPS MCA 470 FLOWLINE RELEASE LEA COUNTY, NM

			Field Screen	ing Deculte							BTEX	2								T	PH ³		
Samala ID		Sample Depth		ing Results	Chlorid	e1	Ponzor		Toluor		Ethylbon	7000	Total Vul		Total P	rev	GRO	1	DRO		EXT DF	20	Total TPH
Sample ID	Sample Date		Chloride	PID			Benzer	ie	Toluene		Ethylbenzene		Total Xylenes		Total BTEX		C ₆ - C ₁₀		> C ₁₀ - C ₂₈		> C ₂₈ - C ₃₆		(GRO+DRO+EXT DRO)
		ft. bgs	рр	m	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
FS-1	3/3/2022	4			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		225		272		497
FS-2	3/3/2022	4			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		736		644		1,380
FS-3	3/3/2022	2			80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-4	3/3/2022	2			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
FS-5	3/3/2022	2			80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SW-1	3/3/2022	-			160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		81.9		29.4		111
SW-1 (2')*	4/4/2022	-			32		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SW-2	3/3/2022	-			16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		196		126		322
SW-2 (4')*	4/4/2022	-			64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SW-3	3/3/2022	-			< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SW-4	3/3/2022	-			48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SW-5	3/3/2022	-			80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
SW-6	3/3/2022	-			32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

Method SM4500Cl-B 1

Method 8021B 2

3 Method 8015M Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements. Gold highlight represents soil horizons that were removed during deepening of excavation floors.

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

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

QUALIFIERS:

.

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	NRM1935447155
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

BA85N-191104-C-1410

)

Responsible Party ConocoPhillips Company	OGRID 217817					
Contact Name Gustavo Fejervary	Contact Telephone 432/210-7037					
Contact email g.fejervary@cop.com	Incident # (assigned by OCD)					
Contact mailing address	5735 SW 7000 Andrews, TX 79714					

Location of Release Source

Latitude 32.7932587

Longitude -103.7670975

(NAD 83 in decimal degrees to 5 decimal places)

Site Name MCA 470	Site Type flow line leak
Date Release Discovered 10/26/19	API# (if applicable)

Unit Letter	Section	Township	Range	County
Н	33	17S	32E	Lea

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

Nature and Volume of Release

Crude Oil	Volume Released (bbls) 6	Volume Recovered (bbls) 0
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release MSC The	V was checking his weekend route and fou line was traced back to the MCA 470. The	nd a flowline leak in the field. leak resulted in a 6 bbl oil spill

Received by OCD: 4/27/2022 11:14:53 PM

Form C-141	State of New Mexico	Incident ID	NRM1935447155
Page 2	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	
Was this a major release as defined by	If YES, for what reason(s) does the responsible pa	rty consider this a major release?	
19.15.29.7(A) NMAC	LESS THAN 25 BBLS		
Yes V No	((35'x25'x1.5")+(30'x30'x1.5"))X15.12% ((Effective porosity off pad)=	5.97 bbls

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

 \checkmark The source of the release has been stopped.

 \bigvee The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Remediation process is ongoing.

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: Gustavo Fejervary	Title: Environmental Coordinator
Signature:	Date: <u>11/4/19</u> Telephone: <u>432/210-7037</u>
OCD Only	
Received by: <u>Ramona Marcus</u>	Date: 12/19/2019

Oil Conservation Division

	Page 17 of 0
Incident ID	NRM1935447155
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>108</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🗸 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🖌 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🖌 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🖌 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🖌 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🖌 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🖌 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🖌 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🖌 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🗸 No

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

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
- $\mathbf{\overline{V}}$ Data table of soil contaminant concentration data
- $\mathbf{\overline{\mathbf{V}}}$ Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- **Z** 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.

Page 3

preived by OCD: 4/27/2022 11:14:53 PM State of New Mexi		60	Page 18		
			Incident ID	NRM1935447155	
age 4	Oil Conservation Div	1S10N	District RP		
			Facility ID		
			Application ID		
public health or the envir failed to adequately inve addition, OCD acceptance and/or regulations. Printed Name: Kelsy Signature: Kuy		by the OCD does not relieve the se a threat to groundwater, surf	e operator of liability sh ace water, human health pliance with any other fe ntal Engineer	nould their operations have h or the environment. In	
OCD Only Received by:		Date:			

Received by OCD: 4/27/2022 11:14:53 PM Form C-141 State of New Mexico

Page 5

Oil Conservation Division

	Page 19 of 64
Incident ID	NRM1935447155
District RP	
Facility ID	
Application ID	

Remediation Plan

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

Detailed description of proposed remediation technique

Scaled sitemap with GPS coordinates showing delineation points

Estimated volume of material to be remediated

 \checkmark 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 con	firmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around pr deconstruction.	oduction equipment where remediation could cause a major facility
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 complet rules and regulations all operators are required to report and/or file c which may endanger public health or the environment. The acceptan liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local la	ertain release notifications and perform corrective actions for releases nee of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name: Kelsy Waggaman	Title: Environmental Engineer
Signature: Kuluf Jayyum	Date: 1/10/22
email: kelsy.waggaman@conocophillips.com	Telephone: <u>5055779071</u>
OCD Only	
Received by: Chad Hensley	Date: 02/01/2022
\checkmark Approved \square Approved with Attached Conditions of A	Approval Denied Deferral Approved
Signature: Chind Meno	Date: 02/01/2022

Page 6

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u> : Each of the following it	tems must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.1	11 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certai may endanger public health or the environment. The acceptance of	ations. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in
Printed Name:	Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by: <u>Jennifer Nobui</u>	Date:
Printed Name:	

APPENDIX B Site Characterization Data

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)							2=NE 3	3=SW 4=SE) rgest) (NA) AD83 UTM in me	ters)	(1	n feet)	
POD Number	POD Sub- Code basin Co	untv		Q 16		Sec	Twe	Rng	х	Y	Distance	-	Depth Water	Water Column
RA 12721 POD7		LE	1				17S		615064	3629198 🌍	291	130	mater	oolulliil
RA 12721 POD6	RA	LE	1	2	2	33	17S	32E	615530	3629431 🌍	466	130		
RA 12721 POD4	RA	LE	1	1	2	33	17S	32E	615055	3629589 🌍	613	140		
RA 12721 POD8	RA	LE	1	2	1	33	17S	32E	614640	3629463 🌍	790	130	108	22
										Avera	ge Depth to	Water:	108	feet
											Minimum	Depth:	108	feet
											Maximum	Depth:	108	feet
Record Count: 4					_									
UTMNAD83 Radius Search (in meters):														

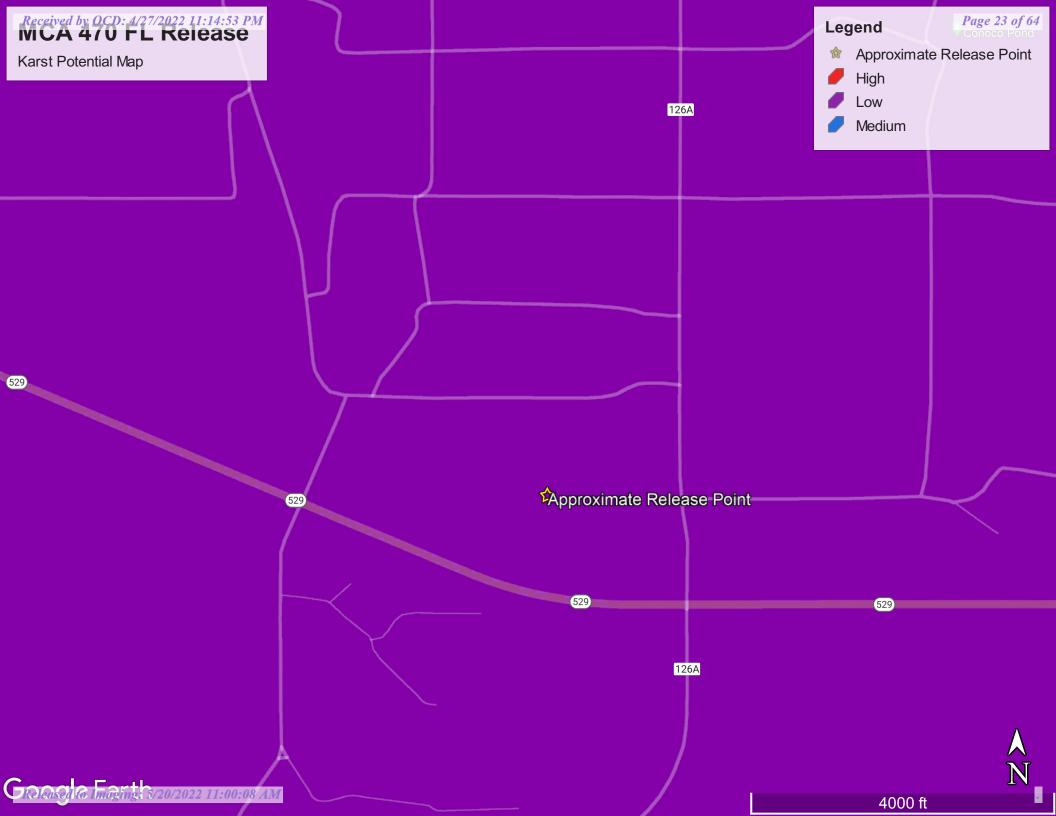
Easting (X): 615298.95

Northing (Y): 3629026.34

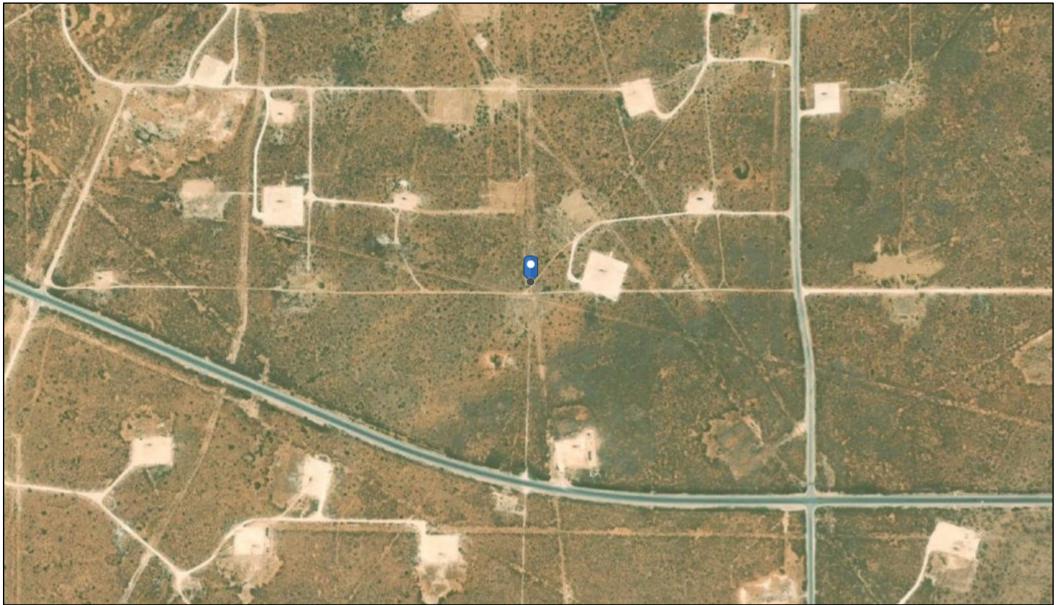
Radius: 800

Page 22 of 64

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.



OCD - Waterbodies Map



11/16/2021, 12:20:45 PM



OSE Water-bodies



OSE Streams Released to Imaging: 5/20/2022 11:00:08 AM

.

APPENDIX C Waste Manifests

Received by OCD: 4/27/2022 T RECEIVED AND AND AND AND AND AND AND AND AND AN	1:14 CONOCOPHILLIPS Customer #: CRI2190 Ordered by: ANDREW RICHARDS AFE #: PO #: Manifest #: -NA Manif. Date: 3/1/2022 Hauler: MCNABB PARTNERS Driver HUGO Truck # M31 Card # Job Ref #	Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well Name: Well #: Field: Field #: Rig: County	700-1279693 O6UJ9A000HH0 3/1/2022 CONOCOPHILLIP 39765L MCA UNIT 470 NON-DRILLING LEA (NM)	<i>Page 26 of 64</i>
Facility: CRI				
Product / Service	Q	uantity Units		
Contaminated Soil (RCRA Exe	mpt)	18.00 yards		
_ RCRA Non-Exempt: Oil field w characteristics established in RCRA amended. The following documenta _ MSDS Information _ RCRA	s generated from oil and gas exploration and p vaste which is non-hazardous that does not ex- regulations, 40 CFR 261.21-261.24 or listed h ation is attached to demonstrate the above-des A Hazardous Waste Analysis Process Km	ceed the minimum standar azardous waste as defined cribed waste is non-hazar	ds for waste hazardou l in 40 CFR, part 261, dous. (Check the appr	is by subpart D, as opriate items):
Driver/ Agent Signature	R360 Represe	ntative Signature		
Hugh & M3		5		
Customer Approval				
	THIS IS NOT AN II	VVOICE!		
Approved By:	D	ate:		

Received by OCD: 4/27/2022 11:14 RB3600 ENVIRONMENTAL SOLUTIONS Permian Basin	Customer #:	ANDREW RICHARDS	Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well #: Field: Field #: Rig: County	39765L	<i>Page 27 of 64</i> PS
Facility: CRI					
Product / Service		Quan	tity Units		
Contaminated Soil (RCRA Exemp	ot)	2	20.00 yards		
1988 regulatory determination, the abov X RCRA Exempt: Oil Field wastes ge RCRA Non-Exempt: Oil field wast characteristics established in RCRA reg amended. The following documentatio MSDS Information _ RCRA H Driver/ Agent Signature	enerated from o te which is non- gulations, 40 CF on is attached to	il and gas exploration and produ hazardous that does not exceed R 261.21-261.24 or listed hazard demonstrate the above-described	the minimum standar dous waste as defined ed waste is non-hazar deg Other (Prov	ds for waste hazardo l in 40 CFR, part 261, dous. (Check the app	us by , subpart D, as ropriate items):
Al		CA+	27		
Customer Approval					
	тні	S IS NOT AN INV	OICE!		
Approved By:		Date:			

Received by OCD: 4/27/2022 TI:14 RECEIVER SOLUTIONS Permian Basin	Customer #:	ANDREW RICHARDS	Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well Name: Well #: Field: Field #: Rig: County	700-1279954 O6UJ9A000HH0 3/2/2022 CONOCOPHILLIF 39765L MCA UNIT 470 NON-DRILLING LEA (NM)	<i>Page 28 of 64</i>	
Facility: CRI						
Product / Service		Quanti	ty Units			
Contaminated Soil (RCRA Exemp	t)	20.00 yards				
Generator Certification Statement I hereby certify that according to the Ref 1988 regulatory determination, the above X RCRA Exempt: Oil Field wastes ge RCRA Non-Exempt: Oil field wastes characteristics established in RCRA reg amended. The following documentation MSDS Information _ RCRA H	esource Conserv ve described wa enerated from o e which is non- gulations, 40 CF n is attached to	vation and Recovery Act (RCRA) iste is: il and gas exploration and product hazardous that does not exceed th TR 261.21-261.24 or listed hazardo demonstrate the above-described e Analysis Process Knowled	ction operations and the minimum standar ous waste as defined I waste is non-hazar geOther (Prov	l are not mixed with r rds for waste hazardo d in 40 CFR, part 261 rdous. (Check the app	non-exempt waste ous by , subpart D, as propriate items):	
Driver/ Agent Signature		R360 Representativ	e Signature			
Che		AX+	$\overline{}$			
Customer Approval						
	TH	S IS NOT AN INV	DICE!			
Approved By:		Date:				

Received by OCD: 4/27/2022 11 RB3600 ENVIRONMENTAL SOLUTIONS Permian Basin	Customer #: Ordered by: AFE #: PO #: Manifest #: Manif. Date: Hauler: Driver Truck # Card # Job Ref #	ANDREW RICHARDS	Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well Name: Well #: Field: Field #: Rig: County		<i>Page 29 of 64</i> S
Facility: CRI					
Product / Service		Qua	ntity Units		
Contaminated Soil (RCRA Exem	npt)		20.00 yards		
X RCRA Exempt: Oil Field wastes _ RCRA Non-Exempt: Oil field wastes characteristics established in RCRA reamended. The following documentati _ MSDS Information _ RCRA	ste which is non- egulations, 40 CF ion is attached to	hazardous that does not exceed R 261.21-261.24 or listed haza demonstrate the above-describ	d the minimum standar rdous waste as defined bed waste is non-hazard	ds for waste hazardou in 40 CFR, part 261, dous. (Check the appr	s by subpart D, as opriate items):
Driver/ Agent Signature		R360 Representa	tive Signature		
Eustomer Approval				- /	
	тні	S IS NOT AN INV			
Approved By:		Date		(

Received by OCD: 4/27/2022 11:14 RB3600 ENVIRONMENTAL SOLUTIONS Permian Basin	Customer #:	ANDREW RICHARDS	Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well Name: Well #: Field: Field #: Rig: County		<i>Page 30 of 64</i> PS
Facility: CRI					
Product / Service		Quantity U	Inits		
Contaminated Soil (RCRA Exemp	t)	20.00	yards		
I hereby certify that according to the Re 1988 regulatory determination, the abov X RCRA Exempt: Oil Field wastes ge RCRA Non-Exempt: Oil field waste characteristics established in RCRA reg amended. The following documentation MSDS Information _ RCRA Ha	ve described was enerated from of e which is non-l gulations, 40 CF n is attached to	ste is: il and gas exploration and production hazardous that does not exceed the mi R 261.21-261.24 or listed hazardous w demonstrate the above-described was	operations and nimum standard vaste as defined te is non-hazard	are not mixed with n ds for waste hazardo in 40 CFR, part 261, lous. (Check the app	on-exempt waste us by subpart D, as ropriate items):
Driver/ Agent Signature		R360 Representative Si	gnature		
Spe		A			
Customer Approval					
	THI	S IS NOT AN INVOID	E!		
Approved By:		Date:			

Received by OCD: 4/27/2022 11:14 Received by OCD: 4/27/2022 11:14 Receiv	Customer #:	ANDREW RICHARDS		Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well #: Field: Field #: Rig: County	999908	<i>Page 31 of 64</i> PS	
Facility: CRI							
Product / Service		QI	uantity U	nits			
Contaminated Soil (RCRA Exempt)		20.00 yards					
Generator Certification Statement of Waste Status I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste _ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items): _ MSDS Information RCRA Hazardous Waste Analysis Process Knowledge Other (Provide description above)							
Driver/ Agent Signature		R360 Represen	tative Sig	gnature			
		Al	~				
Customer Approval							
THIS IS NOT AN INVOICE!							
Approved By:		Da	ite:				

Received by OCD: 4/27/2022 T1:14 RB3600 ENVIRONMENTAL SOLUTIONS Permian Basin	Customer #:	ANDREW RICHARDS		Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well #: Field: Field #: Rig: County		<i>Page 32 of 64</i> 2S
Facility: CRI						
Product / Service		Qua	antity U	nits		
Contaminated Soil (RCRA Exempt		18.00 yards				
I hereby certify that according to the Re: 1988 regulatory determination, the abov X RCRA Exempt: Oil Field wastes ger RCRA Non-Exempt: Oil field waste characteristics established in RCRA regu amended. The following documentation MSDS Information RCRA Ha	which is non-h ulations, 40 CFF	and gas exploration and pro azardous that does not excee 261.21-261.24 or listed haza demonstrate the above-descri	oduction o ed the min ardous wa	perations and a limum standard aste as defined	are not mixed with no ls for waste hazardou in 40 CFR, part 261, s	on-exempt waste s by subpart D, as
Driver/ Agent Signature		R360 Representa	ative Sig	nature		
Hugo M3	1)			
Customer Approval						
	THIS	S IS NOT AN IN	VOIC	E!		
Approved By:		Date	e:			

Received by OCD: 4/27/2022 11:14 Received by OCD: 4/27 Received by OCD:	Customer #:	ANDREW RICHARDS		700-1290601 O6UJ9A000HH0 4/4/2022 CONOCOPHILLIPS 39765L	Page 33 of 64	
Facility: CRI						
Product / Service		Quan	tity Units			
Contaminated Soil (RCRA Exempt	t)	18.00 yards				
Generator Certification Statement of Waste Status I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste _ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items): _ MSDS Information RCRA Hazardous Waste Analysis Process Knowledge Other (Provide description above)						
Driver/ Agent Signature		R360 Representati	ve Signature			
Hugo M31		46				
Customer Approval						
THIS IS NOT AN INVOICE!						
Approved By:		Date:				

Received by OCD: 4/27/2022 11:14:5 Received by OCD: 4/27/2022 11:14:5 ENVIRONMENTAL SOLUTIONS Permian Basin	Customer #:	ANDREW RIHARDS	Ticket #: Bid #: Date: Generator: Generator #: Well Ser. #: Well Name: Well #: Field: Field #: Rig: County	39765L		
Facility: CRI						
Product / Service		Quantity	Units			
Contaminated Soil (RCRA Exempt	t)	18.00 yards				
Generator Certification Statement of Waste Status I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste _ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items): _ MSDS Information RCRA Hazardous Waste Analysis Process Knowledge Other (Provide description above)						
Driver/ Agent Signature		R360 Representative S	ignature			
Hugo M31		dh)			
Customer Approval						
THIS IS NOT AN INVOICE!						
Approved By:		Date:				

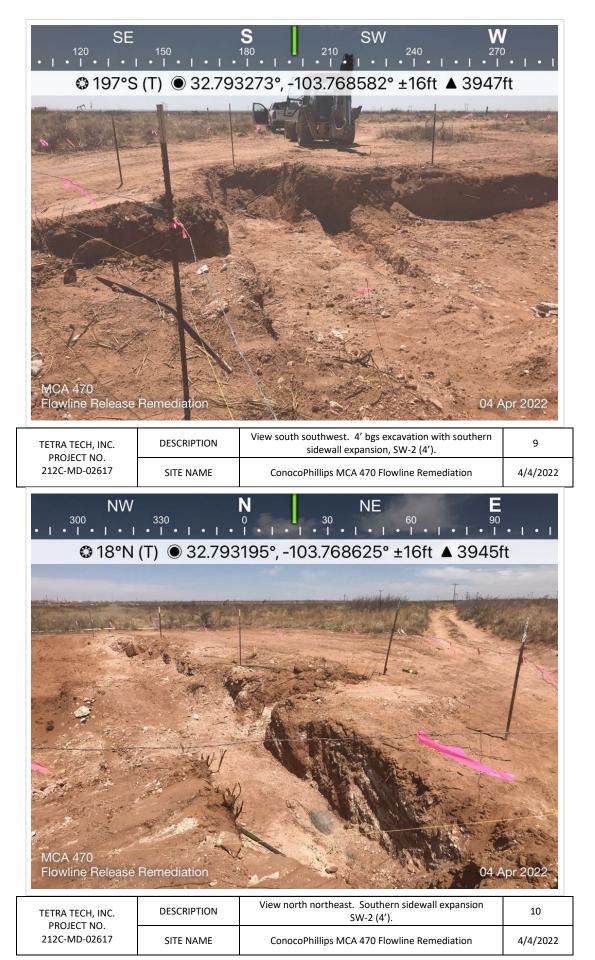
APPENDIX D Photographic Documentation











APPENDIX E Regulatory Correspondence

Poole, Nicholas

From:	Llull, Christian
Sent:	Thursday, March 3, 2022 4:35 PM
То:	ocd.enviro@state.nm.us
Cc:	Poole, Nicholas
Subject:	Incident ID: NRM1935447155 - Confirmation Sampling

RE: Incident ID (n#) NRM1935447155 (MCA 470 Flowline 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 this week.

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 on March 7, 2022.

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

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

Tetra Tech | Leading with Science[®] | OGA

8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | tetratech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

🞽 🔟 📓 Please consider the environment before printing. <u>Read more</u>



APPENDIX F Laboratory Analytical Data



March 09, 2022

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

RE: MCA 470 FLOW LINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 03/03/22 14:25.

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/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: FS - 1 (4') (H220842-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.02	101	2.00	6.32	
Toluene*	<0.050	0.050	03/04/2022	ND	1.98	99.2	2.00	6.57	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	1.90	94.8	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	5.95	99.2	6.00	6.04	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/08/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	225	10.0	03/08/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	272	10.0	03/08/2022	ND					
Surrogate: 1-Chlorooctane	80.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	89.1	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: FS - 2 (4') (H220842-02)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.02	101	2.00	6.32	
Toluene*	<0.050	0.050	03/04/2022	ND	1.98	99.2	2.00	6.57	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	1.90	94.8	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	5.95	99.2	6.00	6.04	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/08/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	736	10.0	03/08/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	644	10.0	03/08/2022	ND					
Surrogate: 1-Chlorooctane	87.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	114	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: FS - 3 (2') (H220842-03)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.02	101	2.00	6.32	
Toluene*	<0.050	0.050	03/04/2022	ND	1.98	99.2	2.00	6.57	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	1.90	94.8	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	5.95	99.2	6.00	6.04	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/08/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	<10.0	10.0	03/08/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	<10.0	10.0	03/08/2022	ND					
Surrogate: 1-Chlorooctane	90.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	92.4	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: FS - 4 (2') (H220842-04)

BTEX 8021B	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/04/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/05/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	<10.0	10.0	03/05/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	<10.0	10.0	03/05/2022	ND					
Surrogate: 1-Chlorooctane	73.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	72.9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: FS - 5 (2') (H220842-05)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/04/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/05/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	<10.0	10.0	03/05/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	<10.0	10.0	03/05/2022	ND					
Surrogate: 1-Chlorooctane	70.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	68.9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: SW - 1 (H220842-06)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/04/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/05/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	81.9	10.0	03/05/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	29.4	10.0	03/05/2022	ND					
Surrogate: 1-Chlorooctane	70.6	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	72.3	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: SW - 2 (H220842-07)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/04/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/05/2022	ND	199	99.4	200	7.72	
DRO >C10-C28*	196	10.0	03/05/2022	ND	232	116	200	12.9	
EXT DRO >C28-C36	126	10.0	03/05/2022	ND					
Surrogate: 1-Chlorooctane	72.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	72.1	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: SW - 3 (H220842-08)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/04/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2022	ND	180	89.9	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/07/2022	ND	194	97.1	200	8.45	
EXT DRO >C28-C36	<10.0	10.0	03/07/2022	ND					
Surrogate: 1-Chlorooctane	68.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	69.8	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: SW - 4 (H220842-09)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/04/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/04/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/04/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/04/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2022	ND	180	89.9	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/07/2022	ND	194	97.1	200	8.45	
EXT DRO >C28-C36	<10.0	10.0	03/07/2022	ND					
Surrogate: 1-Chlorooctane	82.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	82.1	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: SW - 5 (H220842-10)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/05/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/05/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/05/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/05/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/07/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2022	ND	180	89.9	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/07/2022	ND	194	97.1	200	8.45	
EXT DRO >C28-C36	<10.0	10.0	03/07/2022	ND					
Surrogate: 1-Chlorooctane	84.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	84.0	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/03/2022	Sampling Date:	03/03/2022
Reported:	03/09/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02617	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: SW - 6 (H220842-11)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/05/2022	ND	2.19	109	2.00	2.45	
Toluene*	<0.050	0.050	03/05/2022	ND	2.13	107	2.00	1.86	
Ethylbenzene*	<0.050	0.050	03/05/2022	ND	2.04	102	2.00	1.92	
Total Xylenes*	<0.150	0.150	03/05/2022	ND	6.36	106	6.00	1.89	
Total BTEX	<0.300	0.300	03/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/07/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2022	ND	180	89.9	200	0.312	
DRO >C10-C28*	<10.0	10.0	03/07/2022	ND	194	97.1	200	8.45	
EXT DRO >C28-C36	<10.0	10.0	03/07/2022	ND					
Surrogate: 1-Chlorooctane	81.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	81.2	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

2	2
La	C A
bor	R
ato	
orie	Þ

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	e@cardinall	es to celey.keer	Please email chang	Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com	† Cardinal canno		(
□ Yes □ Nc □ No Corrected Temp. °C	3 5°C	Correction Factor -0.5°C	10			- OF O - Dus - Outet.	Valiple - OF V
	Standard Rush	Turnaround Time:	als)	Cool Inta			Campler
1	send report			, and a second sec			
	*	REMARKS	2000 Marine	HUURA US	Date: Rec	Relinquished By:	Relinqui
Verbal Result:	I Yes I No iled. Please pro	Verbal Result:	NIN AND	Received By:	4		
		nt, its subsidiaries, ns or otherwise.	e, or loss of profits incurred by clier upon any of the above stated reasc	limitation, business interruptions, loss of us regardless of whether such claim is based	consequental damages, including without mance of services hereunder by Cardinal,	service. In or event snall cardinal be liable for incidental or consequentia damages, including without limitation, business interruptions, loss of use, or loss of porfits 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.	affiliates or suc
		y the client for the applicable ompletion of the applicable	shall be limited to the amount paid by the client for the red by Cardinal within 30 days after completion of the a	ansing whether based in contract or tort, sr waived unless made in writing and received	other cause whatsoever shall be deemed	analyses. All claims including those for negligence and any other cause whatboever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable	analyses. All cl
	4	1305 -	X	×	ad allow the soulest second a feature of the	No SW-S	DI EASE NOT
		300 1	X	×			
		2/55	X	X		8 SW-3	
		1250	×	X		7 SW-2	
		1245		X		6 500-1	
		240	X	1 ×		S FS-5(21)	
		230	X	X		rs-4 (
		1220	X			3 FS-3 (21)	
		1210	×	1 X I		2FS-2(4)	
	へメ	1200 X X	3/3/22	X		1 FS-1 (H)	
	BTEX	Ciliona		# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	(G)RAB OR (C)OMP	Ś	Lab H220
		e	PRESERV. SAMPLING	MATRIX		FOR LAB USE ONLY	FOR LAB L
		-	*	Fax #:	ights	Sampler Name: Houricn (-	Sample
) Z		Phone #:	Pho	TU, NM	Project Location: Lea Loun	Project
			e: Zip:	State:	Г	t Name:	Project Name:
		50		City:	FlowProject Owner:	:#: MCA 470	Project #:
			Address:	Add	Fax #:		Phone #:
	ă	NIK	Attn: Rahul Kaushik		State: Zip:		City:
ř		lips	Company: Conoco Phillip	×		SS:	Address:
			. #:	Kaushik P.O.	n 1Lul / Rahul,	Project Manager: Christian	Project
ANALYSIS REQUEST			BILL TO			Company Name: COP	Compa
					101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	101 East Marlar (575) 393-232	-

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: COF		BILL TO	ANALYSIS REQUEST	
Project Manager: Christian Llull/R	Rahul Kaushnile F	P.O. #:		
Address:		Company: Co P		-
City: State:	Zip:	Attn: Rahul Kaushik		
Phone #: Fax #:				
Project #: MCA 470 Flowlike Project Owner:		City:		
Project Name: MCA 470 Flowline Release	0	State: Zip:	15	-
Project Location: Leg County	P	Phone #:	4	
Sampler Name: Adhion Kau	-	Fax #:	8	
	MATRIX	PRESERV. SAMPLING		
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	ACID/BASE: ICE / COOL OTHER : DATE	TIME Chloride BTEX TPH	
11 50 - 6	×	X 3/3/2UI	310 XXX	
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be 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.	any claim arising whether based in contract or to deemed waived unless made in writing and rec g without limitation, business interruptions, loss g ardinal, regardless of whether such claim is be	rt, shall be limited to the amount paid by the revived by Cardinal within 30 days after comple of use, or loss of profils incurred by client, its used upon any of the above stated reasons on seed upon any of the above stated reasons on the state of the state state of the s	the client for the mpleton of the applicable (, the substance) of the applicable (, the substance) of the mpleton of the substance) resort of the mode.	E
Relinquished By: Date: 13/22 Time: 125 Date: 13/22 Time: 125	Received By:		Verbal Result: Ves No Add'I Phone #: All Results are emailed. Please provide Email address:	
Time:	Received By:	REN	REMARKS:	
Delivered By: (Circle One) Observed Temp. °C Sample - UPS - Bus - Other: Corrected Temp °C		CHECKED BY: (Initials)	Standard X Bacteria	
+	annot accept verbal change	es. Please email changes	Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com	

Page 58 of 64



April 07, 2022

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

RE: MCA 470 FLOW LINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 04/04/22 16:51.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	04/04/2022	Sampling Date:	04/04/2022
Reported:	04/07/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02617	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: SW - 1 (2') (H221335-01)

BTEX 8021B	mg	/kg	Analyze	ed By: MS∖					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/05/2022	ND	2.18	109	2.00	6.87	
Toluene*	<0.050	0.050	04/05/2022	ND	2.15	108	2.00	6.39	
Ethylbenzene*	<0.050	0.050	04/05/2022	ND	2.12	106	2.00	6.10	
Total Xylenes*	<0.150	0.150	04/05/2022	ND	6.51	108	6.00	5.76	
Total BTEX	<0.300	0.300	04/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	10						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/05/2022	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/07/2022	ND	214	107	200	3.43	
DRO >C10-C28*	<10.0	10.0	04/07/2022	ND	233	117	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	04/07/2022	ND					
Surrogate: 1-Chlorooctane	82.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	86.5	% 59.5-14	12						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	04/04/2022	Sampling Date:	04/04/2022
Reported:	04/07/2022	Sampling Type:	Soil
Project Name:	MCA 470 FLOW LINE RELEASE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02617	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: SW - 2 (4') (H221335-02)

BTEX 8021B	mg,	/kg	Analyze	d By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/05/2022	ND	2.18	109	2.00	6.87	
Toluene*	<0.050	0.050	04/05/2022	ND	2.15	108	2.00	6.39	
Ethylbenzene*	<0.050	0.050	04/05/2022	ND	2.12	106	2.00	6.10	
Total Xylenes*	<0.150	0.150	04/05/2022	ND	6.51	108	6.00	5.76	
Total BTEX	<0.300	0.300	04/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/05/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2022	ND	214	107	200	3.43	
DRO >C10-C28*	<10.0	10.0	04/06/2022	ND	233	117	200	4.72	
EXT DRO >C28-C36	<10.0	10.0	04/06/2022	ND					
Surrogate: 1-Chlorooctane	89.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	89.3	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

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

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

aboratories J DIZ.

101 East Marland, Hobbs, NM 88240

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of

Company Name: Conoco	Philips	BILL TO		ANALYSIS REQUEST
Project Manager: Chris	han Linu	P.O. #:		
Address:		Company:		
City:	State: Zip:	Attn:		
Phone #:	Fax #:	Address:		
Project #: 212(- MD - 02	02617 Project Owner:	City:		
Project Name: MCA H	0	State: Zip:		
Project Location: Lea Con	Counter NM	Phone #:		
Sampler Name: Andrew	2 Garcia	Fax #:		
FOR LAB USE ONLY	M/	ESERV.	SAMPLING	>
Lab I.D. Sam	Sample I.D. DRAB OR (C)OMP. CONTAINERS ROUNDWATER ASTEWATER DIL	L UDGE THER : DID/BASE: E / COOL THER :	BT EX TPH Chlorides	
1 SW-1	-	F		
2 SW-2	(4) (4)		3: oc X X	
PLEASE NOTE: Liability and Damages. Cardinal's liabilit analyses. All claims including those for negligence and a	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable	d in contract or fort, shall be limited to the amount pak in writing and received by Cardinal within 30 days after	by the client for the pplicable	
Relinquished By: Andrew Greica	Relinquished By: Andrw Gerree Time: 1451 Algor 22 Time: 1451 Algor 24 Time: 1451 Algor 24	r such claim is based upon any of the above stated re-	tian (L)	□ No Add" Phone #: Nease provide Email address: I will & tetrate cha. courd
Kelinguished By:	Date: Received By: Time:	C	REMARKS:	
Delivered By: (Circle One)		Cool Intact (Initials)	Turnaround Time: Stan	ly) S
Sampler - UPS - Bus - Other:		Yes (Introductor)	Thermometer ID #113 Correction Factor -0.5°C	

Received by OCD: 4/27/2022 11:14:53 PM

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

Page 5 of 5

Page 63 of 64

Company Name:

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

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	102202
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jnobui	Closure Report Approved.	5/20/2022

Page 64 of 64

Action 102202