TETRA TECH

February 10, 2022

Bradford Billings
Hydrologist/E.Spec.A
District 2 Artesia
1220 South St. Francis Drive
Oil Conservation Division
Santa Fe, NM 87505

Re: Release Characterization and Closure Request
ConocoPhillips
Heritage Concho
McIntyre DK Federal #4 Release
Unit Letter M, Section 17, Township 17 South, Range 30 East
Eddy County, New Mexico
Incident ID# NJMW1303938125
2RP-1547

Mr. Billings,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release and subsequent remedial actions taken at a site associated with the McIntyre DK Federal #4 well (API No. 30-015-20661), which has since been plugged. The release footprint is located in Public Land Survey System (PLSS) Unit Letter M, Section 17, Township 17 South, Range 30 East, in Eddy County, New Mexico (Site). The approximate release point occurred east of the Northwest Central Tank Battery, approximately 0.3 miles northeast of the former McIntyre DK Federal #4 well pad, at coordinates 32.829782°, -103.994663°, 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 January 23, 2013. The C-141 reports that the release was caused by a partially corroded steel flowline allowing the release of produced fluid. Approximately 15 barrels (bbls) of produced water and 5 bbls of crude oil were released, of which approximately 10 bbls of produced water and 5 bbl of oil were recovered. The release occurred off-pad and was contained to a 40-foot by 40-foot area in the pasture. The NMOCD approved the initial C-141 on February 8, 2014 and subsequently assigned the release the Incident ID NJMW1303938125 and the remediation permit (RP) number 2RP-1547. 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, stream bodies, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of 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

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NMOSE database within approximately 0.75 miles (1,200 meters) of the site, the depth to groundwater is 80 feet below ground surface (bgs). The site characterization data are presented 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	10,000 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 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 RESPONSE ACTIVITIES

The release Site is located immediately east of the Northwest Central Tank Battery facility in an area with numerous flowlines, as shown in Figure 3. Following the release, Concho replaced the steel flowline with a new poly flowline to prevent incident reoccurrence. According to information provided by Concho, the release area footprint was excavated to a depth of 4 feet bgs, lined, and backfilled with clean material to surface grade. No documentation of the remedial actions described by Concho were available at the time of this report. The area congested with flowlines east of the battery has had numerous unplanned releases.

However, a review of historical aerial imagery revealed evidence of disturbed soil, excavation walls and visible remedial activities in progress at the release area location between March 2012 and February 2014. The most recent aerial image of the Site taken in February 2019 shows reestablished vegetation in the backfilled excavation area. Historical aerial imagery is presented in Appendix C.

SITE ASSESSMENT ACTIVITIES

To confirm the reported remedial actions conducted at the release Site, as described by Concho and observed in aerial imagery, Tetra Tech conducted assessment activities at the Site on behalf of ConocoPhillips on December 29, 2021. Tetra Tech personnel installed seven (7) hand auger borings (AH-1 through AH-7) to characterize soils in the reported footprint and attempt to delineate the release. Borings AH-1 through AH-3 were installed in the vicinity of the identified backfill area to vertically delineate the release and verify the presence of the liner at the base of the backfilled excavation. Borings AH-4 through AH-7 were installed along the perimeter of the identified backfill area to complete horizontal delineation of the release extent. The boring locations are presented on Figure 4.

The liner was encountered at approximately 2 feet bgs at the AH-2 and AH-3 locations, indicating that approximately 2 feet of overburden topsoil had eroded since the initial placement. Observations made in the field and elevation data obtained from Google Earth indicate that the release extent is in a localized

topographically low area compared to the surrounding ground surface. Soils stratigraphically above the liner appeared unimpacted, had no hydrocarbon odor, and screened clean. Additionally, established vegetation was observed throughout the reported remedial extent. Soils below the liner, however, exhibited a hydrocarbon odor and moderate staining. No liner was encountered in boring AH-1. Borings AH-2 and AH-3 were terminated at 4 feet bgs and 3 feet bgs, respectively, where refusal was encountered. Upon completion of boreholes AH-2 and AH-3, the borings were plugged with bentonite and hydrated with distilled water to seal.

A total of seventeen (17) samples were collected from the seven (7) borings and submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for chloride via EPA Method 4500.0, TPH via EPA Method 8015M and BTEX via EPA Method 8261B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix D.

SUMMARY OF SAMPLING RESULTS

Analytical results from the December 2021 assessment activities are summarized in Table 1. All analytical results associated with the vertical borings above the liner encountered at 2 feet bgs (AH-1 through AH-3) and the horizontal borings (AH-4 through AH-7) were below the Site reclamation requirements for all analyzed constituents.

The analytical results associated with boring locations AH-2 and AH-3 were above the Site reclamation requirements for chlorides (600 mg/kg) and TPH (100 mg/kg) in samples collected below the liner encountered at 2 feet bgs. The highest chloride concentration was 3,040 mg/kg in the 2-3 foot sample collected from boring location AH-2, which exceeds the reclamation requirement, but is below the Site RRAL of 10,000 mg/kg. The highest TPH concentration was 17,830 mg/kg in the 3-4 foot bgs sample collected from boring location AH-2, which is elevated above the Site RRAL of 2,500 mg/kg. Additionally, the Site RRAL for BTEX (50 mg/kg) was exceeded in the 3-4 foot bgs sample collected from boring location AH-2 (64.9 mg/kg).

SITE RECLAMATION AND RESTORATION PLAN

Based on the site characterization, the backfilled areas of the release extent meet the Site reclamation requirements for surface soils located above the liner encountered at approximately 2 feet bgs. While analytical results associated with soil found below the liner exhibited concentrations of Table I constituents above the reclamation requirements, the liner has protected root zone as designed and allowed for the establishment of uniform vegetative cover. The lithified layer that was encountered during the hand auger boring installation at 3-4 feet bgs likely serves to impede further downward migration of those contaminants left in place. Photographic documentation of the Site taken during the December 2021 assessment is presented in Appendix E.

CONCLUSION

Based on a review and evaluation of the results from the site assessment, ConocoPhillips considers the current release footprint to be sufficiently remediated in accordance with the description described by Concho. The assessment was successful in horizontally delineating environmental impacts from this release.

Analytical results from vertical borings associated with site assessment were below the surface reclamation limits in soils located stratigraphically above the liner. Following the remedial activities conducted at the Site the established vegetation at the Site indicates that the installed liner at the base of the excavation is protective of the root zone. The reclamation of this disturbed areas is complete, as uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels. Although soil concentrations below the lined and backfilled excavation are above the reclamation standards for chloride and TPH, further remediation of the release footprint would be detrimental to the established vegetation and the Site, would require a major facility deconstruction, and would be disruptive of oil and gas operations in the area.

Based on the above, ConocoPhillips respectfully requests closure for this release. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 217-7254 or Christian at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.

Samantha K. Abbott, P.G.
Project Manager

Christian M, Llull, P.G.
Program Manager

cc:
Mr. Ike Tavarez, RMR – ConocoPhillips
Mr. Charles Beauvais, BU – ConocoPhillips

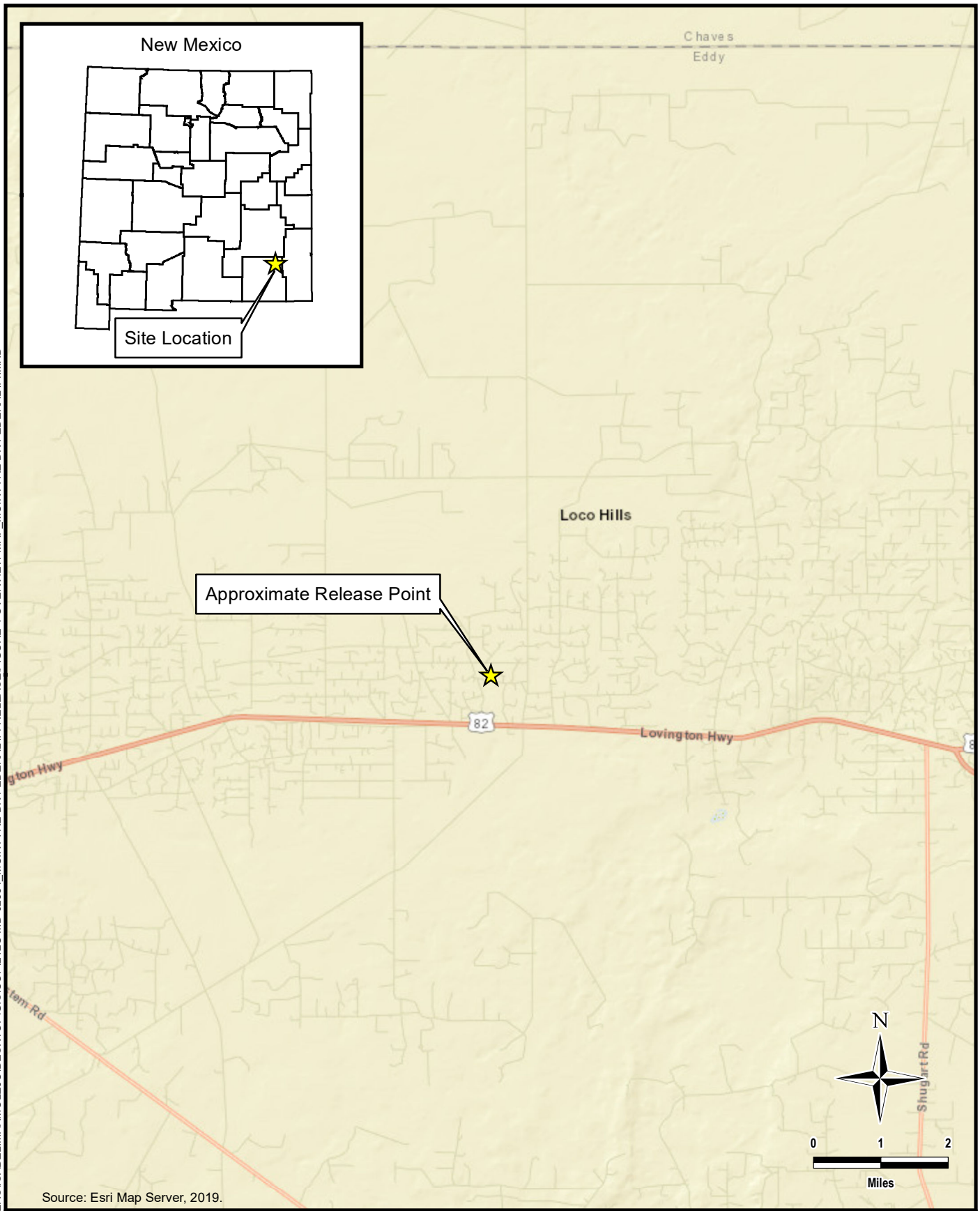
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



Source: Esri Map Server, 2019.

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\COP\212C-MD-02654_MCINTYRE DK FEDERAL #4 RELEASE\FIGURE 1 OVERVIEW MAP_MCINTYRE DK FEDERAL #4.MXD

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Fax: (432) 682-3946

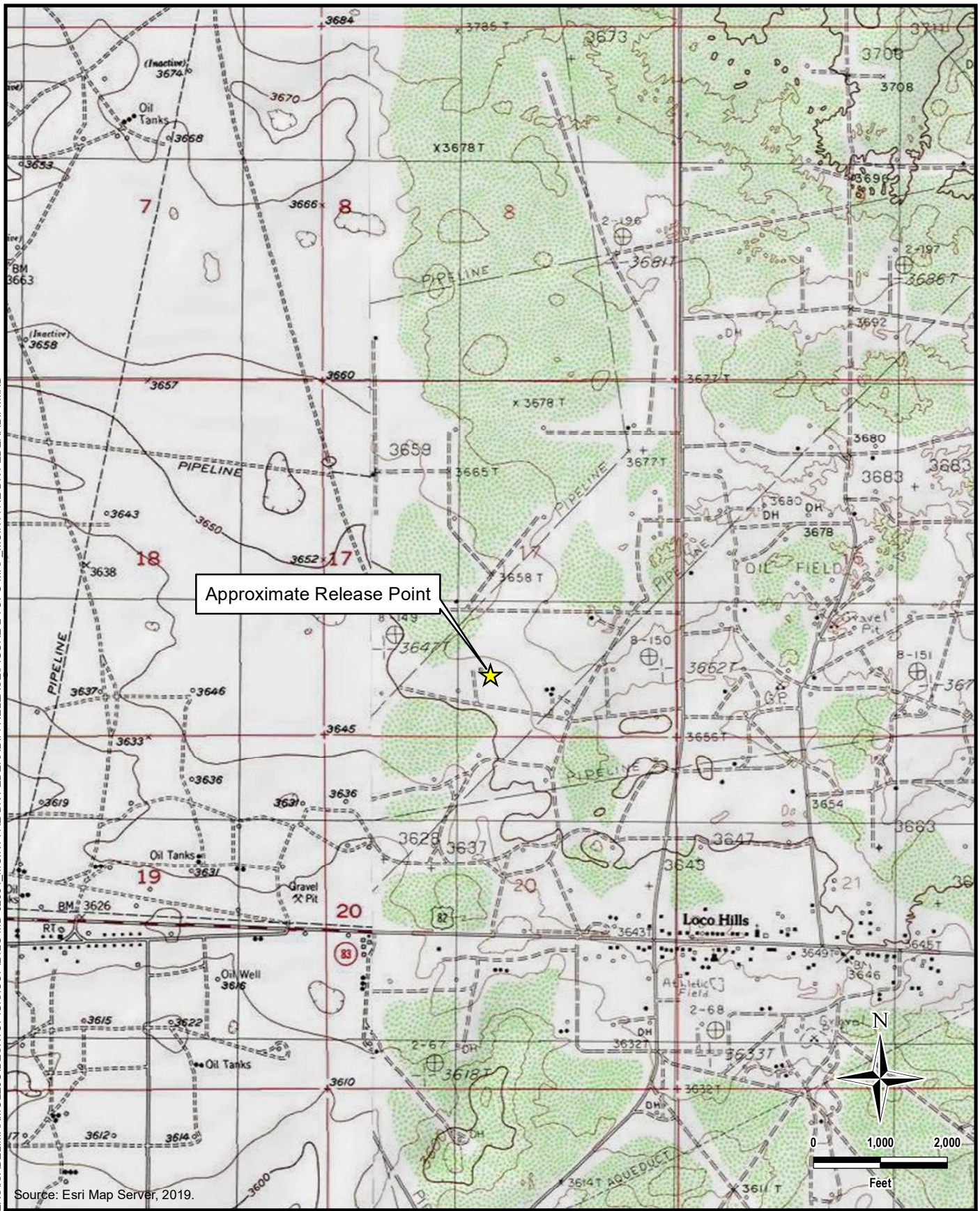
CONOCOPHILLIPS

NJMW1303938125
(32.829782, -103.994663)
EDDY COUNTY, NEW MEXICO

MCINTYRE DK FEDERAL #4
OVERVIEW MAP

PROJECT NO.:	212C-MD-02654
DATE:	JANUARY 04, 2022
DESIGNED BY:	IM

Figure No.
1



Source: Esri Map Server, 2019.

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\COP\212C-MD-02654_MCINTYRE DK FEDERAL #4 RELEASE\FIGURE 2 TOPO MAP_MCINTYRE DK FEDERAL #4.MXD

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CONOCOPHILLIPS

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EDDY COUNTY, NEW MEXICO

MCINTYRE DK FEDERAL #4
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02654
DATE:	JANUARY 04, 2022
DESIGNED BY:	IM

Figure No.
2

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\CONOCO PHILIPS\212C-MD-02654_MCINTYRE DK FEDERAL #4 RELEASE\FIGURE 3 APPROXIMATE RELEASE EXTENT AND EXCAVATION EXTENT_MCINTYRE DK FEDERAL #4.MXD

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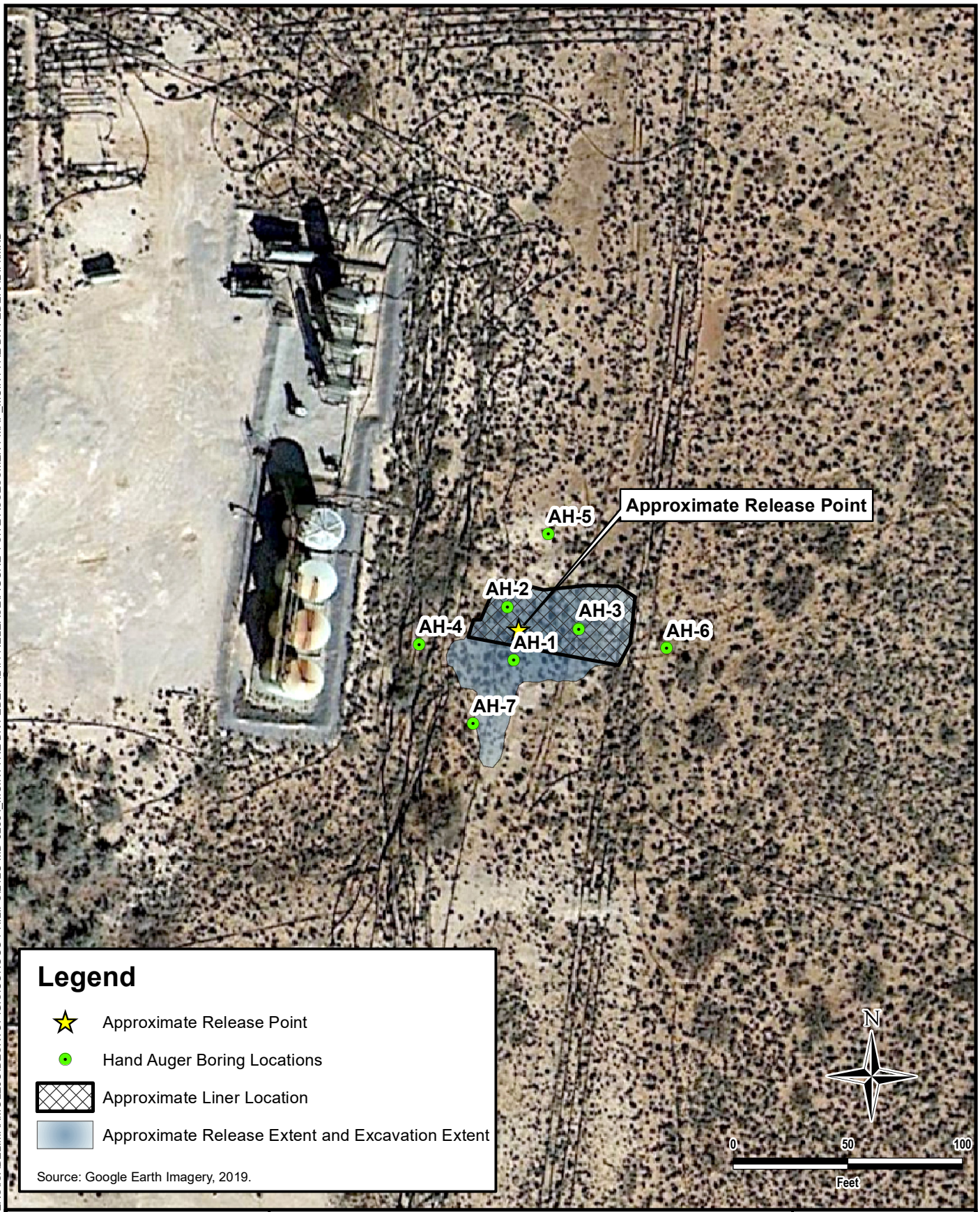
(32.829782, -103.994663)
EDDY COUNTY, NEW MEXICO

MCINTYRE DK FEDERAL #4
APPROXIMATE RELEASE EXTENT AND EXCAVATION EXTENT MAP

PROJECT NO.:	212C-MD-02654
DATE:	FEBRUARY 07, 2022
DESIGNED BY:	IM

Figure No.
3



DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\CONOCO PHILIPS\212C-MD-02654_MCINTYRE DK FEDERAL #4 RELEASE\FIGURE 4 SITE ASSESSMENT MAP_MCINTYRE DK FEDERAL #4.MXD

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CONOCOPHILLIPS

NJMW1303938125
(32.829782, -103.994663)
EDDY COUNTY, NEW MEXICO

MCINTYRE DK FEDERAL #4
SITE ASSESSMENT MAP

PROJECT NO.:	212C-MD-02654
DATE:	FEBRUARY 08, 2022
DESIGNED BY:	IM

Figure No.
4

TABLE

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - NJMW1303938125
CONOCOPHILLIPS
MCINTYRE DK FEDERAL 4 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)
															C_6 - C_{10}		C_{10} - C_{28}		C_{28} - C_{36}		
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-1	12/29/2021	0-1	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		1-2	128.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-2	12/29/2021	0-1	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		1-2	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	***3040***		< 0.050	GC-NC	0.710	GC-NC1	< 0.050	GC-NC	7.80		8.51		322		3800		785		***4907***
		3-4	***2720***		< 0.500		4.17		13.0		47.7		***64.9***		1740		13700		2390		***17830***
AH-3	12/29/2021	0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		44.2		17.4		61.6
		1-2	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	***1320***		< 0.050		0.222		< 0.050		< 0.150		< 0.300		< 10.0		5270		1610		***6880***
AH-4	12/29/2021	0-1	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		20.6		< 10.0		20.6
		1-2	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-5	12/29/2021	0-1	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		1-2	432		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-6	12/29/2021	0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		1-2	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-7	12/29/2021	0-1	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		1-2	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
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 SM4500Cl-B
2	EPA Method 8021B
3	EPA Method 8015M

QUALIFIERS:

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

Liner location

APPENDIX A
C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

RECEIVED
FEB 5 2013
NMOCD ARTESIA

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

nJMW1303938125

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC 229137	Contact	Pat Ellis
Address	600 West Illinois Avenue, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	McIntyre DK Federal #4	Facility Type	Flowline

Surface Owner Federal	Mineral Owner	Lease No. (API#) 30-015-20661

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	17	17S	30E					Eddy

Latitude 32 49.792 **Longitude** 103 59.651

NATURE OF RELEASE

Type of Release Oil and Produced water	Volume of Release 5bbls Oil 15bbls Produced water	Volume Recovered 5bbls Oil 10bbls Produced water
Source of Release Flowline from McIntyre DK Federal #4 well	Date and Hour of Occurrence 01/23/2013	Date and Hour of Discovery 01/23/2013 7:30a.m.
Was Immediate Notice Given? ☐ Yes ☒ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A steel flowline partially corroded which allowed the release of produced fluid. The steel flowline is being replaced with new poly flowline to prevent reoccurrence.

Describe Area Affected and Cleanup Action Taken.*

Initially 20bbls of produced fluid were released from the steel flowline and we were able to recover 15bbls with a vacuum truck. The release was contained in a 40' x 40' area east of the Northwest Central Tank Battery location. All free fluids have been recovered. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:

Printed Name: Josh Russo

Title: Senior Environmental Coordinator

E-mail Address: jrusso@concho.com

Date: 02/05/2013 Phone: 432-212-2399

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Mike Bratcher

Approval Date: FEB 08 2013 Expiration Date:

Conditions of Approval: Attached ☐

Remediation per OCD Rule & Guidelines. **SUBMIT REMEDIATION PROPOSAL NO LATER THAN:** March 8, 2013

2RP-1547

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:__ _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
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.

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

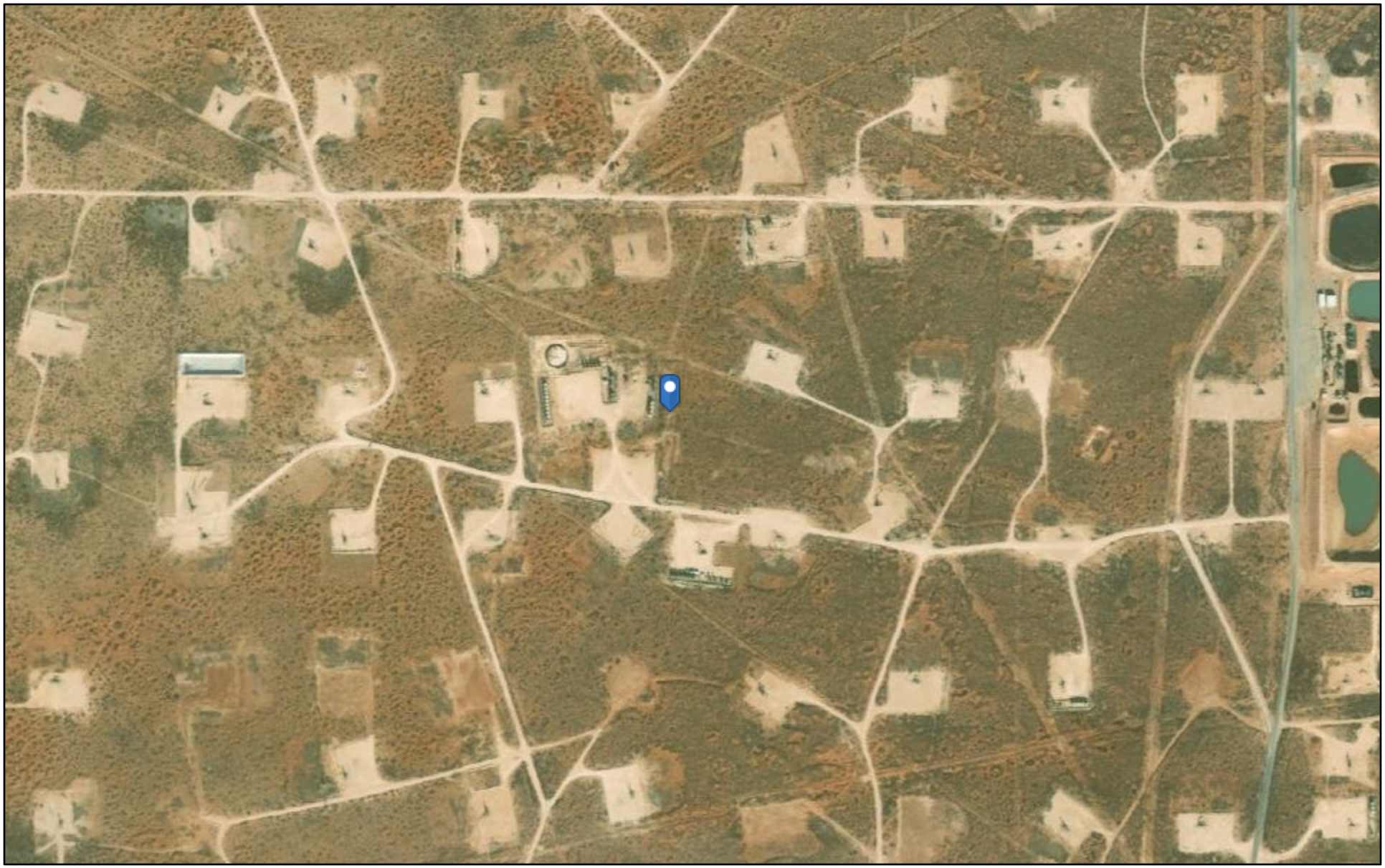
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: Bradford Billings Date: _____

Printed Name: _____ Title: _____

APPENDIX B
Site Characterization Data

OCD Water Bodies



12/27/2021, 3:55:21 PM

OCD District Offices

PLJV Probable Playas

OSE Water-bodies

OSE Streams

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

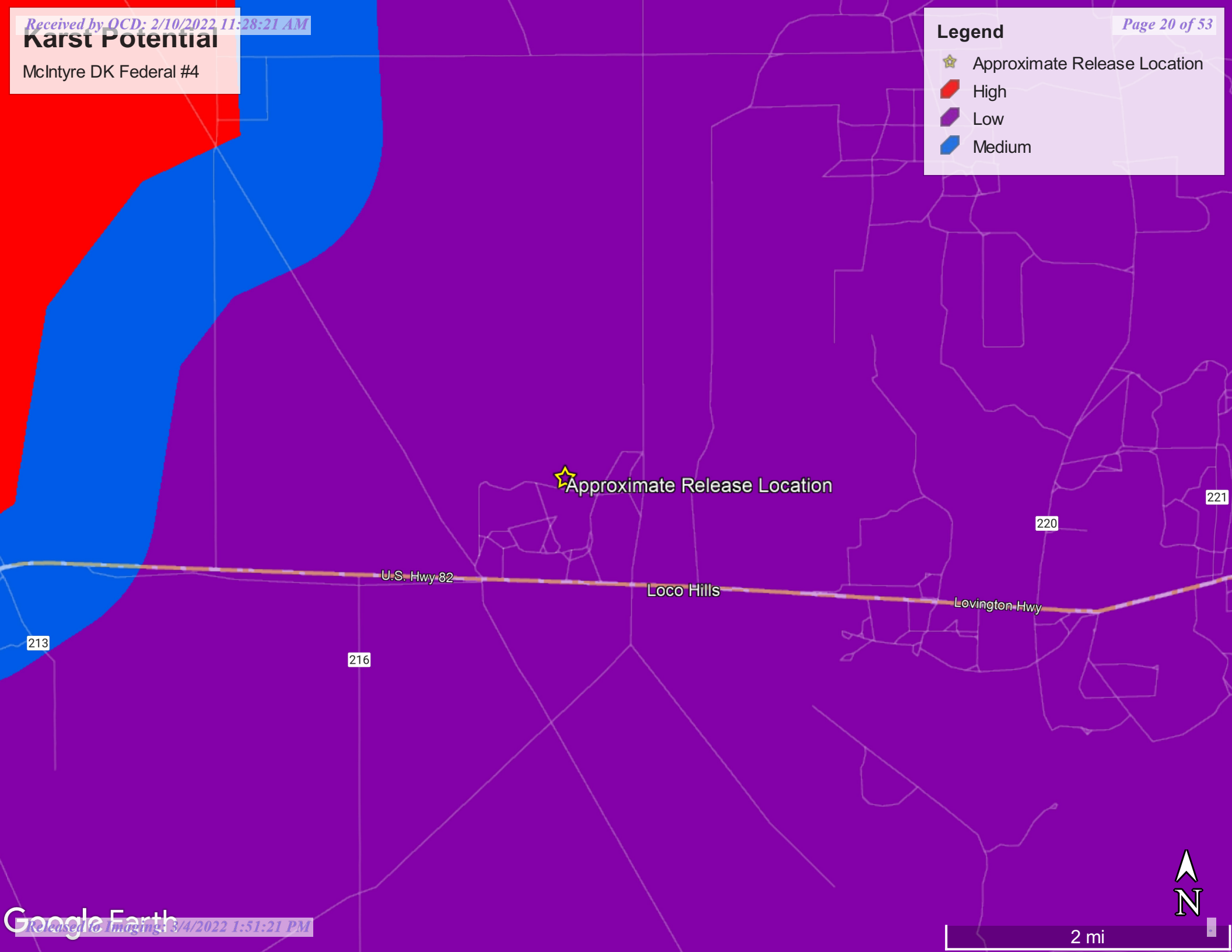
OCD, Maxar

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

Karst Potential

McIntyre DK Federal #4



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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 11914 POD1		RA	ED	2	4	2	20	17S	30E	594801	3632002	1113	85	80	5

Average Depth to Water: **80 feet**

Minimum Depth: **80 feet**

Maximum Depth: **80 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 594096 **Northing (Y):** 3632864 **Radius:** 1200

12/27/21 3:04 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

APPENDIX C
Historical Aerial Imagery

March 2012

April 2013

February 2014

November 2017

February 2019

APPENDIX D
Laboratory Analytical Data

CARDINAL Laboratories

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

January 04, 2022

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MCINTYRE DK FED #4

Enclosed are the results of analyses for samples received by the laboratory on 12/29/21 15:10.

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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 1 (0-1') (H213745-01)

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	12/30/2021	ND	2.11	106	2.00	1.94	
Toluene*	<0.050	0.050	12/30/2021	ND	1.99	99.4	2.00	1.40	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	1.99	99.3	2.00	2.23	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.18	103	6.00	2.22	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.2 %* *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	**16.0**	16.0	12/30/2021	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	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *83.9 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *86.0 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 1 (1'-2') (H213745-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *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	**128**	16.0	12/30/2021	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	12/30/2021	ND	165	82.5	200	26.2	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	204	102	200	10.6	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *94.4 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *91.3 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (0-1') (H213745-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *108 %* *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	<16.0	16.0	12/30/2021	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	12/30/2021	ND	165	82.5	200	26.2	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	204	102	200	10.6	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *106 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *102 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (1'-2') (H213745-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *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	<16.0	16.0	12/30/2021	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	12/30/2021	ND	165	82.5	200	26.2	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	204	102	200	10.6	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *106 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *106 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (2'-3') (H213745-05)

BTEX 8021B mg/kg Analyzed By: MS/ S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/03/2022	ND	2.00	99.9	2.00	6.40	GC-NC
Toluene*	**0.710**	0.050	01/03/2022	ND	2.05	103	2.00	4.44	GC-NC1
Ethylbenzene*	<0.050	0.050	01/03/2022	ND	2.07	104	2.00	4.53	GC-NC
Total Xylenes*	**7.80**	0.150	01/03/2022	ND	6.48	108	6.00	4.77	
Total BTEX	**8.51**	0.300	01/03/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *414 %* *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	**3040**	16.0	12/30/2021	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**322**	50.0	12/30/2021	ND	165	82.5	200	26.2	
DRO >C10-C28*	**3800**	50.0	12/30/2021	ND	204	102	200	10.6	
EXT DRO >C28-C36	**785**	50.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *118 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *158 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (3'-4') (H213745-06)

BTEX 8021B mg/kg Analyzed By: MS/ S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	01/03/2022	ND	2.00	99.9	2.00	6.40	
Toluene*	**4.17**	0.500	01/03/2022	ND	2.05	103	2.00	4.44	
Ethylbenzene*	**13.0**	0.500	01/03/2022	ND	2.07	104	2.00	4.53	
Total Xylenes*	**47.7**	1.50	01/03/2022	ND	6.48	108	6.00	4.77	
Total BTEX	**64.9**	3.00	01/03/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *149 %* *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	**2720**	16.0	12/30/2021	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1740**	50.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	**13700**	50.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	**2390**	50.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *301 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *805 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (0-1') (H213745-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/30/2021	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	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	**44.2**	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	**17.4**	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *76.5 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *82.0 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (1'-2') (H213745-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *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	<16.0	16.0	12/30/2021	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	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *88.8 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *90.1 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (2'-3') (H213745-09)

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	01/03/2022	ND	2.00	99.9	2.00	6.40	
Toluene*	**0.222**	0.050	01/03/2022	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	01/03/2022	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	01/03/2022	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	01/03/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.5 %* *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	**1360**	16.0	12/30/2021	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/03/2022	ND	202	101	200	5.41	
DRO >C10-C28*	**5270**	10.0	01/03/2022	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	**1610**	10.0	01/03/2022	ND					

Surrogate: 1-Chlorooctane *83.8 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *244 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 4 (0-1') (H213745-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	<16.0	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	**20.6**	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *99.2 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *105 %* *59.5-142*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 4 (1'-2') (H213745-11)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**16.0**	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *107 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *112 %* *59.5-142*

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CARDINAL Laboratories

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Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 5 (0-1') (H213745-12)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *94.6 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *98.9 %* *59.5-142*

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CARDINAL Laboratories

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Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 5 (1'-2') (H213745-13)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**432**	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *88.8 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *91.9 %* *59.5-142*

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CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 6 (0-1') (H213745-14)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *89.5 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *93.8 %* *59.5-142*

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Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 6 (1'-2') (H213745-15)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *97.8 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *103 %* *59.5-142*

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CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 7 (0-1') (H213745-16)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	<16.0	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *92.9 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *97.9 %* *59.5-142*

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CARDINAL Laboratories

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Analytical Results For:

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

Received:	12/29/2021	Sampling Date:	12/29/2021
Reported:	01/04/2022	Sampling Type:	Soil
Project Name:	MCINTYRE DK FED #4	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02654	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 7 (1'-2') (H213745-17)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/30/2021	ND	2.00	99.9	2.00	6.40	
Toluene*	<0.050	0.050	12/30/2021	ND	2.05	103	2.00	4.44	
Ethylbenzene*	<0.050	0.050	12/30/2021	ND	2.07	104	2.00	4.53	
Total Xylenes*	<0.150	0.150	12/30/2021	ND	6.48	108	6.00	4.77	
Total BTEX	<0.300	0.300	12/30/2021	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/30/2021	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/30/2021	ND	202	101	200	5.41	
DRO >C10-C28*	<10.0	10.0	12/30/2021	ND	195	97.5	200	9.20	
EXT DRO >C28-C36	<10.0	10.0	12/30/2021	ND					

Surrogate: 1-Chlorooctane *82.5 %* *66.9-136*

Surrogate: 1-Chlorooctadecane *87.2 %* *59.5-142*

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1/2

Company Name: Tetra Tech
Project Manager: Sam Abbott
Address:
City: State: Zip:
Phone #: Fax #:
Project #: 212C-MD-02654 Project Owner: ConocoPhillips
Project Name: McIntyre DK Fed #4
Project Location: Eddy County, NM
Sampler Name: Colton Bickerstaff

BILL TO
P.O. #:
Company: Tetra Tech
Attn: Sam Abbott
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	BTEX 8021B	TPH 8015M (GRO-DRO)	Chlorides 300.0 4500 TP 12/29/21
H213745																	
1	AH-1 (0-1')	G	1			X					X		12/29/21		X	X	X
2	AH-1 (1'-2')																
3	AH-2 (0-1')																
4	AH-2 (1'-2')																
5	AH-2 (2'-3')																
6	AH-2 (3'-4')																
7	AH-3 (0-1')																
8	AH-3 (1'-2')																
9	AH-3 (2'-3')																
10	AH-4 (0-1')																

Relinquished By: Colton Bickerstaff Date: 12/29/21 Time: 1510
Received By: Tamara Oldaker
Relinquished By: Date: Time:
Received By:

Verbal Result: ☐ Yes ☒ No Add'l Phone #:
All Results are emailed. Please provide Email address:
Sam.Abbott@tetratech.com
REMARKS:
Email invoice, results to Sam Abbott

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
Observed Temp. °C 2.8
Corrected Temp. °C 2.3
Sample Condition: Cool ☑ Yes ☐ No Intact ☐ Yes ☐ No
CHECKED BY: (Initials) T.O.

Turnaround Time: Standard ☒ Rush ☐
Thermometer ID #113
Correction Factor -0.5°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ Nc Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2/2

Company Name: Tetra Tech
Project Manager: Sam Abbott
Address:
City: State: Zip:
Phone #: Fax #:
Project #: 212C-MD-02654 Project Owner: ConocoPhillips
Project Name: McIntyre DK Fed #4
Project Location: Eddy County, NM
Sampler Name: Colton Bickerstaff

BILL TO
P.O. #:
Company: Tetra Tech
Attn: Sam Abbott
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M (GRO - DRO)	Chlorides 300.0
H213745																	
11	AH-4 (1'-2')	G	1			X					X		12/29/21		X	X	X
12	AH-5 (0-1')																
13	AH-5 (1'-2')																
14	AH-6 (0-1')																
15	AH-6 (1'-2')																
16	AH-7 (0-1')																
17	AH-7 (1'-2')																

TAT 14 Days 12/29/21

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 service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, 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.

Relinquished By: Colton Bickerstaff Date: 12/29/21 Time: 1510
Received By: Tamara Oldaker
Relinquished By: Date: Time:
Received By:

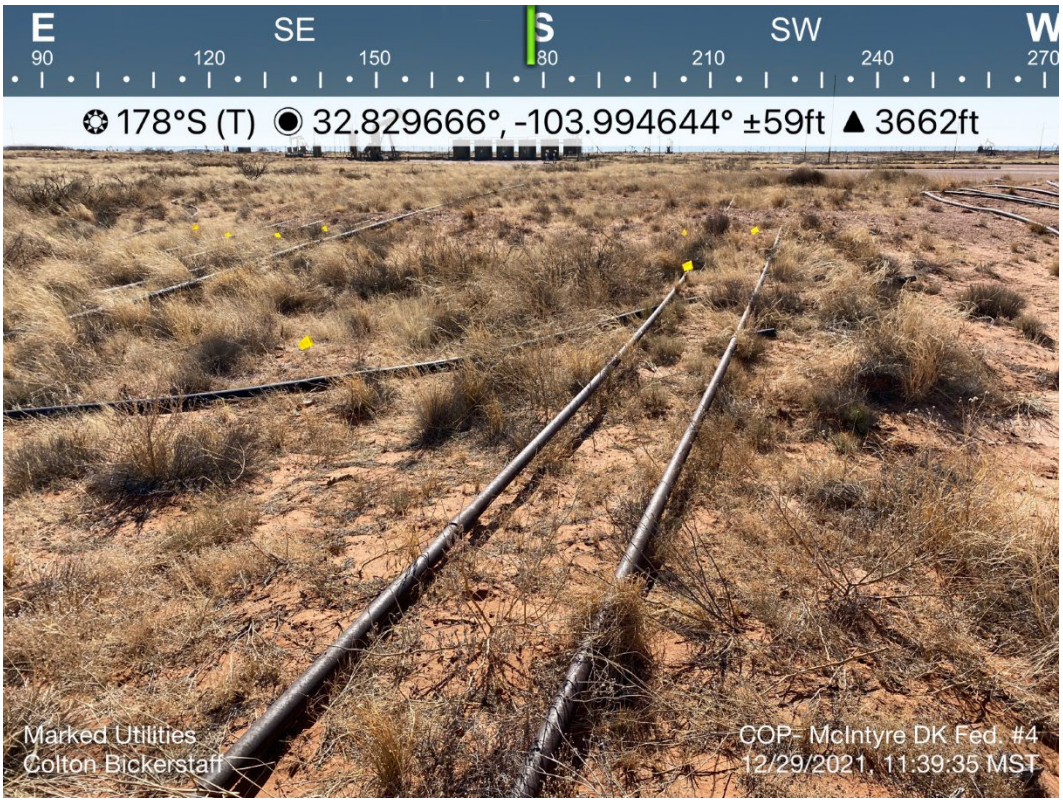
Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 2.8 Corrected Temp. °C 2.3
Sample Condition: Cool Yes Intact Yes
CHECKED BY: (Initials) YO

Verbal Result: ☐ Yes ☒ No Add'l Phone #:
All Results are emailed. Please provide Email address: Sam.Abbott@tetratech.com
REMARKS: Email invoice, results to Sam Abbott
Turnaround Time: Standard ☒ Rush ☐
Thermometer ID #113
Correction Factor -0.5°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

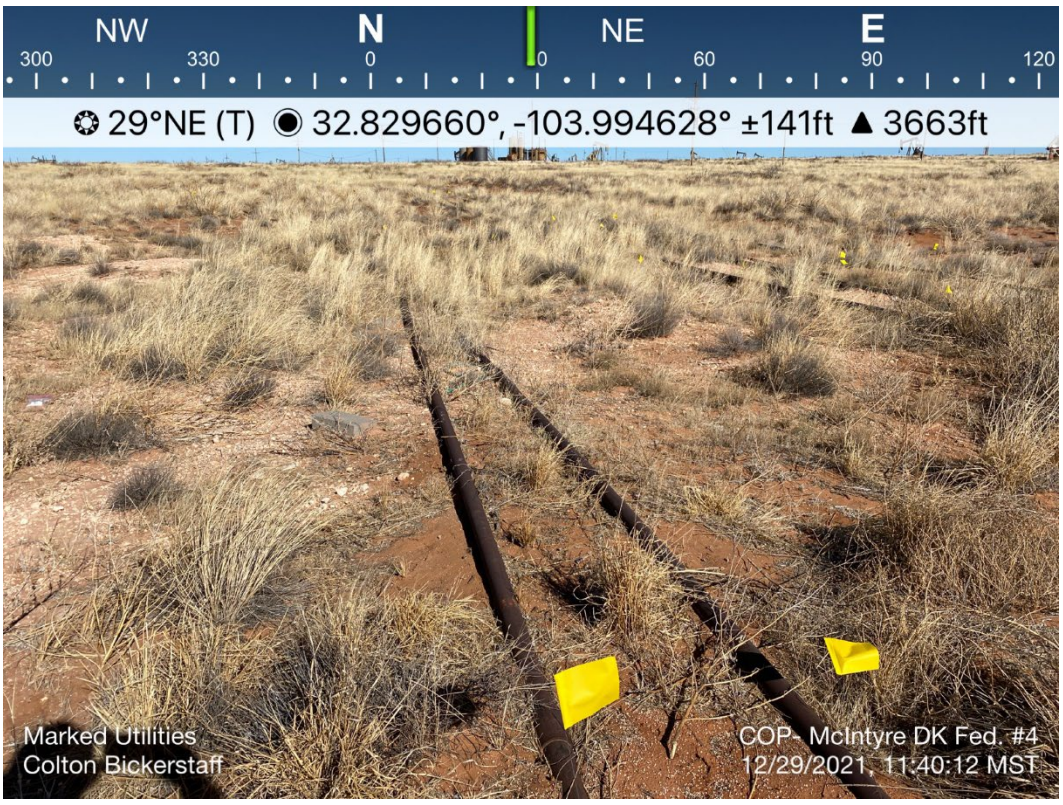
FORM-006 R 3.2 10/07/21

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

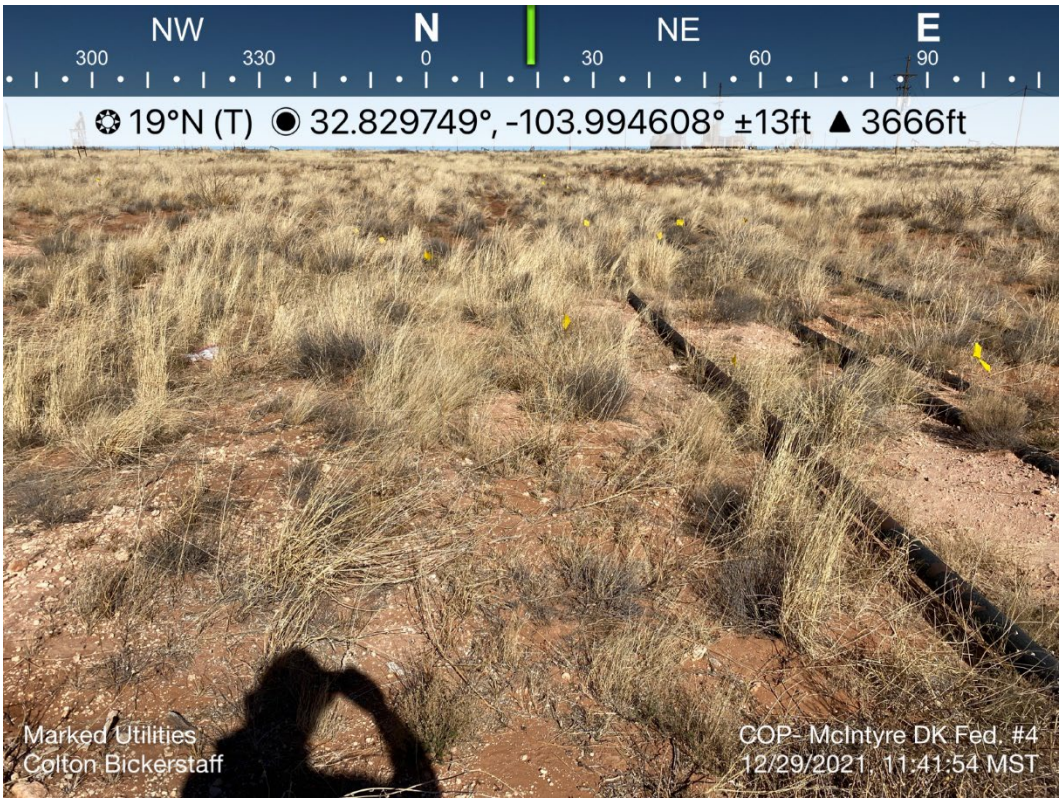
APPENDIX E
Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View south. Pastureland and above ground utilities.	1
	SITE NAME	McIntyre DK Federal 4	12/29/2021



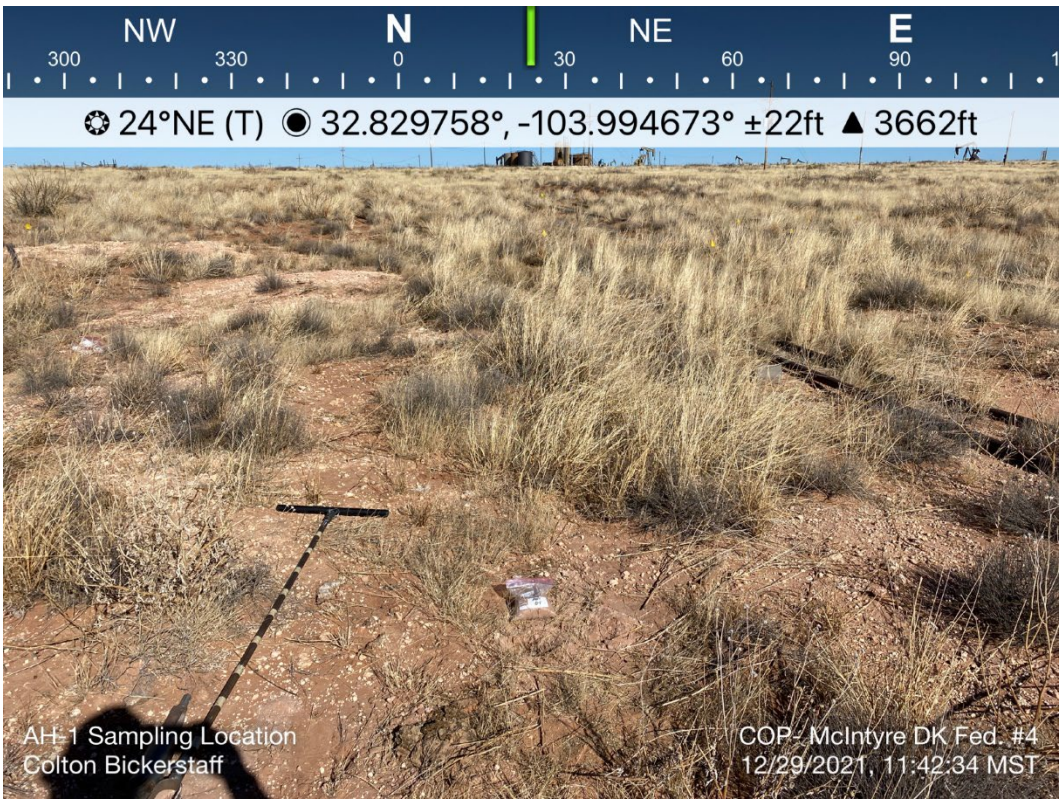
TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View northeast. Pastureland and above ground utilities.	2
	SITE NAME	McIntyre DK Federal 4	12/29/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View north-northeast. Pastureland and above ground utilities.	3
	SITE NAME	McIntyre DK Federal 4	12/29/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View north-northwest. Above ground utilities and COP facility in background.	4
	SITE NAME	McIntyre DK Federal 4	12/29/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View west-southwest. COP facility in background, above ground utilities in foreground.	5
	SITE NAME	McIntyre DK Federal 4	12/29/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View north-northeast. AH-1 sample location.	6
	SITE NAME	McIntyre DK Federal 4	12/29/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02654	DESCRIPTION	View north-northwest. AH-3 sample location.	7
	SITE NAME	McIntyre DK Federal 4	12/29/2021

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 80643

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 80643
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	Approved but evaluate function of liner at P&A	3/4/2022