

## SITE INFORMATION

### Report Type: Closure Report nAPP2336158873 and nAPP2404354589

#### General Site Information:

Site:	Hayhurst NM Section 9 CTB					
Company:	Chevron U.S.A., Inc.					
Section, Township and Range	Unit P	Sec. 08	T 26S	R 27E		
Lease Number:						
County:	Eddy County					
GPS:	32.05254458			-104.2015445		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	From the intersection of Road Runner Road and Whites City Road, drive west on Whites City Road 0.9-miles. Turn left and drive south 0.63-miles. Turn right and drive west for approximately 1650-feet. Turn right and drive northeast for 300 ft. The center of the spill site is located at GPS coordinate point 32.052460, -104.201540.					

#### Release Data:

Date Released:	12.26.2023 and 2.12.2024
Type Release:	Produced Water
Source of Contamination:	Equipment failure at dump valve
Fluid Released:	10 bbls produced water (12.26.23), 52 bbls produced water (2.12.24)
Fluids Recovered:	0 bbls produced water (12.26.23), 35 bbls produced water (2.12.24)

#### Official Communication:

Name:	Kennedy Lincoln		John Faught
Company:	Chevron U.S.A., Inc.		Tetra Tech
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			Ste 100
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#### Site Characterization

Depth to Groundwater:	17.75' Below Ground Surface
Karst Potential:	Medium

#### Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	100 mg/kg	600 mg/kg



June 6, 2024

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**RE: Remediation Closure Report  
Chevron MCBU  
Hayhurst NM Section 9 CTB  
Eddy County, New Mexico  
nAPP2336158873 and nAPP2404354589**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contracted by Chevron U.S.A., Inc. (Chevron) to assess and remediate two releases that occurred at the Hayhurst NM Section 9 CTB, Unit P, Section 8, Township 26 South, Range 27 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.05254458°, -104.20154454°. The site location is shown on **Figures 1 and 2**.

## **Background**

### Initial Release

According to the initial C-141 and based on the previously submitted work plan dated February 9, 2024, an initial release (nAPP2336158873) at the Site occurred due to a dump valve failure, causing the release of 10 barrels (bbls) of produced water, however, none of the fluids were recovered. The release impacted an area of approximately 3,500 square feet. On December 26, 2023, the release was discovered and reported to the New Mexico Oil Conservation Division (NMOCD). A workplan for the initial release was submitted to the NMOCD on February 13, 2024, and was approved on March 11, 2024.

### Second Release

According to the State of New Mexico Notice of Release report, a second release (nAPP2404354589) at the Site occurred due to a dump valve failure, causing the release of 52 bbls of produced water, of which 35 bbls of fluids were recovered. The release impacted an area of approximately 2,971 square feet, partially overlapping the initial release footprint at the Site. On February 12, 2024, the release was discovered and reported to the New Mexico Oil Conservation Division (NMOCD).

## **Site Characterization**

### Significant Water Features

According to the (National Flood Hazard Layer) NFHL Flood Data Application and the (United States Geological Survey) USGS National Water Information System Mapper, there were no watercourses, lakebeds, sinkholes, playa lakes, springs, wetlands, subsurface mines,



private domestic water wells, or floodplains located within the specified distances of the Site. However, the Site is located in a medium karst area. The NFHL Map and USGS Mapper are provided in **Appendix A**.

### Significant Boundaries

According to Google Earth US Government City Boundaries and US School Districts, the lateral extents of the release were not within incorporated municipal boundaries, a defined municipal fresh water well field, or a school district. Additionally, there were no occupied permanent residences, schools, hospitals, institutions, or churches located within the specified distances of the lateral extents of the release.

### Groundwater Review

Groundwater research was completed for the Site through the USGS National Water Information System and New Mexico Office of the State Engineer (NMOSE) Water Rights Reporting System. Results of groundwater research conducted through these two resources, show the three closest water wells within a 2-mile radius of the Site. Point of Diversion (POD) number C 02588 reported on the NMOSE Water Rights Reporting System is listed as having a total depth of 81 ft below ground surface (bgs), and measured water level of 19 ft bgs and is located approximately 1.88 miles from the Site. USGS well, number 320323104112901, reported on the USGS National Water Information System (NWIS) is listed as having a water level measured at 17.75 ft bgs and is approximately 0.64 miles from the Site. USGS well, number 320343104110201, reported on the USGS NWIS, is listed as having a water level measured at 8.94 ft bgs and is approximately 1.05 miles from the Site. The groundwater information is shown in **Appendix B**.

Distance from Site	Date of Data	Resource of Information	Depth of Well	Depth to Water
1.88 Miles	6/3/1998	NMOSE	81'	19'
0.64 Miles	1/28/2003	USGS	N/A	17.75'
1.05 Miles	1/9/2013	USGS	N/A	8.94'

### **Regulatory**

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018, will be followed for the Site. The guidelines require a risk-based evaluation of the Site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (BTEX), total petroleum hydrocarbons (TPH), and chloride concentrations in the soil at the Site. The proposed RRALs for the Site were determined to be 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, 100 mg/kg for TPH and 600 mg/kg for Chloride in the soil.



## Site Assessment Activities

Based on the information provided by Chevron, Tetra Tech conducted site assessment activities for both of the releases (nAPP2404354589) to determine vertical and horizontal delineation of the extent of the impact. The release areas are shown on **Figure 3**.

### Initial Release Assessment

Tetra Tech conducted Site assessment activities on January 18, 2024. A total of three (3) auger holes (AH-1 through AH-3) were installed within the impacted area, to depths ranging from surface to 4 feet below ground surface (ft bgs) to attempt to assess and vertically delineate the impacted the area. Additionally, a total of four (4) horizontal auger holes (H-1 through H-4) were installed directly outside of the impact outline to total depth of 1.0 ft bgs, to horizontally delineate the impact. The extent of impact and delineation sample locations are shown on **Figure 3A**.

The soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for TPH by method 8015 modified, BTEX by method 8021B, and Chloride by EPA Method SM4500-Cl B. The analytical results are summarized in **Table 1** and the analytical laboratory reports are included in **Appendix B**.

Referring to Table 1, auger holes (AH-1 through AH-3) indicated chloride concentrations above RRALs, with concentrations ranging from 832 mg/kg to 5,120 mg/kg, at depths ranging from surface to 3 ft bgs. Auger holes (AH-1 through AH-3) did not indicate benzene, BTEX, or TPH concentrations above laboratory detection limits. Vertical delineation was achieved at 1 ft bgs at sample point AH-1, 3 ft bgs at sample point AH-2 and 2 ft bgs at sample point AH-3. Additionally, horizontals (H-1 through H-4) did not indicate benzene, BTEX, TPH, or chloride concentrations above the determined RRALs for the Site. The release impacted area is vertically delineated at all of the vertical delineation sample points.

### Second Release Assessment

Tetra Tech conducted Site assessment activities on February 26, 2024. A total of four (4) hand auger borings (BH-1 through BH-4) were installed within the impacted area, to depths ranging from surface to 4 feet below ground surface (ft bgs) to attempt to assess and vertically delineate the impacted the area. Additionally, a total of four (4) hand auger borings (B-1 through B-4) were installed directly outside of the impact outline to total depth of 1.0 ft bgs, to horizontally delineate the impact. The extent of impact and delineation sample locations are shown on **Figure 3B**.

The soil samples were submitted to Eurofins Laboratories in Midland, Texas to be analyzed for TPH by Method 8015 modified, BTEX by Method 8021B, and chloride by Method 300.0. The analytical results are summarized in **Table 2** and the analytical laboratory reports are included in **Appendix B**.

Referring to Table 1, hand auger borings BH-1, BH-3, and BH-4 indicated chloride concentrations above RRALs, with concentrations ranging from 868 mg/kg to 4,340 mg/kg, at depths ranging from surface to 1.0 ft bgs. Hand auger borings BH-1 through BH-4 did not





indicate benzene, BTEX, or TPH concentrations above RRALs. Vertical delineation was achieved at 1 ft bgs in all of the vertical delineation sample points. Additionally, hand auger borings B-1 through B-3 did not indicate benzene, BTEX, TPH, or chloride concentrations above the determined RRALs for the Site, however, hand auger boring B-4 indicated a chloride concentration above RRALs with a concentration of 826 mg/kg, and a total TPH concentration of 152 mg/kg at surface depths. The release impacted area is vertically delineated at all of the vertical delineation sample points with the exception of B-4 which was delineated while remediation activities were completed.

### Remediation Activities

Tetra Tech and construction subcontractor McNabb Partners, LLC, conducted remediation activities from April 30, 2024, through May 24, 2024. The areas of impact were remediated to depths ranging from 0.5 ft bgs to 1.5 ft bgs. Additionally, a hand dug surface scrape was completed in areas inaccessible to equipment and for housekeeping purposes. The remediation areas and depths are shown on **Figure 4**.

Following remediation activities, Tetra Tech conducted confirmation sampling by collecting 5-point composite bottom hole samples and 5-point composite sidewall samples every 200 square feet within the remediation. All confirmation samples are collected as a composite 5-point die pattern to ensure a representative sample of sidewalls and floor of the excavation are collected. A total of twenty-one (21) bottom holes were collected and a total of fourteen (14) sidewalls were collected from the remediated area. The confirmation soil samples were submitted to the Cardinal Laboratory in Hobbs, New Mexico to be analyzed for TPH by method 8015 modified, BTEX by method 8021B, and Chloride by EPA Method 4500. The analytical results are summarized in **Table 3** and the analytical laboratory reports are included in **Appendix B**. The confirmation sample notifications were sent to the NMOCD via email, on April 29, 2023, and May 14, 2024, and a copy of the notices is provided in **Appendix C**. A photographic log is included in **Appendix D**.

Referring to Table 3, all final samples collected from the remediation, analytical results indicated benzene, BTEX, TPH, and chloride concentrations were below the RRALs, with the exception of confirmation samples (BTM-16 through BTM-19, and WSW-2, ISW-2, ISW-3, ISW-4, and, ISW-5) which exhibited chloride concentrations ranging from 1,090 mg/kg to 4,080 mg/kg at depths ranging from surface to 0.5 ft bgs. The areas of exceedance are located in areas which are in close proximity or under active separators and piping at the Site. The extent of the remaining impacted area has been horizontally and vertically delineated.

Chevron requests a deferral in the areas under the active separators and piping at the Site until the equipment is removed during other operations, or when the well or facility is plugged or abandoned. Excavation under these areas poses imminent safety concerns and the strong likelihood of structural damage to the active equipment at the Site. The requested deferral area is shown on **Figure 5**.

### Conclusions

Based on the C-141s (nAPP2302847724 and nAPP2404354589) and information provided by Chevron, Tetra Tech performed site characterization and groundwater research to



determine groundwater depth, proximity from significant water features, and proximity from specified populated entities to determine RRALs and assess the impacted area. Based on the OCD *Guidelines for Remediation of Leaks, Spills, and Releases*, updated August 14, 2018, according to the groundwater data found during research activities, the RRALs of 600 mg/kg for chlorides and 100 mg/kg for TPH were followed for soil beyond the top 4.0 ft of soil. Based on Tetra Tech assessment activities, laboratory results indicated chloride concentrations in auger holes (AH-1 through AH-3, BH-1, BH-3, BH-4 and B-4) exceeded RRALs and required remediation.

Following remediation of the areas of impact, Tetra Tech conducted confirmation soil sampling of the area by collecting 5-point composite confirmation bottom hole and sidewall samples to ensure the impacted soil was fully removed. Approximately 289 cubic yards of impacted soil was removed and properly disposed of at R360 in Orla, TX and Hobbs, NM, and the area was backfilled with clean material to surface grade. The analytical results indicated all confirmation samples reported below the RRALs for all constituents, with the exception of chloride concentration exceedances in confirmation samples (BTM-16 through BTM-19, and WSW-2, ISW-2, ISW-3, ISW-4, and ISW-5) which were located within close proximity to, and underneath active separators and piping at the Site. The remaining areas that indicated concentrations exceeding the RRALs were left in place for deferment.

Based on site assessment and remediation activities at the Site, Chevron requests closure of the release area with the exception of the requested deferral in the areas under the active separators and piping at the Site until the equipment is removed during other operations, or when the well or facility is plugged or abandoned. Excavation under these areas poses safety concerns and the possibility of damage to the active equipment at the Site. The final C-141s will be electronically submitted to the NMOCD.

If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

A handwritten signature in blue ink that reads 'John Faught'.

John Faught, G.I.T.  
Project Manager

A handwritten signature in blue ink that reads 'Clair Gonzales'.

Clair Gonzales, P.G.  
Senior Project Manager

## Figures

- Figure 1 – Site Overview Map
- Figure 2 – Topographic Map
- Figure 3A – Initial Spill Assessment Map
- Figure 3B – Secondary Spill Assessment Map



Figure 4 – Excavation Area and Depth Map

Figure 5 – Deferral Area Map

### **Tables**

Table 1 – Initial Release Delineation Analytical Results

Table 2 – Secondary Release Delineation Analytical Results

Table 3 – Confirmation Analytical Results

### **Appendices**

Appendix A – Site Characterization

Appendix B – Analytical Laboratory Reports

Appendix C – NMOCD Correspondence

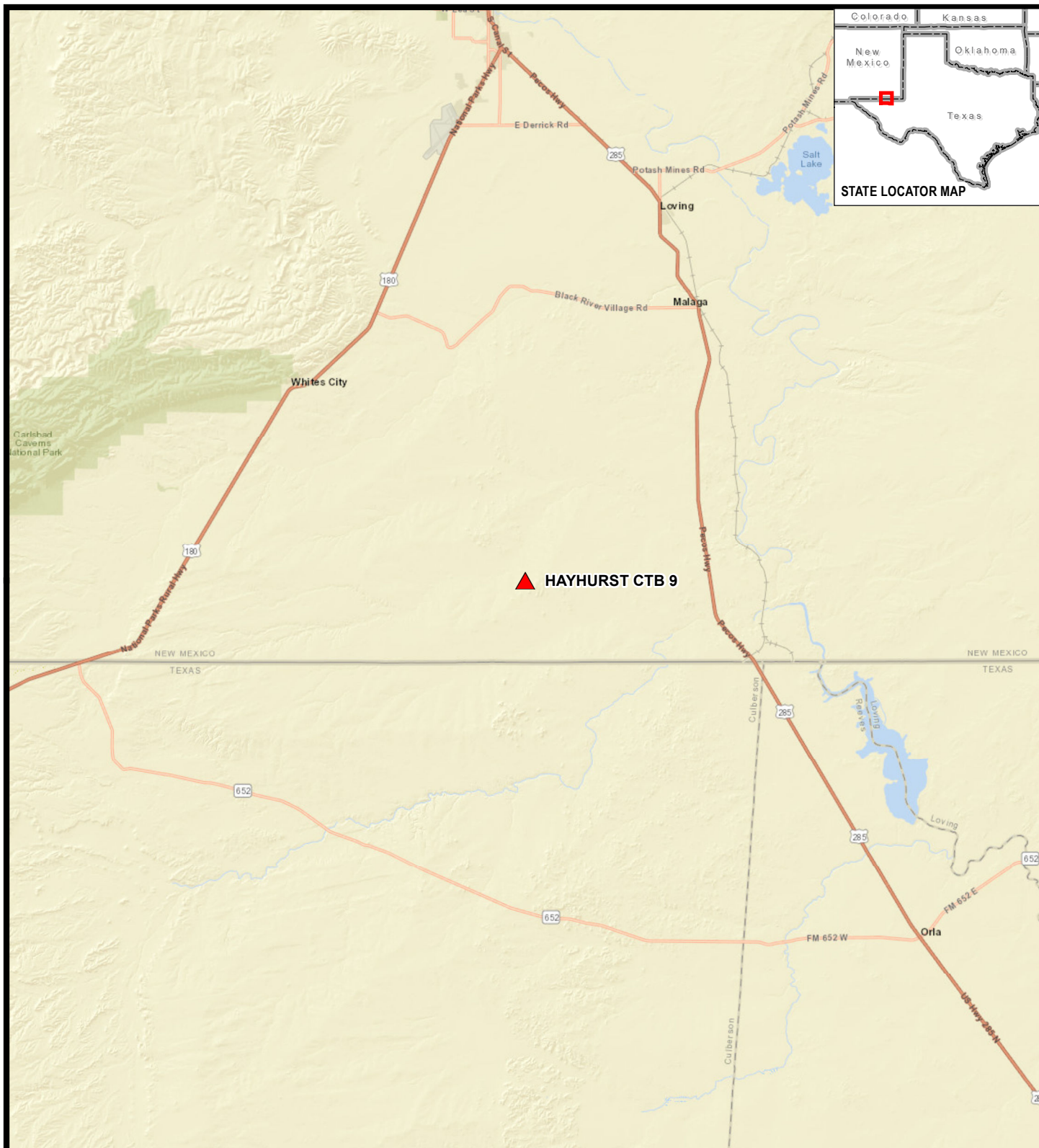
Appendix D – Photographic Documentation



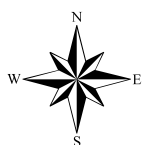
# Figures

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▲ APPROXIMATE SITE LOCATION



0 2.5 5  
Miles  
Approximate Scale in Miles

SITE LOCATION MAP  
HAYHURST CTB 9  
32.05254458, -104.20154454  
EDDY COUNTY, NEW MEXICO

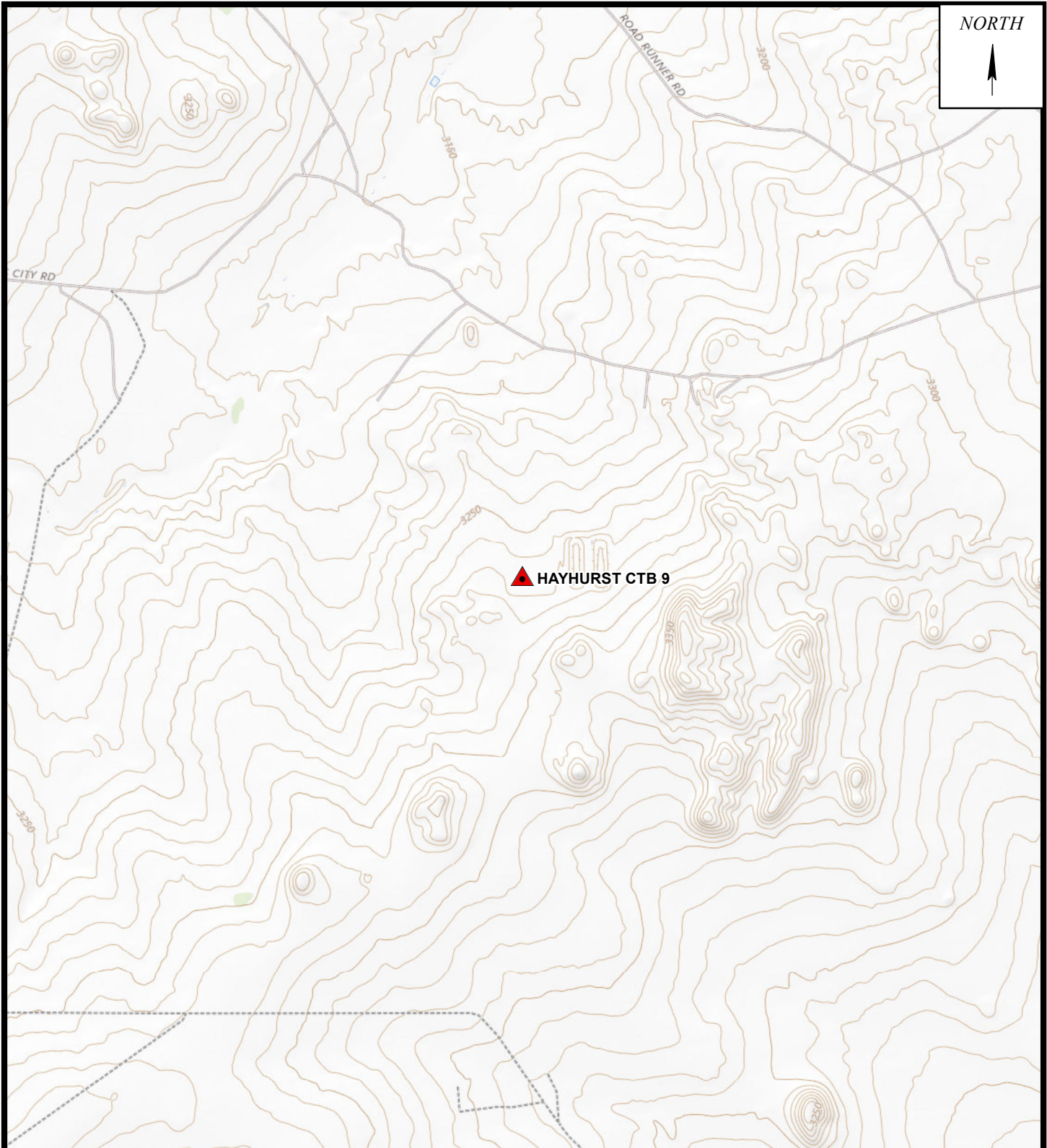


Project #:  
212C-MD-03329

FIGURE  
1

Source: ESRI Basemap - Streets, 2024.





 APPROXIMATE SITE LOCATION



0 1,000 2,000 Feet  
Approximate Scale in Feet

TOPOGRAPHIC MAP  
HAYHURST CTB 9  
32.05254458, -104.20154454  
EDDY COUNTY, NEW MEXICO



Project #:  
212C-MD-03329

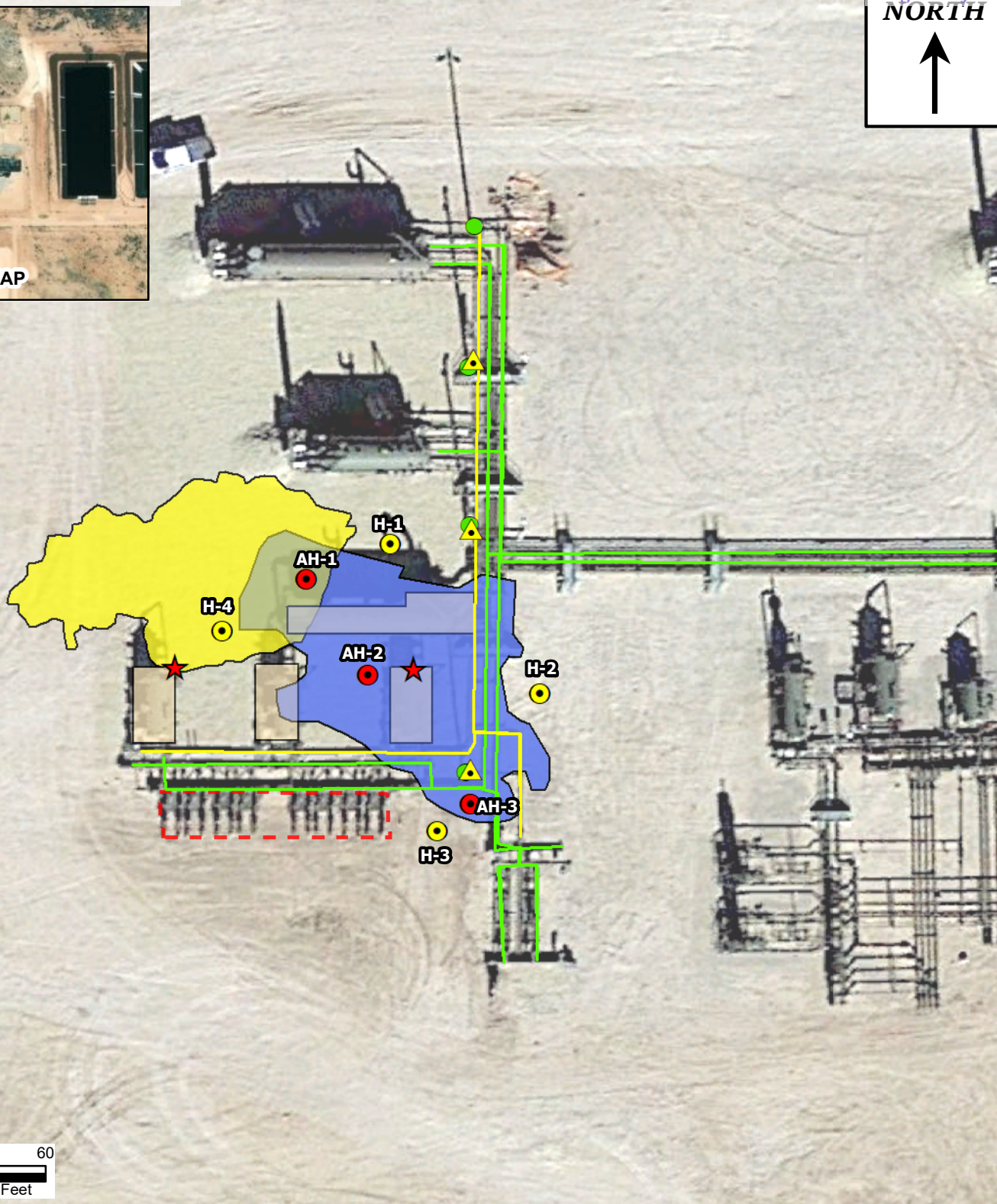
FIGURE  
2

SOURCE: USGS 7.5 MINUTE SERIES,  
COTTONWOOD HILLS QUADRANGLE, TEXAS, 2024.

C:\Users\isabel\Documents\GIS\CHEVRON\212C-MD-03329 Chevron Hayhurst CTB 9\_FIG2.mxd 10/1/2024 Isabel Marmolejo



NORTH



0 30 60  
Approximate Scale in Feet

- ★ RELEASE POINT
- U.E.S.
- ▲ LIGHT POLE
- AUGER HOLE SAMPLE LOCATION
- HORIZONTAL SAMPLE LOCATION
- FLOWLINES
- SURFACE ELECTRICAL
- - - 16-LINE MANIFOLD
- HORIZONTAL SEPARATORS
- INITIAL RELEASE FOOTPRINT
- SECONDARY RELEASE FOOTPRINT



FIGURE 3A  
INITIAL SPILL ASSESSMENT MAP  
HAYHURST NM SECTION 9 CTB  
EDDY COUNTY, NEW MEXICO  
32.0526030°, -104.2005392°

Project: 212C-MD-03329

Date: 4/9/2024

Name: 03329 - Figure 3A - Hayhurst

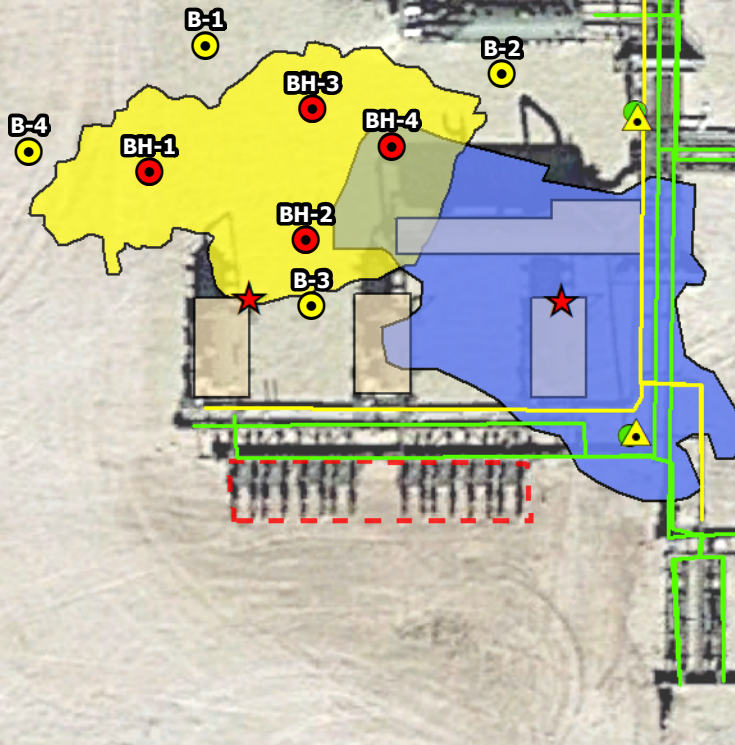




NORTH



SITE LOCATOR MAP



0 30 60  
Approximate Scale in Feet

- BOREHOLE SAMPLE LOCATION
- HORIZONTAL SAMPLE LOCATION
- ★ RELEASE POINT
- U.E.S.
- ▲ LIGHT POLE
- FLOWLINES
- SURFACE ELECTRICAL
- - - 16-LINE MANIFOLD
- HORIZONTAL SEPARATORS
- INITIAL RELEASE FOOTPRINT
- SECONDARY RELEASE FOOTPRINT



FIGURE 3B  
SECONDARY SPILL ASSESSMENT MAP  
HAYHURST NM SECTION 9 CTB  
EDDY COUNTY, NEW MEXICO  
32.0526030°, -104.2005392°

Project: 212C-MD-03329

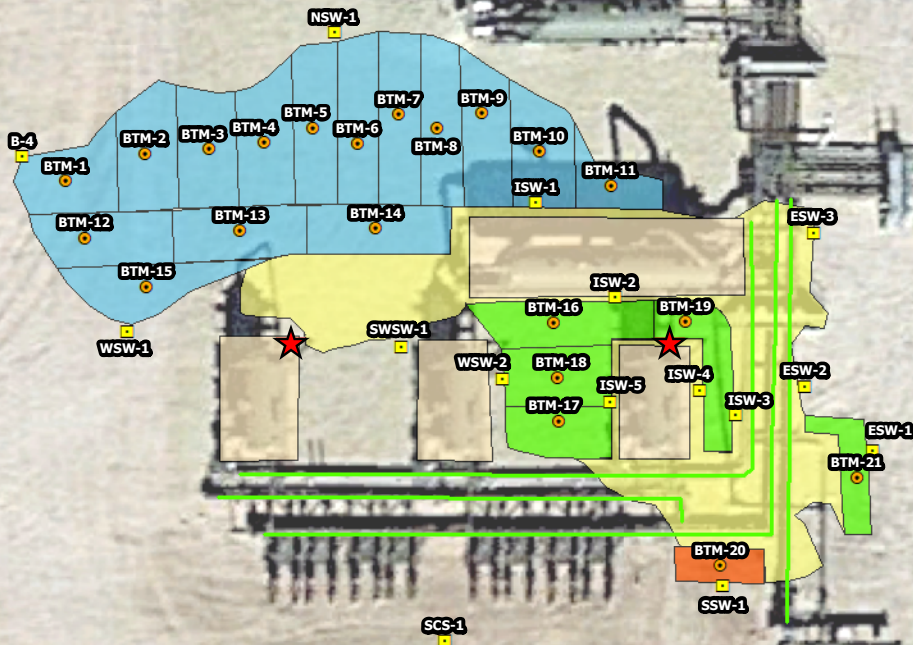
Date: 4/9/2024

Name: 03329 - Figure 3B - Hayhurst





NORTH



RELEASE POINT



BOTTOMHOLE SAMPLE LOCATION



SIDEWALL SAMPLE LOCATION

FLOWLINES

SURFACE SCRAPE

6" EXCAVATION

1.5' EXCAVATION

1-1.5' EXCAVATION

SEPARATOR



FIGURE 4  
EXCAVATION AREA AND DEPTH MAP  
HAYHURST NM SECTION 9 CTB  
EDDY COUNTY, NEW MEXICO  
32.0526030°, -104.2005392°

Project: 212C-MD-03389

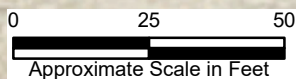
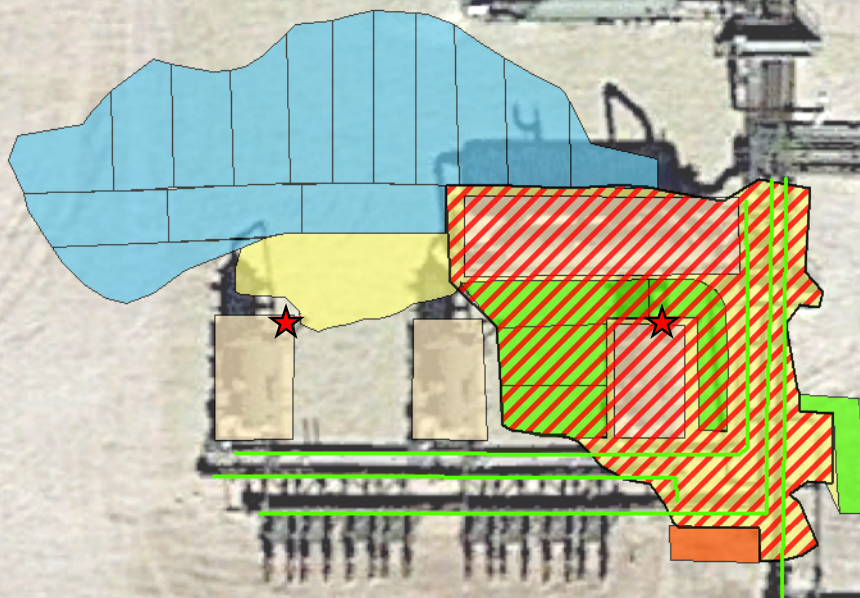
Date: 6/3/2024

Name: 03389 - Figure 4 - Hayhurst





NORTH



- ★ RELEASE POINT
- FLOWLINES
- ▨ DEFERRAL AREA
- SURFACE SCRAPE
- 6" EXCAVATION
- 1.5' EXCAVATION
- 1-1.5' EXCAVATION
- SEPARATOR



**FIGURE 5**  
**DEFERRAL AREA MAP**  
 HAYHURST NM SECTION 9 CTB  
 EDDY COUNTY, NEW MEXICO  
 32.0526030°, -104.2005392°

Project: 212C-MD-03389

Date: 6/3/2024

Name: 03389 - Figure 5 - Hayhurst





## Tables

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**Table 1**  
**Delineation Assessment Analytical Results**  
**Chevron MCBU**  
**Hayhurst NM Section 9 CTB**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Excavation Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
RRALs														
100 mg/kg10 mg/kg50 mg/kg600 mg/kg														
AH-1	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,440
	1/18/2024	1-2'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	256
	1/18/2024	2-3'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
	1/18/2024	3-4'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
AH-2	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	5,120
	1/18/2024	1-2'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	832
	1/18/2024	2-3'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,040
	1/18/2024	3-4'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	336
AH-3	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3,360
	1/18/2024	1-2'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	848
	1/18/2024	2-3'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	256
	1/18/2024	3-4'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	336
H-1	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
H-2	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
H-3	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
H-4	1/18/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0

**NOTES**RRALs (Recommended Remediation Action Levels) are based on NMOCDD (New Mexico Oil Conservation Division) *Guidelines for Remediation of Leaks, Spills, and Releases*.

All screening values and results are presented in milligrams per kilogram (mg/kg)

**Bolded cells represent a detected concentration above the respective screening value.**

&lt; = analyte was not detected above the respective sample detection limit

ft = feet below ground surface

(-) = not analyzed for respective constituent

TPH = total petroleum hydrocarbons

BTEX = benzene, toluene, ethylbenzene, xylene


 Exceedance

Table 2  
Second Release Delineation Assessment Analytical Results  
Chevron MCBU  
Hayhurst NM Section 9 CTB  
Eddy County, New Mexico

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
RRALs			100 mg/kg						10 mg/kg	50 mg/kg				600 mg/kg
BH-1	2/26/2024	0-1'	x	-	42.9	52.4	<15.0	95.3	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	4170
	2/26/2024	1-2'	x	-	47.5	32.9	<15.0	80.4	<0.000381	<0.000451	<0.000559	<0.00100	<0.00100	122
	2/26/2024	2-3'	x	-	48.3	38.4	<15.0	86.7	<0.000387	<0.000458	<0.000567	<0.00101	<0.00101	78.2
	2/26/2024	3-4'	x	-	45.8	39.2	<15.1	85.0	<0.000389	<0.000461	<0.000571	<0.00102	<0.00102	133
BH-2	2/26/2024	0-1'	x	-	45.8	40.4	<15.2	86.2	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	90.8
	2/26/2024	1-2'	x	-	42.0	37.8	<15.2	79.8	<0.000381	<0.000451	<0.000559	<0.00100	<0.00100	167
	2/26/2024	2-3'	x	-	40.6	34.4	<14.9	75.0	<0.000385	<0.000456	<0.000565	<0.00101	<0.00101	133
	2/26/2024	3-4'	x	-	39.8	40.0	<15.0	79.8	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	77.6
BH-3	2/26/2024	0-1'	x	-	43.6	38.2	<15.0	81.8	<0.000387	<0.000458	<0.000567	<0.00101	<0.00101	4340
	2/26/2024	1-2'	x	-	42.3	36.7	<14.9	79.0	<0.000388	<0.000460	<0.000570	<0.00102	<0.00102	517
	2/26/2024	2-3'	x	-	40.9	33.5	<15.0	74.4	<0.000387	<0.000459	<0.000568	<0.00102	<0.00102	95.8
	2/26/2024	3-4'	x	-	46.3	35.2	<14.9	81.5	<0.000387	<0.000458	<0.000567	<0.00101	<0.00101	129
BH-4	2/26/2024	0-1'	x	-	47.1	35.4	<15.0	82.5	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	868
	2/26/2024	1-2'	x	-	48.9	35.0	<15.1	83.9	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	106
	2/26/2024	2-3'	x	-	49.1	34.1	<15.0	83.2	<0.000381	<0.000451	<0.000559	<0.00100	<0.00100	136
	2/26/2024	3-4'	x	-	48.9	30.2	<15.1	79.1	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	115
B-1	2/26/2024	0-1'	x	-	44.5	39.2	<14.9	83.7	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	281
B-2	2/26/2024	0-1'	x	-	38.8	43.4	<15.2	82.2	<0.000387	<0.000458	<0.000567	<0.00101	<0.00101	124
B-3	2/26/2024	0-1'	x	-	47.8	47.4	<14.9	95.2	<0.000388	<0.000460	<0.000570	<0.00102	<0.00102	71.8
B-4	2/26/2024	0-1'	x	-	42.0	110	<15.0	152	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	826
	5/2/2024	1.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	192.0

**NOTES**  
RRALs (Recommended Remediation Action Levels) are based on NMOCD (New Mexico Oil Conservation Devision) *Guidelines for Remediation of Leaks, Spills, and Releases*.  
All screening values and results are presented in milligrams per kilogram (mg/kg)  
**Bolded cells represent a detected concentration above the respective screening value.**  
< = analyte was not detected above the respective sample detection limit  
ft = feet below ground surface  
(-) = not analyzed for respective constituent  
TPH = total petroleum hydrocarbons  
BTEX = benzene, toluene, ethylbenzene, xylene  
 Exceedance



Table 3  
Soil Remediation Analytical Results  
Chevron MCBU  
Hayhurst NM Section 9 CTB  
Eddy County, New Mexico

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
RRALs			100 mg/kg						10 mg/kg	50 mg/kg				600 mg/kg
BTM-1	5/2/2024	1.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
BTM-2	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
BTM-3	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
BTM-4	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
BTM-5	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
BTM-6	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
BTM-7	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
BTM-8	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	336
BTM-9	5/2/2024	1'	-	x	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	656
	5/6/2024	1.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
BTM-10	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
BTM-11	5/2/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
BTM-12	5/16/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
BTM-13	5/16/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
BTM-14	5/16/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
BTM-15	5/16/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
BTM-16	5/16/2024	0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1090
BTM-17	5/16/2024	0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	2120
BTM-18	5/16/2024	0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1740
BTM-19	5/16/2024	0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1600
BTM-20	5/16/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
BTM-21	5/16/2024	1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
NSW-1	5/2/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
ESW-1	5/16/2024	0-0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
ESW-2	5/16/2024	-	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
ESW-3	5/16/2024	-	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
SSW-1	5/16/2024	0-1.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
WSW-1	5/16/2024	0-1'	-	x	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	608
	5/20/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
WSW-2	5/19/2024	0-0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3000
SWSW-1	5/16/2024	-	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	336
ISW-1	5/2/2024	0-1'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	416



Table 3  
Soil Remediation Analytical Results  
Chevron MCBU  
Hayhurst NM Section 9 CTB  
Eddy County, New Mexico

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
RRALs							100 mg/kg				10 mg/kg	50 mg/kg		600 mg/kg
ISW-2	5/16/2024	0-0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	4080
ISW-3	5/16/2024	0-0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1880
ISW-4	5/16/2024	0-0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3960
ISW-5	5/16/2024	0-0.5'	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3920
SCS-1	5/20/2024	-	x	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128

**NOTES**  
RRALs (Recommended Remediation Action Levels) are based on NMOCD (New Mexico Oil Conservation Devision) *Guidelines for Remediation of Leaks, Spills, and Releases*.  
All screening values and results are presented in milligrams per kilogram (mg/kg)  
**Bolded cells represent a detected concentration above the respective screening value.**  
< = analyte was not detected above the respective sample detection limit  
ft = feet below ground surface  
(-) = not analyzed for respective constituent  
TPH = total petroleum hydrocarbons  
BTEX = benzene, toluene, ethylbenzene, xylene  
 Exceedance



# Appendix A

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## Site Characterization

## **Site Characterization Summary**

### **Site Information:**

Chevron MCBU  
Hayhurst NM Section 9 CTB  
Eddy County, New Mexico  
T26S, R27E, Section 9, Unit M  
(32.05254458°, -104.20154454°)

### **Site Characterization:**

- Medium Karst
- No significant water features within specified distances
- Groundwater 19' BGS 1.88 Miles North. (NMOSE, Section 33, 1998 Sample)
- Groundwater 17.75' BGS 0.64 Miles Northeast. (USGS, Section 7, 2003 Sample)
- Groundwater 8.94' BGS 1.05 Miles Northwest. (USGS, Section 8, 2013 Sample)

### **RRALs:**

- 600 mg/kg Chlorides
- 100 mg/kg Total TPH
- 10 mg/kg Benzene
- 50 mg/kg Total BTEX

### **Explanation:**

Due to inadequate groundwater information (distance further than ½ mile/data dated >25 years), Most stringent RRALs will be followed unless groundwater determination bore is drilled, and no water is found at depths of at least 55' BGS or greater. However, based on the researched data, groundwater is reported shallow (below 50') to the North, West, and East.

Medium Karst

hevron MCBU

ayhurst NM Section 9 CTB

**Legend**

- Hayhurst NM Section 9 CTB
- High
- Low
- Medium

748

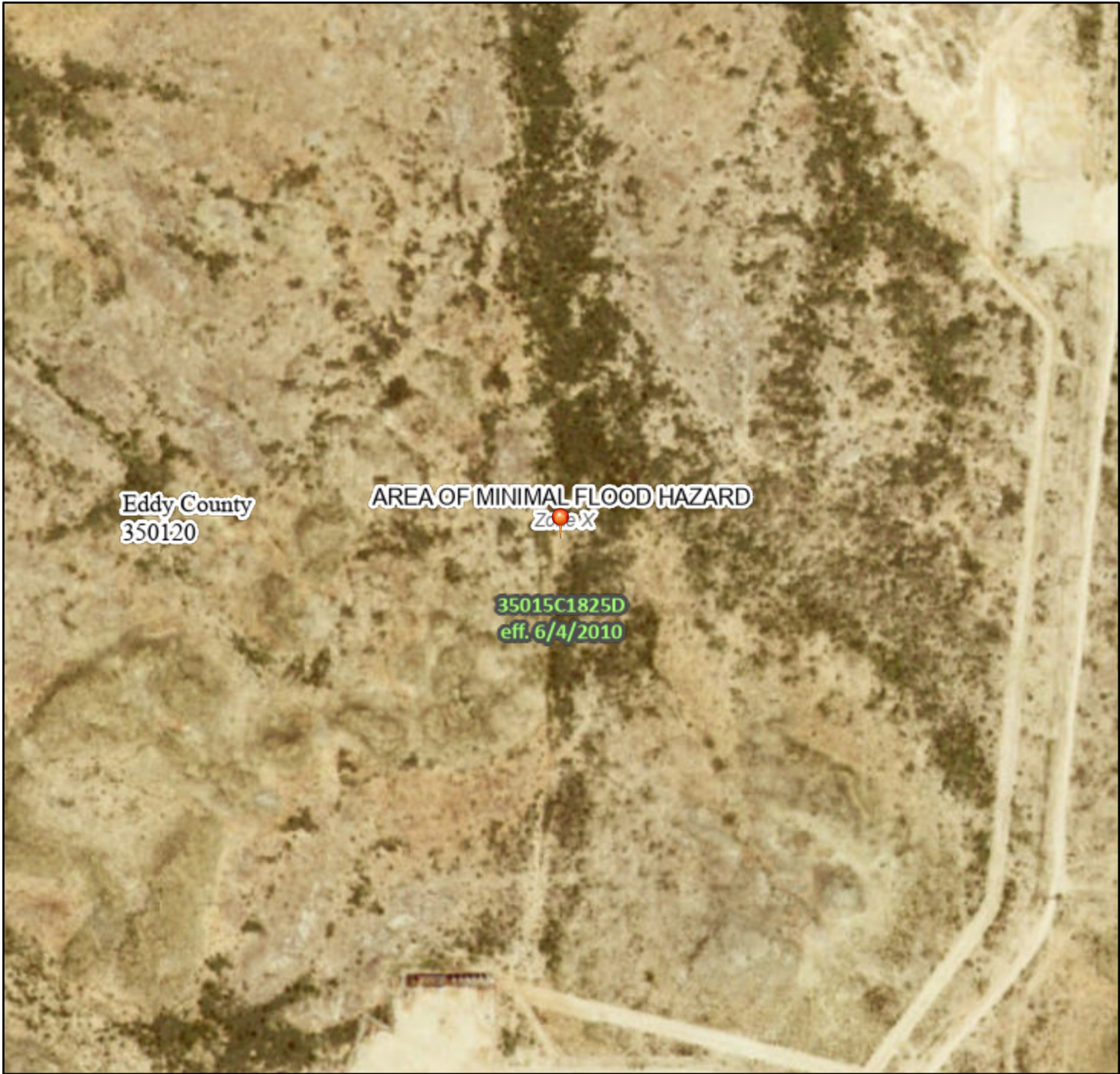
Hayhurst NM Section 9 CTB

775

# National Flood Hazard Layer FIRMette



104°12'24"W 32°3'24"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°11'47"W 32°2'54"N

Released to Imaging: 6/25/2024 3:13:08 PM

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/18/2024 at 9:32 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.


This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02588	3	4	3	33	25S	27E	575645	3549575* 
Driller License: 1348		Driller Company:				TAYLOR WATER WELL SERVICE			
Driller Name:									
Drill Start Date:	05/31/1998	Drill Finish Date:				06/03/1998		Plug Date:	
Log File Date:	08/24/1998	PCW Rcv Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	2 GPM
Casing Size:	5.00	Depth Well:				81 feet		Depth Water:	19 feet
Water Bearing Stratifications:		Top	Bottom	Description					
		21	23	Other/Unknown					
		52	81	Other/Unknown					
Casing Perforations:		Top	Bottom						
		53	81						

\*UTM location was derived from PLSS - see Help

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


3/23/23 4:14 PM

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02588	3	4	3	33	25S	27E	575645	3549575* 
<hr/>									
Driller License: 1348		Driller Company:				TAYLOR WATER WELL SERVICE			
Driller Name:									
Drill Start Date: 05/31/1998		Drill Finish Date:				06/03/1998		Plug Date:	
Log File Date: 08/24/1998		PCW Rev Date:						Source: Shallow	
Pump Type:		Pipe Discharge Size:						Estimated Yield: 2 GPM	
Casing Size: 5.00		Depth Well:				81 feet		Depth Water: 19 feet	
<hr/>									
Water Bearing Stratifications:				Top	Bottom	Description			
				21	23	Other/Unknown			
				52	81	Other/Unknown			
<hr/>									
Casing Perforations:				Top	Bottom				
				53	81				

\*UTM location was derived from PLSS - see Help

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

1/18/24 9:05 AM

POINT OF DIVERSION SUMMARY





National Water Information System: Web Interface


USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

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Groundwater levels for the Nation

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Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 320343104110201

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

USGS 320343104110201 26S.27E.08.13230

Eddy County, New Mexico  
Latitude 32°03'32.4", Longitude 104°13'03.9" NAD83  
Land-surface elevation 3,182.10 feet above NGVD29  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Castile Formation (312CSTL) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1978-01-03			D62610		3164.52	NGVD29	1	Z			A
1978-01-03			D62611		3166.18	NAVD88	1	Z			A
1978-01-03			D72019	17.58			1	Z			A
1983-01-05			D62610		3166.54	NGVD29	1	Z			A
1983-01-05			D62611		3168.20	NAVD88	1	Z			A
1983-01-05			D72019	15.56			1	Z			A
1987-10-08			D62610		3167.72	NGVD29	1	Z			A
1987-10-08			D62611		3169.38	NAVD88	1	Z			A
1987-10-08			D72019	14.38			1	Z			A
1992-11-04			D62610		3165.85	NGVD29	1	S			A
1992-11-04			D62611		3167.51	NAVD88	1	S			A
1992-11-04			D72019	16.25			1	S			A
1998-01-13			D62610		3165.45	NGVD29	1	S			A
1998-01-13			D62611		3167.11	NAVD88	1	S			A
1998-01-13			D72019	16.65			1	S			A
2003-01-28			D62610		3164.88	NGVD29	1	S	USGS	S	A
2003-01-28			D62611		3166.54	NAVD88	1	S	USGS	S	A
2003-01-28			D72019	17.22			1	S	USGS	S	A
2013-01-09	21:45 UTC	m	62610		3173.16	NGVD29	1	S	USGS	S	A
2013-01-09	21:45 UTC	m	62611		3174.82	NAVD88	1	S	USGS	S	A
2013-01-09	21:45 UTC	m	72019	8.94			1	S	USGS	S	A

Explanation		
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface

Section	Code	Description
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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**Title: Groundwater for USA: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2024-01-18 10:46:28 EST  
0.29   0.25   nadww02



National Water Information System: Web Interface


USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

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Groundwater levels for the Nation

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Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 320323104112901

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

USGS 320323104112901 26S.27E.07.414444

Eddy County, New Mexico  
Latitude 32°03'23", Longitude 104°11'29" NAD27  
Land-surface elevation 3,268 feet above NAVD88  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Castile Formation (312CSTL) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1978-01-25		D	62610		3257.04	NGVD29	1	Z			A
1978-01-25		D	62611		3258.69	NAVD88	1	Z			A
1978-01-25		D	72019	9.31			1	Z			A
1983-01-25		D	62610		3258.77	NGVD29	P	Z			A
1983-01-25		D	62611		3260.42	NAVD88	P	Z			A
1983-01-25		D	72019	7.58			P	Z			A
1987-10-08		D	62610		3258.70	NGVD29	1	Z			A
1987-10-08		D	62611		3260.35	NAVD88	1	Z			A
1987-10-08		D	72019	7.65			1	Z			A
1988-04-07		D	62610		3259.93	NGVD29	1	Z			A
1988-04-07		D	62611		3261.58	NAVD88	1	Z			A
1988-04-07		D	72019	6.42			1	Z			A
1992-11-18		D	62610		3257.57	NGVD29	1	S			A
1992-11-18		D	62611		3259.22	NAVD88	1	S			A
1992-11-18		D	72019	8.78			1	S			A
1998-01-13		D	62610		3252.60	NGVD29	1	S			A
1998-01-13		D	62611		3254.25	NAVD88	1	S			A
1998-01-13		D	72019	13.75			1	S			A
2003-01-28		D	62610		3248.60	NGVD29	1	S	USGS	S	A
2003-01-28		D	62611		3250.25	NAVD88	1	S	USGS	S	A
2003-01-28		D	72019	17.75			1	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988

Section	Code	Description
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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**Title: Groundwater for USA: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels>?**



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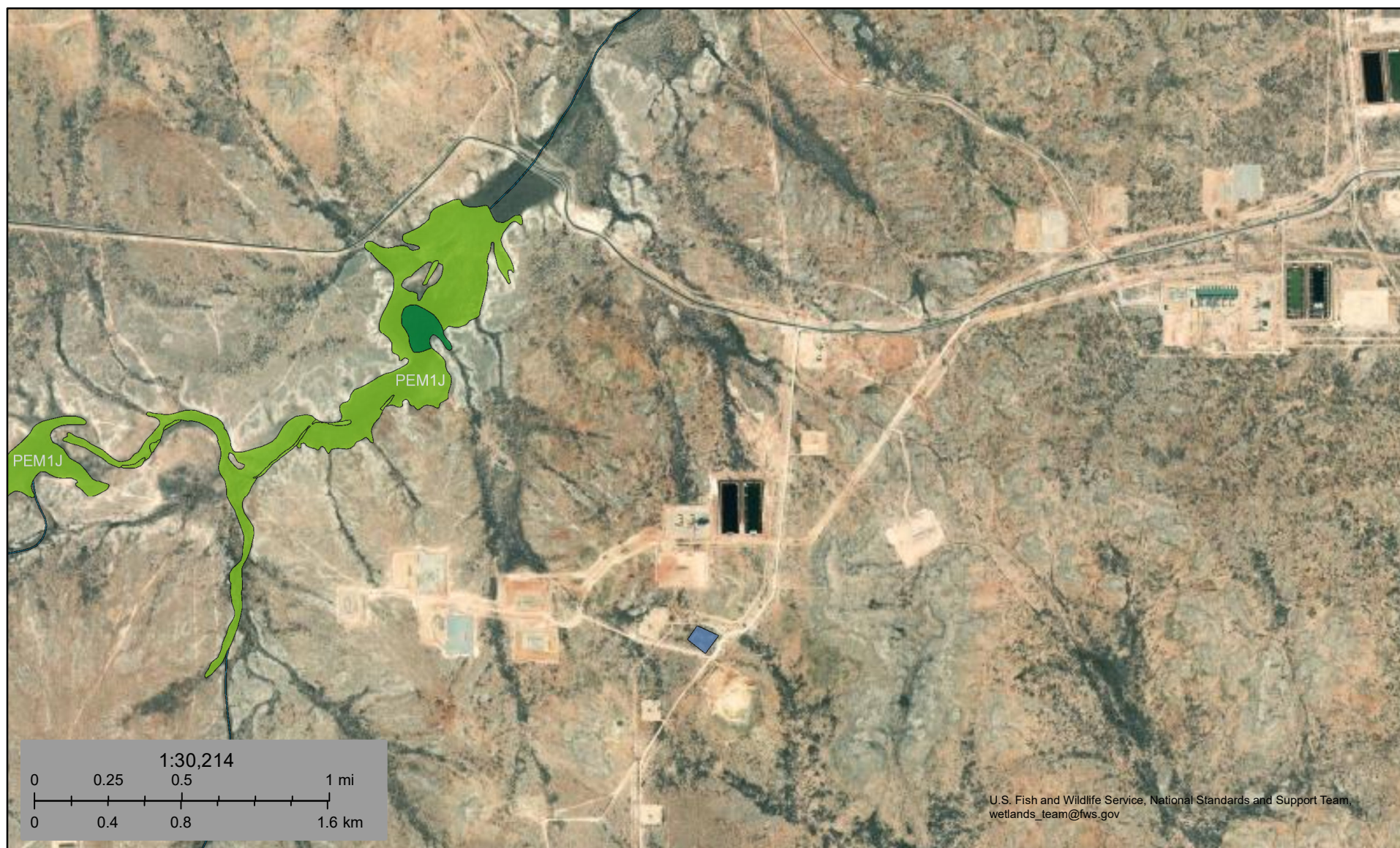


Site Information





## Hayhurst 9 CTB



January 4, 2024

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



## Appendix B

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Analytical Laboratory Reports



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

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May 03, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/02/24 16:26.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 1 (1.5') (H242383-01)**

BTM 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	05/02/2024	ND	2.03	101	2.00	1.16	
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944	
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930	
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677	
Total BTEX	<0.300	0.300	05/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	05/03/2024	ND	416	104	400	10.9	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 2 (1') (H242383-02)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	05/03/2024	ND	416	104	400	10.9		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 90.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 3 (1') (H242383-03)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	05/03/2024	ND	416	104	400	10.9		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 95.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 4 (1') (H242383-04)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/03/2024	ND	416	104	400	10.9		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 85.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 5 (1') (H242383-05)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 89.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 6 (1') (H242383-06)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/03/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 94.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 7 (1') (H242383-07)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 95.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 8 (1') (H242383-08)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 90.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 9 (1') (H242383-09)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 81.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 10 (1') (H242383-10)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 92.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 11 (1') (H242383-11)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: NSW - 1 (0-1) (H242383-12)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 71.5-134

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	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 91.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: ISW - 1 (0-1) (H242383-13)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	208	104	200	4.61	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	205	102	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 90.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/02/2024	Sampling Date:	05/02/2024
Reported:	05/03/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389 TASK 300	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: B - 4 (1.5') (H242383-14)**

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	05/02/2024	ND	2.03	101	2.00	1.16		
Toluene*	<0.050	0.050	05/02/2024	ND	2.04	102	2.00	0.944		
Ethylbenzene*	<0.050	0.050	05/02/2024	ND	2.05	103	2.00	0.930		
Total Xylenes*	<0.150	0.150	05/02/2024	ND	5.95	99.2	6.00	0.677		
Total BTEX	<0.300	0.300	05/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	05/03/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	213	106	200	8.10	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	199	99.3	200	6.45	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 87.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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### Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

Site Manager:

John Faught

Chevron

Project Name:

Hayhurst NM Section 9 CTB

Project Location:

Eddy County, TX

Project #:

212C-MD-03389 Task 300

**Invoice to:**

john.faught1@tetratech.com;  
OGA.ECS.AccountsPayable@tetratech.com

**Receiving Laboratory:**

## Cardinal Laboratories

**Sampler Signature:**

Brady Vaughan

Comments:

Email: [john.faught1@tetrattech.com](mailto:john.faught1@tetrattech.com); [clair.gonzales@tetrattech.com](mailto:clair.gonzales@tetrattech.com)

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## ANALYSIS REQUEST

(Circle or Specify Method No.)

**LAB USE ONLY**

REMARKS: 24 hour rush

☒ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

ORIGINAL COPY

## Analysis Request of Chain of Custody Record



# Tetra Tech, Inc.

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

Page 2 of 2

Page 18 of 18

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---

May 07, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/06/24 14:44.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/06/2024	Sampling Date:	05/06/2024
Reported:	05/07/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 9 1.5' (H242430-01)**

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	05/06/2024	ND	2.04	102	2.00	5.40		
Toluene*	<0.050	0.050	05/06/2024	ND	2.02	101	2.00	5.88		
Ethylbenzene*	<0.050	0.050	05/06/2024	ND	2.00	100	2.00	6.62		
Total Xylenes*	<0.150	0.150	05/06/2024	ND	5.88	98.0	6.00	6.87		
Total BTEX	<0.300	0.300	05/06/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/07/2024	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	05/06/2024	ND	203	101	200	3.52	
DRO >C10-C28*	<10.0	10.0	05/06/2024	ND	204	102	200	1.86	
EXT DRO >C28-C36	<10.0	10.0	05/06/2024	ND					

Surrogate: 1-Chlorooctane 86.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.8 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

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

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

## Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

Page of

Page 4 of 4

[illegible]

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

[illegible]

ORIGINAL COPY



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

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May 20, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/17/24 9:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 12 ( 1' ) (H242733-01)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/17/2024	ND	2.10	105	2.00	1.96	
Toluene*	<0.050	0.050	05/17/2024	ND	2.14	107	2.00	7.69	
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	2.20	110	2.00	7.98	
Total Xylenes*	<0.150	0.150	05/17/2024	ND	6.49	108	6.00	7.81	
Total BTEX	<0.300	0.300	05/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/20/2024	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	05/17/2024	ND	201	101	200	2.64	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	200	99.8	200	1.30	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 98.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 13 ( 1' ) (H242733-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	2.10	105	2.00	1.96		
Toluene*	<0.050	0.050	05/17/2024	ND	2.14	107	2.00	7.69		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	2.20	110	2.00	7.98		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	6.49	108	6.00	7.81		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	05/20/2024	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	05/17/2024	ND	201	101	200	2.64	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	200	99.8	200	1.30	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 14 ( 1' ) (H242733-03)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	2.10	105	2.00	1.96		
Toluene*	<0.050	0.050	05/17/2024	ND	2.14	107	2.00	7.69		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	2.20	110	2.00	7.98		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	6.49	108	6.00	7.81		
Total BTEx	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/20/2024	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	05/17/2024	ND	201	101	200	2.64	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	200	99.8	200	1.30	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 15 ( 1' ) (H242733-04)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	2.10	105	2.00	1.96		
Toluene*	<0.050	0.050	05/17/2024	ND	2.14	107	2.00	7.69		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	2.20	110	2.00	7.98		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	6.49	108	6.00	7.81		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	05/20/2024	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	05/17/2024	ND	201	101	200	2.64	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	200	99.8	200	1.30	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 97.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 16 ( 0.5' ) (H242733-05)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1090	16.0	05/20/2024	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	05/17/2024	ND	201	101	200	2.64	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	200	99.8	200	1.30	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 17 ( 0.5' ) (H242733-06)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2120	16.0	05/20/2024	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	05/17/2024	ND	201	101	200	2.64	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	200	99.8	200	1.30	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 18 ( 0.5' ) (H242733-07)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1740	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 19 ( 0.5' ) (H242733-08)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1600	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 94.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 20 ( 1.5' ) (H242733-09)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: BTM - 21 ( 0.5' ) (H242733-10)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 87.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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**Analytical Results For:**

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

Received: 05/17/2024  
Reported: 05/20/2024  
Project Name: HAYHURST NM SECTION 9 CTB  
Project Number: 212C-MD-03389  
Project Location: CHEVRON - EDDY CO NM

Sampling Date: 05/16/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: WSW - 1 ( 0 - 1' ) (H242733-11)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 93.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: SWSW - 1 (H242733-12)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904	
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610	
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30	
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235	
Total BTEX	<0.300	0.300	05/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 71.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.3 % 49.1-148

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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: ESW - 1 ( 0 - 6" ) (H242733-13)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 99.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: SSW - 1 ( 0 - 1.5') (H242733-14)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 92.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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### Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Client Name:

Chevron

Site Manager:

John Faught

Project Name:

Hayhurst NM Section 9 CTB

Project Location:

Eddy County, TX

Project #:

212C-MD-03389

Invoice to:

John.Faught1@tetratech.com;  
OGA.ECS.AccountsPayable@tetratech.com

PO # 1209237

Receiving Laboratory:

Cardinal Laboratories

Sampler Signature:

Matt Castrejon

Comments:

Email: John.Faught1@tetratech.com; clair.gonzales@tetratech.com

LAB #  
LAB USE ONLY

SAMPLE IDENTIFICATION

LAB USE ONLY

		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
1	BTM-12 (1')	5/16/2024		X			X	1	
2	BTM-13 (1')	5/16/2024		X			X	1	
3	BTM-14 (1')	5/16/2024		X			X	1	
4	BTM-15 (1')	5/16/2024		X			X	1	
5	BTM-16 (0.5')	5/16/2024		X			X	1	
6	BTM-17 (0.5')	5/16/2024		X			X	1	
7	BTM-18 (0.5')	5/16/2024		X			X	1	
8	BTM-19 (0.5')	5/16/2024		X			X	1	
9	BTM-20 (1.5')	5/16/2024		X			X	1	
10	BTM-21 (0.5')	5/16/2024		X			X	1	

Relinquished by:

Matt Castrejon

Date: 5/17/24 Time: 0700

Received by:

John Faught

Date: 5/17/24 Time: 0700

Relinquished by:

John Faught

Date: 5/17/24 Time: 0917

Received by:

Shadrach

Date: 5-17-24 Time: 0917

Relinquished by:

John Faught

Date: 5/17/24 Time: 0917

Received by:

Shadrach

Date: 5-17-24 Time: 0917

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M ( GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride SM4500	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	

Hold

REMARKS: 24 hour rush

LAB USE ONLY

Sample Temperature

24.4

#140

☒ Rush

Same Day 24 hr

48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY



### Analysis Request of Chain of Custody Record



# Tetra Tech, Inc.

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

Page 2 of 2

Page 18 of 18

Client Name: Chevron		Site Manager: John Faught	
Project Name: Hayhurst NM Section 9 CTB			
Project Location: Eddy County, TX		Project #: 212C-MD-03389	
Invoice to: john.faught1@tetrattech.com; OGA.ECS.AccountsPayable@tetrattech.com		PO # 1209237	
Receiving Laboratory: Cardinal Laboratories		Sampler Signature: Matt Castrejon	
Comments: Email: john.faught1@tetrattech.com; clair.gonzales@tetrattech.com			
LAB # H242733 (LAB USE ONLY)		SAMPLE IDENTIFICATION	
W/SW-1 (0-1')		DATE	
SWSW-1		TIME	
ESW-1 (0-6")		WATER	
SSW-1 (0-1.5')		SOIL	
		HCL	
		HNO3	
		ICE	
		# CONTAINERS	
		FILTERED (Y/N)	
		BTEX 8021B BTEX 8260B	
		TPH TX1005 (Ext to C35)	
		TPH 8015M ( GRO - DRO - ORO - MRO)	
		PAH 8270C	
		Total Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Volatiles	
		TCLP Semi Volatiles	
		RCI	
		GC/MS Vol. 8260B / 624	
		GC/MS Semi. Vol. 8270C/625	
		PCB's 8082 / 608	
		NORM	
		PLM (Asbestos)	
		Chloride SM4500	
		Chloride Sulfate TDS	
		General Water Chemistry (see attached list)	
		Anion/Cation Balance	
		Hold	
Relinquished by: Matt Castrejon		Received by: John Faught	
Date: 5/17/24		Date: 5/17/24	
Time: 0700		Time: 0200	
Relinquished by: John Faught		Received by: Matt Castrejon	
Date: 5/17/24		Date: 5/17/24	
Time: 0917		Time: 0917	
Relinquished by: John Faught		Received by: Matt Castrejon	
Date: 5/17/24		Date: 5/17/24	
Time: 0917		Time: 0917	
LAB USE ONLY		LAB USE ONLY	
Sample Temperature		Sample Temperature	
24 hr		24 hr	
48 hr		48 hr	
72 hr		72 hr	
REMARKS: 24 hour rush		REMARKS: 24 hour rush	
Rush: Same Day		Rush: Same Day	
Rush Charges Authorized		Rush Charges Authorized	
Special Report Limits or TRRP Report		Special Report Limits or TRRP Report	

ORIGINAL COPY





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

---

May 20, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/17/24 9:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: ISW - 2 (0-6") (H242734-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904	
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610	
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30	
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235	
Total BTEX	<0.300	0.300	05/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 89.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: ISW - 3 (0-6") (H242734-02)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1880	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 05/17/2024  
Reported: 05/20/2024  
Project Name: HAYHURST NM SECTION 9 CTB  
Project Number: 212C-MD-03389  
Project Location: CHEVRON - EDDY CO NM

Sampling Date: 05/16/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: ISW - 4 (0-6") (H242734-03)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3960	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 05/17/2024  
 Reported: 05/20/2024  
 Project Name: HAYHURST NM SECTION 9 CTB  
 Project Number: 212C-MD-03389  
 Project Location: CHEVRON - EDDY CO NM

Sampling Date: 05/16/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: ISW - 5 (0-6") (H242734-04)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3920	16.0	05/20/2024	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	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 86.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: WSW - 2 (0-6") (H242734-05)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3000	16.0	05/20/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 97.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

---

### Notes and Definitions

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

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Client Name: Chevron Site Manager: John Faught

Project Name: Hayhurst NM Section 9 CTB

Project Location: Eddy County, TX Project #: 212C-MD-03389

Invoice to: John.Faught1@tetratech.com; PO # 1209237

Receiving Laboratory: OGA.ECS.AccountsPayable@tetratech.com

Comments: Cardinal Laboratories Sampler Signature: Matt Castrejon

Email: john.faught1@tetratech.com; clair.gonzales@tetratech.com

LAB # 1202284  
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLE IDENTIFICATION	DATE		WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	# CONTAINERS	FILTERED (Y/N)
	YEAR	TIME							
ISW-2 (0-6")	5/16/2024		X			X		1	
ISW-3 (0-6")	5/16/2024		X			X		1	
ISW-4 (0-6")	5/16/2024		X			X		1	
ISW-5 (0-6")	5/16/2024		X			X		1	
WSW-2 (0-6")	5/16/2024		X			X		1	

Relinquished by: Matt Castrejon Date: 5/17/24 Time: 0700

Relinquished by: John Faught Date: 5/17/24 Time: 0700

Relinquished by: John Faught Date: 5/17/24 Time: 0700

ANALYSIS REQUEST  
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride SM4500	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
Hold	

LAB USE ONLY

Sample Temperature

20.0

#440

REMARKS: 24 hour rush  
☒ Rush: Same Day 24 hr 48 hr 72 hr  
☐ Rush Charges Authorized  
☐ Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



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

---

May 20, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/17/24 9:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: ESW - 2 (H242735-01)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/20/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 85.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.6 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	05/17/2024	Sampling Date:	05/16/2024
Reported:	05/20/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: ESW - 3 (H242735-02)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/17/2024	ND	1.89	94.5	2.00	0.904		
Toluene*	<0.050	0.050	05/17/2024	ND	1.81	90.5	2.00	0.610		
Ethylbenzene*	<0.050	0.050	05/17/2024	ND	1.80	90.0	2.00	1.30		
Total Xylenes*	<0.150	0.150	05/17/2024	ND	5.93	98.8	6.00	0.235		
Total BTEX	<0.300	0.300	05/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/20/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/17/2024	ND	179	89.6	200	0.846	
DRO >C10-C28*	<10.0	10.0	05/17/2024	ND	169	84.6	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	05/17/2024	ND					

Surrogate: 1-Chlorooctane 92.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

### Notes and Definitions

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

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\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Client Name:

Chevron

Site Manager:

John Faught

Project Name:

Hayhurst NM Section 9 CTB

Project Location:  
(county, state)

Eddy County, TX

Project #:

212C-MD-03389

Invoice to:

john.faught@tetrattech.com;  
OGA.ECS.AccountsPayable@tetrattech.com

PO # 1209237

Receiving Laboratory:

Cardinal Laboratories

Sampler Signature:

Matt Castrejon

Comments:

Email: john.faught@tetrattech.com; clair.gonzales@tetrattech.com

SAMPLE IDENTIFICATION

LAB #  
1742785  
(LAB USE ONLY)

SAMPLING

YEAR:

DATE  
TIME

MATRIX

PRESERVATIVE METHOD

WATER  
SOIL  
HCL  
HNO<sub>3</sub>  
ICE

# CONTAINERS  
FILTERED (Y/N)

BTEX 8021B BTEX 8260B  
TPH TX1005 (Ext to C35)  
TPH 8015M ( GRO - DRO - ORO - MRO)  
PAH 8270C  
Total Metals Ag As Ba Cd Cr Pb Se Hg  
TCLP Metals Ag As Ba Cd Cr Pb Se Hg  
TCLP Volatiles  
TCLP Semi Volatiles  
RCI  
GC/MS Vol. 8260B / 624  
GC/MS Semi. Vol. 8270C/625  
PCB's 8082 / 608  
NORM  
PLM (Asbestos)  
Chloride SM4500  
Chloride Sulfate TDS  
General Water Chemistry (see attached list)  
Anion/Cation Balance

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:

Matt Castrejon

Date: 5/17/24  
Time: 0700

Received by:

Date: 5/17/24  
Time: 0706

Relinquished by:

John Faught

Date: 5/17/24  
Time: 0917

Received by:

Date: 5/17/24  
Time: 5:17-24

Relinquished by:

John Faught

Date: 5/17/24  
Time: 0917

Received by:

Date: 5/17/24  
Time: 5:17-24

LAB USE ONLY

REMARKS:

24 hour rush

☒ RUSH

Same Day 24 hr

48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

#140

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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---

May 22, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/21/24 11:32.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/21/2024	Sampling Date:	05/20/2024
Reported:	05/22/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: WSW - 1 ( 0-1' ) (H242794-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/21/2024	ND	1.94	97.2	2.00	4.08	
Toluene*	<0.050	0.050	05/21/2024	ND	1.97	98.7	2.00	3.62	
Ethylbenzene*	<0.050	0.050	05/21/2024	ND	1.99	99.6	2.00	3.99	
Total Xylenes*	<0.150	0.150	05/21/2024	ND	5.89	98.2	6.00	3.14	
Total BTEX	<0.300	0.300	05/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/22/2024	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	05/21/2024	ND	196	97.9	200	2.32	
DRO >C10-C28*	<10.0	10.0	05/21/2024	ND	214	107	200	1.42	
EXT DRO >C28-C36	<10.0	10.0	05/21/2024	ND					

Surrogate: 1-Chlorooctane 76.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.6 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

Page 1 of 1

Page 4 of 4

[illegible]ANALYSIS REQUEST  
(Circle or Specify Method No.)[illegible]

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---

May 22, 2024

JOHN FAUGHT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: HAYHURST NM SECTION 9 CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/21/24 11:32.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	05/21/2024	Sampling Date:	05/20/2024
Reported:	05/22/2024	Sampling Type:	Soil
Project Name:	HAYHURST NM SECTION 9 CTB	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03389	Sample Received By:	Tamara Oldaker
Project Location:	CHEVRON - EDDY CO NM		

**Sample ID: SCS - 1 (H242795-01)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/21/2024	ND	1.94	97.2	2.00	4.08	
Toluene*	<0.050	0.050	05/21/2024	ND	1.97	98.7	2.00	3.62	
Ethylbenzene*	<0.050	0.050	05/21/2024	ND	1.99	99.6	2.00	3.99	
Total Xylenes*	<0.150	0.150	05/21/2024	ND	5.89	98.2	6.00	3.14	
Total BTX	<0.300	0.300	05/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: CT				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/22/2024	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	05/21/2024	ND	196	97.9	200	2.32	
DRO >C10-C28*	<10.0	10.0	05/21/2024	ND	214	107	200	1.42	
EXT DRO >C28-C36	<10.0	10.0	05/21/2024	ND					

Surrogate: 1-Chlorooctane 84.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.5 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

Page 1 of 1

[illegible]

## ANALYSIS REQUEST

(Circle or Specify Method No.)

X	BTEX 8021B	BTEX 8260B
	TPH TX1005 (Ext to C35)	
X	TPH 8015M ( GRO - DRO - ORO - MRO)	
	PAH 8270C	
	Total Metals Ag As Ba Cd Cr Pb Se Hg	
	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
	TCLP Volatiles	
	TCLP Semi Volatiles	
	RCI	
	GC/MS Vol. 8260B / 624	
	GC/MS Semi. Vol. 8270C/625	
	PCB's 8082 / 608	
	NORM	
	PLM (Asbestos)	
X	Chloride SM4500	
	Chloride Sulfate TDS	
	General Water Chemistry (see attached list)	
	Anion/Cation Balance	
	Hold	

Hold

Page 4 of 4

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #



## Appendix C

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NMOCD Correspondence

**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**

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**District IV**

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

QUESTIONS

Action 338601

**QUESTIONS**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 338601
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2336158873
Incident Name	NAPP2336158873 HAYHURST NM SECTION 9 CTB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2131341164] Hayhurst NM Section 9 CTB

**Location of Release Source**

Site Name	Hayhurst NM Section 9 CTB
Date Release Discovered	12/26/2023
Surface Owner	Federal

**Sampling Event General Information***Please answer all the questions in this group.*

What is the sampling surface area in square feet	800
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/02/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Brady Vaughan / 4322502544
Please provide any information necessary for navigation to sampling site	Please follow the directions to these coordinates. (32.05254458, -104.2015445)

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CONDITIONS

Action 338601

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 338601
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
klincoln	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	4/29/2024

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**Santa Fe, NM 87505**

QUESTIONS

Action 344113

**QUESTIONS**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 344113
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2336158873
Incident Name	NAPP2336158873 HAYHURST NM SECTION 9 CTB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2131341164] Hayhurst NM Section 9 CTB

Location of Release Source	
Site Name	Hayhurst NM Section 9 CTB
Date Release Discovered	12/26/2023
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	4,600
What is the estimated number of samples that will be gathered	23
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/17/2024
Time sampling will commence	11:00 AM
Please provide any information necessary for observers to contact samplers	Brady Vaughan / 4322502544
Please provide any information necessary for navigation to sampling site	Please follow the directions to these coordinates. (32.05254458, -104.2015445)



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CONDITIONS  
  
Action 344113

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 344113
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
klincoln	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/14/2024

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**Oil Conservation Division**  
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**Santa Fe, NM 87505**

QUESTIONS

Action 338412

**QUESTIONS**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 338412
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2404354589
Incident Name	NAPP2404354589 HAYHURST NM SECTION 9 CTB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2131341164] Hayhurst NM Section 9 CTB

**Location of Release Source**

Site Name	Hayhurst NM Section 9 CTB
Date Release Discovered	02/12/2024
Surface Owner	Federal

**Sampling Event General Information***Please answer all the questions in this group.*

What is the sampling surface area in square feet	2,800
What is the estimated number of samples that will be gathered	14
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/02/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Brady Vaughan / 4322502544
Please provide any information necessary for navigation to sampling site	Use these coordinates to get to the location. (32.05254458, -104.2015445)

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CONDITIONS  
  
Action 338412

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 338412
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
klincoln	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	4/29/2024

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**Santa Fe, NM 87505**

QUESTIONS

Action 344101

**QUESTIONS**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 344101
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2404354589
Incident Name	NAPP2404354589 HAYHURST NM SECTION 9 CTB @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2131341164] Hayhurst NM Section 9 CTB

**Location of Release Source**

Site Name	Hayhurst NM Section 9 CTB
Date Release Discovered	02/12/2024
Surface Owner	Federal

**Sampling Event General Information***Please answer all the questions in this group.*

What is the sampling surface area in square feet	4,600
What is the estimated number of samples that will be gathered	23
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/17/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Brady Vaughan / 4322502544
Please provide any information necessary for navigation to sampling site	Use these coordinates to get to the location. (32.05254458, -104.2015445)

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CONDITIONS  
  
Action 344101

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 344101
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
klincoln	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/14/2024





## Appendix D

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### Photographic Documentation

**Photographic Log**  
**Chevron U.S.A., Inc.**  
**Hayhurst CTB 9**  
**Produced Water Release Remediation**



Photo 1: View of remediation activities.



Photo 2: View of remediation activities.



Photo 3: View of remediation activities.

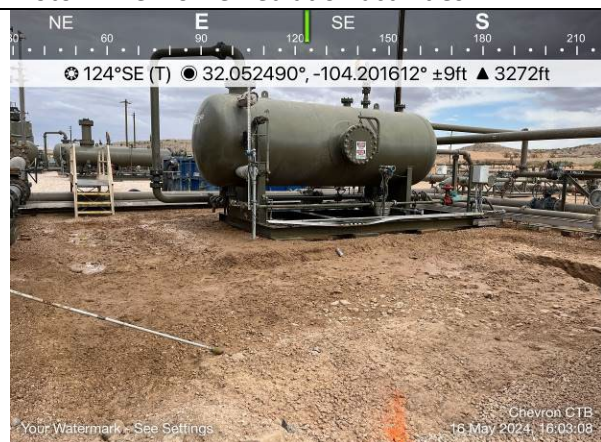



Photo 4: View of remediation activities.



Photo 5: View of remediation activities.



Photo 6: View of remediation activities.

Job No.	Page No.	Client:	Site Name:	
212C-MD-03389	1 of 2	Chevron U.S.A., Inc	Hayhurst CTB 9	



**Photographic Log**  
**Chevron U.S.A., Inc.**  
**Hayhurst CTB 9**  
**Produced Water Release Remediation**



Photo 7: View of remediation activities.




Photo 8: View of backfilled Site post-remediation.



Photo 9: View of backfilled Site post-remediation.



Photo 10: View of backfilled Site post-remediation.

Job No.	Page No.	Client:	Site Name:	
212C-MD-03389	2 of 2	Chevron U.S.A., Inc	Hayhurst CTB 9	

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QUESTIONS  
  
Action 357018

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 357018
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2404354589
Incident Name	NAPP2404354589 HAYHURST NM SECTION 9 CTB @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Facility	[fAPP2131341164] Hayhurst NM Section 9 CTB

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	HAYHURST NM SECTION 9 CTB
Date Release Discovered	02/12/2024
Surface Owner	Federal

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

<b>Nature and Volume of Release</b>	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Dump Valve   Produced Water   Released: 52 BBL   Recovered: 35 BBL   Lost: 17 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 357018

**QUESTIONS (continued)**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	357018
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Kennedy Lincoln Title: Environmental Specialist Email: kennedy.lincoln@chevron.com Date: 02/14/2024
--	--



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QUESTIONS, Page 3

Action 357018

**QUESTIONS (continued)**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	357018
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	4340
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	152
GRO+DRO (EPA SW-846 Method 8015M)	152
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	05/10/2024
On what date will (or did) the final sampling or liner inspection occur	05/20/2024
On what date will (or was) the remediation complete(d)	06/10/2024
What is the estimated surface area (in square feet) that will be reclaimed	2971
What is the estimated volume (in cubic yards) that will be reclaimed	150
What is the estimated surface area (in square feet) that will be remediated	2971
What is the estimated volume (in cubic yards) that will be remediated	150

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 357018

**QUESTIONS (continued)**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	357018
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS****Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	Sundance Services, Inc [fKJ1600527371]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	No
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement	Name: Kennedy Lincoln Title: Environmental Specialist Email: kennedy.lincoln@chevron.com Date: 04/11/2024
--	--

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

**District I**

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**District II**

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**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**

QUESTIONS, Page 5

Action 357018

**QUESTIONS (continued)**

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	357018
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS****Deferral Requests Only**

*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*

Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	To get to the requested deferral area, three of the main oil/water separators for the associated central tank battery would have to be removed along with the piping running from the separators to the tank battery. Once remediation was completed, the site would have to be re-compacted to support the weight of the equipment in that area.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	2895
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	260
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	Hayhurst NM Section 9 CTB [fAPP2131341164]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Kennedy Lincoln Title: Environmental Specialist Email: kennedy.lincoln@chevron.com Date: 06/24/2024

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QUESTIONS, Page 6  
  
Action 357018

**QUESTIONS (continued)**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	357018
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	344101
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/17/2024
What was the (estimated) number of samples that were to be gathered	23
What was the sampling surface area in square feet	4600

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 357018

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:
	4323
	Action Number:
	357018
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

CONDITIONS

Created By	Condition	Condition Date
scwells	Deferral approved. Deferral of BTM-16 through BTM-19, WSW-2 and ISW-2 through ISW-5 is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time. Sampling notices were submitted for 5/2 and 5/17/24 however confirmation samples were collected on 5/2, 5/6, 5/16, 5/19, and 5/20/24. A C-141N should be submitted for each day confirmation samples will be collected.	6/25/2024
scwells	Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC	6/25/2024