



September 21, 2022

District Supervisor  
Oil Conservation Division, District 2  
811 S. First St.  
Artesia, New Mexico 88210

**Re: Closure Report  
ConocoPhillips  
Heritage Concho  
Diamondback #22 State 2H Flowline Release  
Unit Letter D, Section 22, Township 26 South, Range 28 East  
Eddy County, New Mexico  
Incident ID# NAPP2129931373**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to evaluate a Heritage Concho release and subsequent assessment and remedial activities performed at the Diamondback #22 State 2H Flowline Release site. The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 22, Township 26 South, Range 28 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.033079°, -104.080863°, as shown on Figures 1 and 2.

## BACKGROUND

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the leak was discovered on August 30, 2021, and was a result of internal corrosion on a flowline. The corrosion resulted in the release of approximately six (6) barrels of produced water, of which zero (0) barrels were recovered. The release area is shown on Figure 3. The NMOCD approved the initial C-141 on November 1, 2021, and subsequently assigned the release the Incident ID NAPP2129931373. The initial C-141 form is included in Appendix A.

## SITE CHARACTERIZATION

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

There is one (1) water well listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately ½ mile (800 meters) of the site. According to data from this well, which was drilled in 1961, the average depth to groundwater is 120 feet below ground surface (bgs).

The remediation action levels proposed for the site are largely dependent upon depth to groundwater. As such, the OCD focuses upon depth to water estimation. Thus, 19.15.11(A)(2) NMAC allows for various means of determining depth to groundwater.

For this release, due to the age of the water level information available in the NMOSE database, ConocoPhillips elected to drill a groundwater determination boring to supplement the depth to groundwater

Tetra Tech

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

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

determination. A licensed well drilling subcontractor was contracted to install a soil boring to assess the presence and depth of groundwater at the Site. A single boring (GWDB) was installed to a depth of 59 ft bgs. The soil boring was left open for 72 hours and a water level meter was placed into the soil boring to assess the presence of water. No water was detected at 59 ft bgs. The soil boring location is shown on Figure 3. A boring log depicting the encountered lithology is included in Appendix B.

## REGULATORY FRAMEWORK

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

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

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

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

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

## SITE ASSESSMENT

Site assessment activities were conducted by New Tech Global Environmental, LLC (NTGE) on behalf of Concho Resources (COG) over three events to fully characterize and delineate the extent of impacts resulting from the release. Soil samples were collected from the Site using various sample collection methodologies and submitted to an accredited laboratory for chemical analysis. Soil samples were field screened for volatile organic compounds (VOCs) and chloride.

All soil samples were analyzed for TPH (EPA method 8015 modified), BTEX (EPA Method 8021B), and chloride (EPA method 300.0). The combined analytical results from each sampling event are provided in Table 1, attached. Soil sample locations are shown on Figure 3. Complete details of each sampling event are further described below.

### Initial Assessment

On September 9, 2021, NTGE conducted site assessment activities to horizontally and vertically delineate the extent of impacts from the release. A total of thirteen (13) vertical (S-1 through S-12) and fourteen (14) horizontal sample points (H-1 through H-14) were installed to total depths ranging from 0 - 4.5 ft bgs with a geotechnical hand auger. The hand auger was decontaminated with Alconox and deionized water between soil borings to prevent cross-contamination. Soil samples selected for chemical analysis were collected from various depth intervals based on field screening results.

Analytical results from the initial assessment activities identified elevated TPH and chloride concentrations across the release area. Soil samples collected immediately west and northwest of the point of release were below the regulatory limits for all COC at the Site; however, soil impacts across the remainder of the

Closure Report  
September 21, 2022

ConocoPhillips

release area extend to depths ranging from 1 – 4.5 feet bgs. The vertical delineation of soil impacts was not achieved, and further assessment was required. Analytical results of all horizontal delineation samples were below the regulatory limits.

#### Additional Assessment – Trenches

On September 22, 2021, NTGE conducted additional sampling activities to vertically delineate soil impacts in the areas of sample points S-4, S-5, S-9, S-10, S-11, and S-12. A total of six (6) trenches (T1 – T6) were installed with a backhoe and advanced to depths ranging from 3 to 11 feet bgs. Samples were collected directly from the center of the backhoe bucket to prevent cross-contamination.

Analytical results from the trench sampling activities indicated that vertical delineation was achieved in all trenches except for T4 and T5. Impacts identified in T4 and T5 extended to the total depths of each trench at depths of 11 feet bgs and 5 feet bgs, respectively. Further assessment was required to assess the vertical extent of impacts in the areas of S-10/T4 and S-11/T5.

#### Additional Assessment – Soil Boring Installations

On November 16, 2021, NTGE conducted additional follow up sampling activities to vertically delineate soil impacts in the areas of sample points S-10/T4 and S-11/T5. A total of two (2) soil boring BH-1 and BH-2 were installed using an air rotary drilling rig and advanced to depths ranging from 15 to 25 feet bgs. Soil samples selected for chemical analysis were collected from various depth intervals based on field screening results.

Analytical results from the soil boring installations indicated that vertical delineation was achieved in BH-1 and BH-2. The samples collected from BH-1 did not confirm the presence of previously identified impacts in S-10 and T-4; however, the area will be addressed in the proposed work plan below. The sample collected from the boring terminus in BH-2 is elevated for total TPH; however, based on field observations and the analytical results of multiple samples collected and analyzed from 11 to 20 feet bgs in BH-2 indicate the results are likely a result of cross-contamination.

### **REMEDIATION WORK PLAN AND ALTERNATIVE CONFIRMATION SAMPLING PLAN**

A Work Plan was prepared by NTGE on behalf of COG and submitted to NMOCD on April 4, 2022. The Work Plan described the results of the release assessment activities performed at the site. The Work Plan was approved via email by Ms. Jennifer Nobui on April 20, 2022, with the following comments:

- *Remediation Plan Approved. The variance for a liner is approved. Composite confirmation samples need to be collected from the bottom and sidewalls of the excavation from areas representing no more than four hundred (400) square feet.*

Ms. Nobui also executed page 5 of the C-141 form included with the Work Plan. A 90-day extension request was submitted by Tetra Tech on behalf of ConocoPhillips on July 20, 2022 was approved by Ms. Nobui via email on the same day, with a closure due date of October 17, 2022. A copy of the NMOCD correspondence is included in Appendix C.

### **REMEDIATION ACTIVITIES AND CONFIRMATION SAMPLING**

From August 2-15, 2022, Tetra Tech personnel were onsite to supervise the remediation activities proposed in the approved Work Plan, including excavation, disposal, and confirmation sampling. Prior to confirmation sampling, on August 1, 2022, the NMOCD division district office was notified via email in accordance with Subsection D of 19.15.29.12 NMAC. Documentation of associated regulatory correspondence is included in Appendix C.

Impacted soils were excavated until a representative sample from the walls and bottom of the excavation had a field screening value inferred as lower than the RRALs for the Site. Once field screening was

Closure Report  
September 21, 2022

ConocoPhillips

completed, confirmation floor and sidewall samples were collected for laboratory analysis to verify that the impacted materials were properly removed. Each confirmation sample laboratory analytical result was directly compared to the proposed reclamation requirements/RRALs to demonstrate compliance. Per the approved Work Plan, confirmation samples were collected such that each discrete sample (sidewall and floor) were representative of no more than 400 square feet of excavated area. A total of twenty (20) floor sample locations and twenty-one (21) sidewall sample locations were used during the remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with "FS"-#. Excavated areas, depths and confirmation sample locations are indicated in Figure 4.

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

Per the approved Work Plan and laboratory analytical results, the impacted areas were excavated to between 1.5 and 4 feet below pre-release grade. The portion of the release area in the vicinity of floor samples FS-1 through FS-6 was excavated to 4 feet bgs and capped with a 20-mil polyethylene liner before backfilling, per the approved Work Plan. The flowlines in the release footprint were consolidated to one hand dig area in the vicinity of a north-south surface line during remediation. All final confirmation soil samples (floor and sidewall) were below the respective RRALs and reclamation requirements for chloride, BTEX, and TPH. The results of the August 2022 confirmation sampling event are summarized in Table 2.

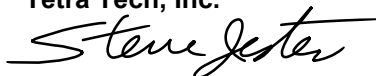
All the excavated material was transported offsite for proper disposal. Approximately 1,242 cubic yards of material were transported to the R360 Red Bluff facility in Orla, Texas for disposal. Due to the number and large file size associated with the waste manifests, they are not included in this report; however, waste manifests can be uploaded to the portal separately upon NMOCD request. Once confirmation sampling activities were completed and associated analytical results were below the RRALs, the excavated areas were backfilled with clean material to surface grade. Photographs from the excavated areas prior to and immediately following placement of backfill are provided in Appendix E.

The backfilled pasture areas were seeded on August 24, 2022 to aid in revegetation. A New Mexico State Land Office (NMSLO) approved seed mixture (Loamy Sites) was used for seeding and planted in the amount specified in the pounds pure live seed (PLS) per acre. Site inspections will be performed to assess the revegetation progress and evaluate the Site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the SLO will be contacted to determine an effective method for eradication. If the Site does not show revegetation after one growing season the area will be reseeded as appropriate.

## CONCLUSION

ConocoPhillips respectfully requests closure of the incident based on the confirmation sampling results and remediation activities performed. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the remediation activities for the Site, please call me at (713) 806-8871.

Sincerely,  
**Tetra Tech, Inc.**



Steve Jester  
Project Manager

cc:  
Mr. Ike Tavarez, RMR – ConocoPhillips

Closure Report  
September 21, 2022

ConocoPhillips

## LIST OF ATTACHMENTS

### Figures:

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

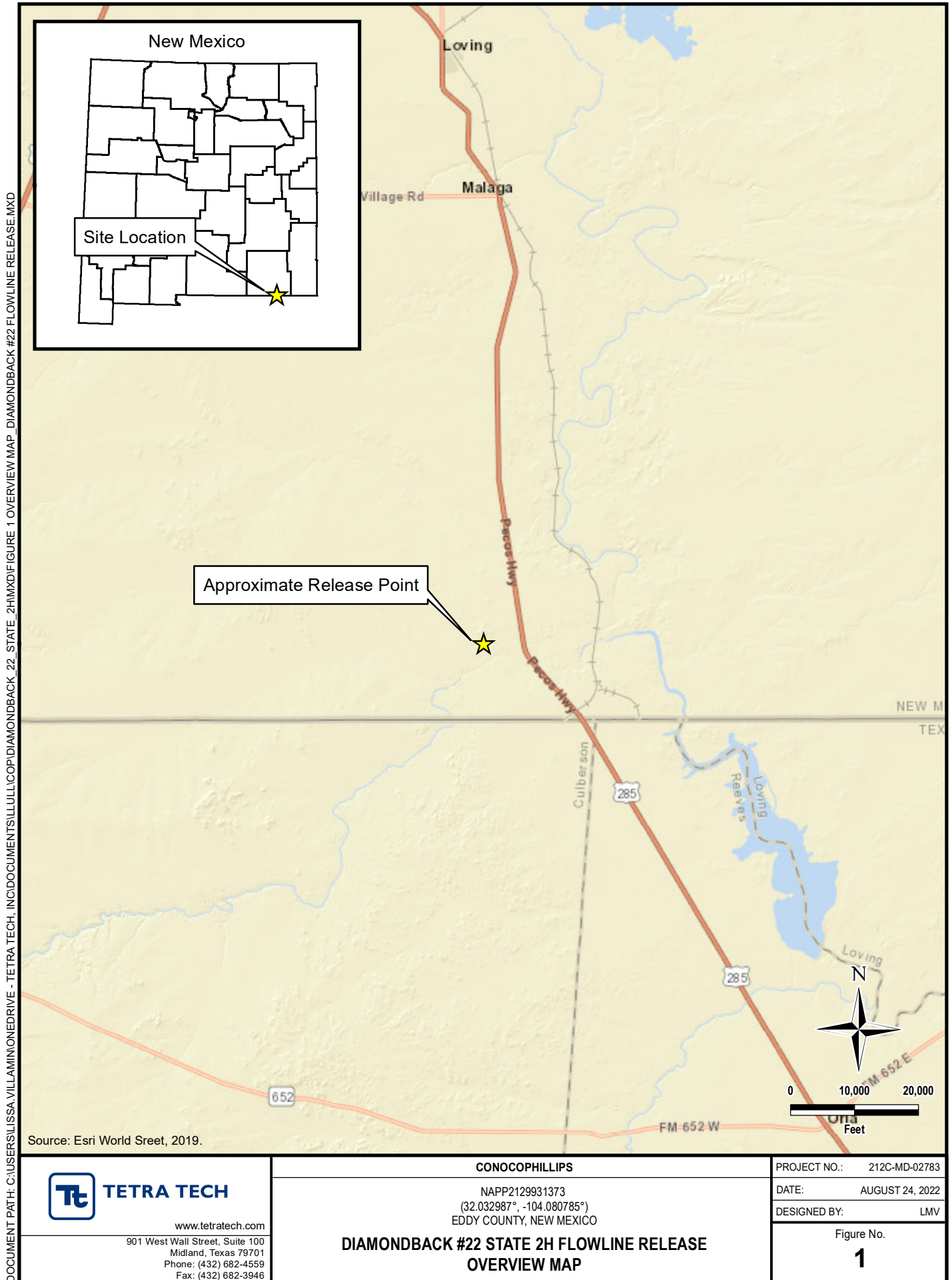
### Tables:

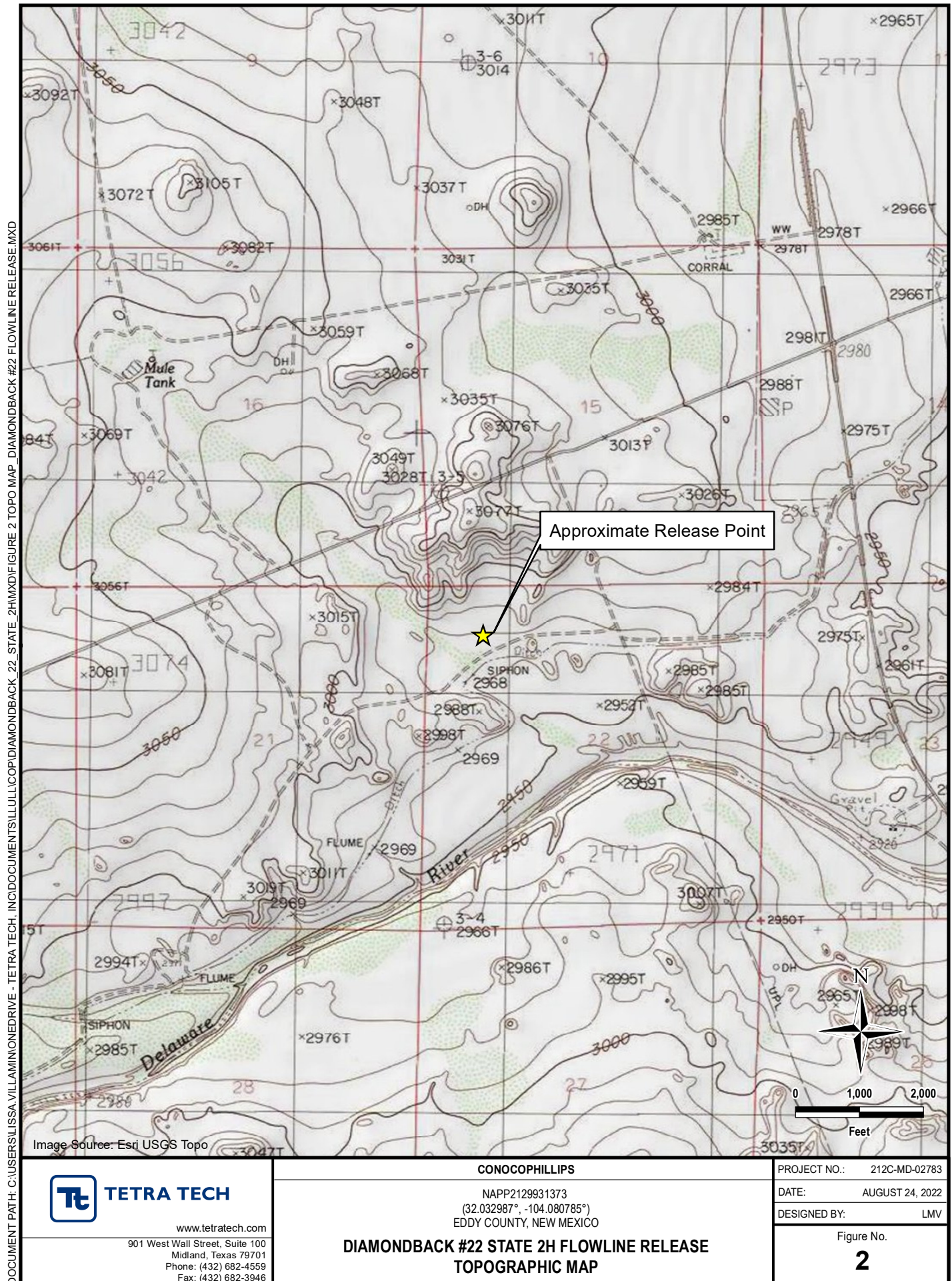
- Table 1 – Summary of Analytical Results – Soil Assessment
- Table 2 – Summary of Analytical Results – Soil Remediation

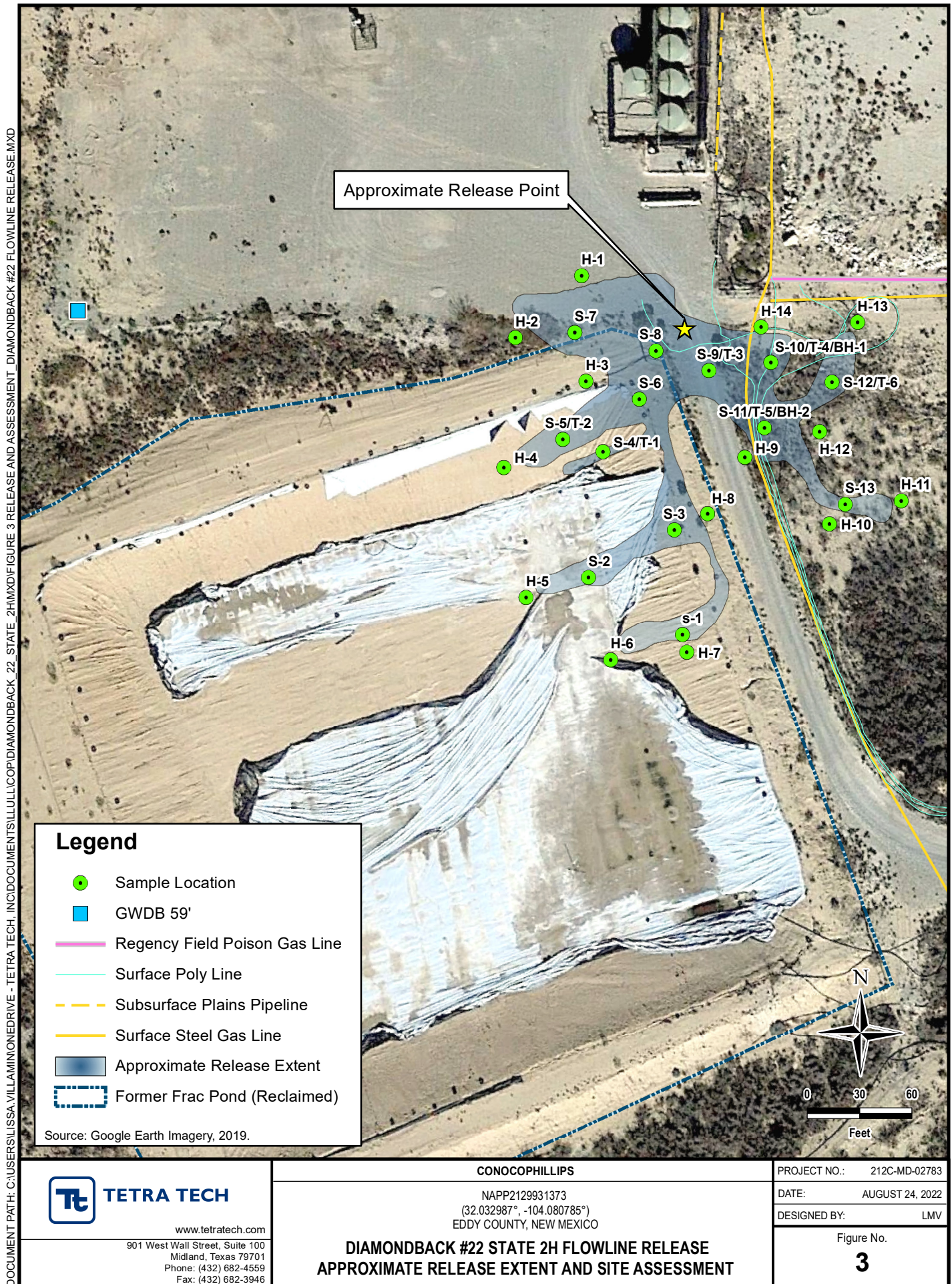
### Appendices:

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

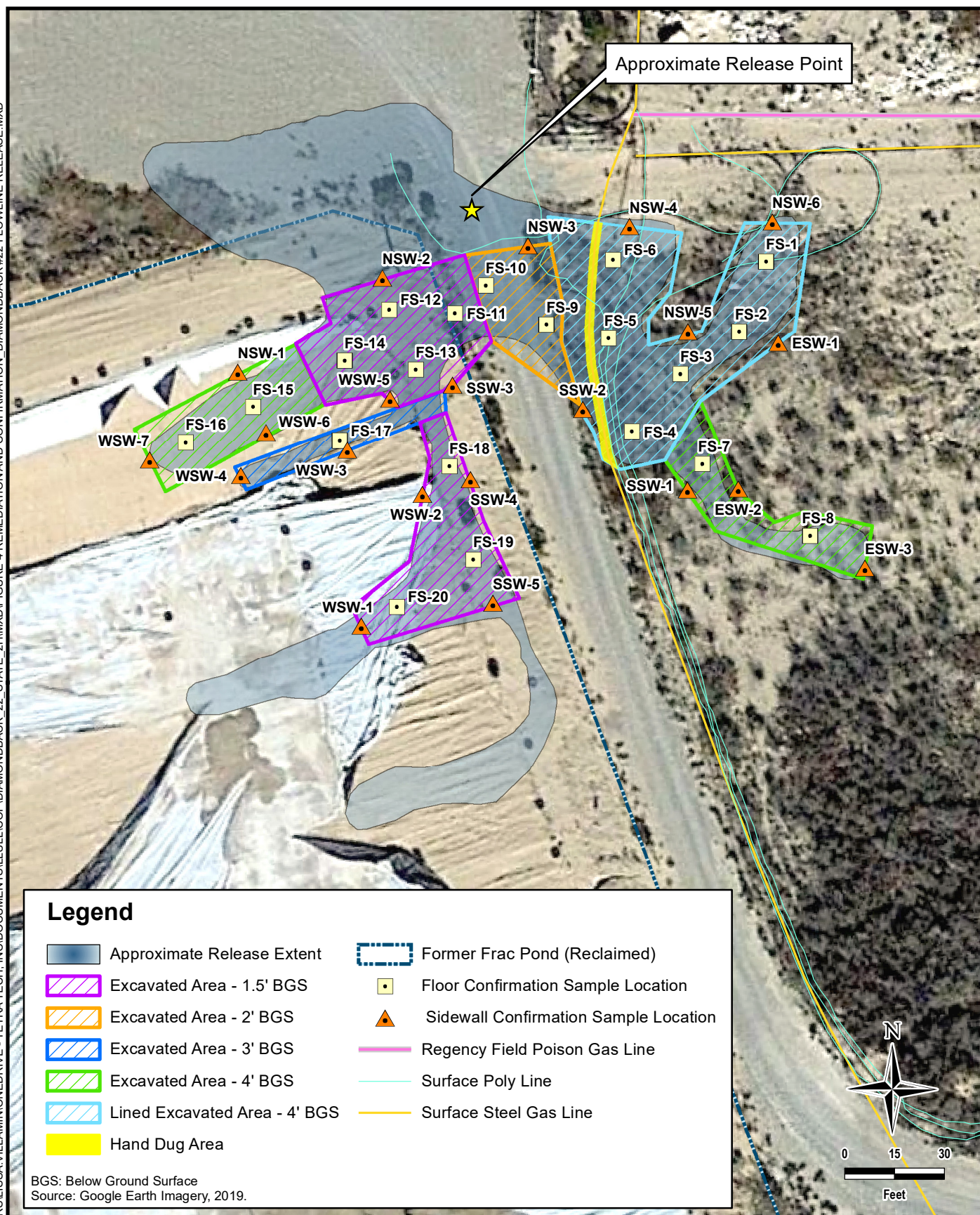
## **FIGURES**







DOCUMENT PATH: C:\USERS\ISSA.VILLAMONEDRIVE - TETRA TECH\INC\DOCUMENTS\ILLULLCOP\DIAMONDBACK #22 STATE 2H\FIGURE 4 REMEDIATION AND CONFIRMATION DIAMONDBACK #22 FLOWLINE RELEASE.MXD

**TETRA TECH**

www.tetrattech.com

901 West Wall Street, Suite 100  
Midland, Texas 79701  
Phone: (432) 682-4559  
Fax: (432) 682-3946

**CONOCOPHILLIPS**

NAPP2129931373  
(32.032987°, -104.080785°)  
EDDY COUNTY, NEW MEXICO

**DIAMONDBACK #22 STATE 2H FLOWLINE RELEASE  
REMEDATION EXTENT AND CONFIRMATION SAMPLING LOCATIONS**

PROJECT NO.: 212C-MD-02783

DATE: AUGUST 24, 2022

DESIGNED BY: LMV

Figure No.

**4**

## **TABLES**

**Table 1 - Soil Analytical Results**  
**COG Operating, LLC**  
**COG Diamondback 22 State (8.30.21)**  
**Eddy County, New Mexico**

Sample ID	Date	Sample Depth (ft)	Total Petroleum Hydrocarbons (mg/kg)					Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	GRO + DRO	Total						
Vertical Delineation Samples													
S-1	9/9/2021	0-1	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	35.6
		1-1.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	30.5
		2-2.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	42.9
		3-3.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	51.0
		4-4.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	114
S-2	9/9/2021	0-1	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	41.9
		1-1.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	19.7
		2-2.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	80.5
		3-3.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	82.6
S-3	9/9/2021	0-1	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	5,560
		1-1.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	162
		2-2.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	31.4
		3-3.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	566
S-4	9/9/2021	0-1	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,420
		1-1.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,150
		2-2.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	778
Trench 1	9/22/2021	0-1	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	82.8
		1	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	68.4
		2	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	297
		3	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00200	441
		4	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00200	79.2
S-5	9/9/2021	0-1	<49.8	83.3	<49.8	83.3	83.3	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	5,750
		1-1.5	<49.7	273	<49.7	273	273	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	6,780
		2-2.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,960
		3-3.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,670
Trench 2	9/22/2021	0-1	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	2,610
		1	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	103
		2	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	426
		3	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	67.1
		4	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00200	46.7
		5	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00200	104
S-6	9/9/2021	0-1	<49.8	84.5	<49.8	84.5	84.5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	7,180
		1-1.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	121
		2-2.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	357
		3-3.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	349
S-7	9/9/2021	0-1	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	48.4
		1-1.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	90.4
		2-2.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	22.1

**Table 1 - Soil Analytical Results**  
**COG Operating, LLC**  
**COG Diamondback 22 State (8.30.21)**  
**Eddy County, New Mexico**

Sample ID	Date	Sample Depth (ft)	Total Petroleum Hydrocarbons (mg/kg)					Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	GRO + DRO	Total						
S-8	9/9/2021	0-1	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	235
		1-1.5	<49.8	<49.8	<49.8	<49.8	<49.8	0.00316	<0.00199	<0.00199	<0.00398	<0.00398	150
		2-2.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	60.6
		3-3.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	186
S-9	9/9/2021	0-1	109	3,770	459	3,879	4,340	0.00788	<0.00201	0.0283	0.189	0.225	1,190
		1-1.5	306	4,010	448	4,316	4,760	<0.00202	<0.00202	0.130	0.888	1.02	630
Trench 3	9/22/2021	0-1	<49.9	5,030	626	5,030	5,660	<0.00202	0.00588	0.0232	0.198	0.227	3,300
		1	<49.9	161	75.8	161	237	<0.00202	<0.00202	<0.00202	<0.00403	<0.00200	64.4
		2	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	30.3
		3	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	50.6
S-10	9/9/2021	0-1	<49.8	198	<49.8	198	198	<0.00202	<0.00202	0.00272	0.0352	0.0379	11,800
		1-1.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	0.00461	0.00461	15,000
		2-2.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	0.00503	0.00503	14,200
		3-3.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	12,200
Trench 4	9/22/2021	0-1	<50.0	2,730	264	2,730	2,990	<0.0398	<0.0398	<0.0398	3.56	3.56	1,840
		1	126	5,800	586	5,926	6,510	0.342	0.223	0.104	13.6	15.3	6,880
		2	206	5,190	526	5,396	5,920	0.245	0.0835	0.0586	12.7	13.1	7,200
		3	204	2,980	327	3,184	3,510	0.405	0.0930	0.0577	13.6	14.2	2,980
		4	286	3,580	379	3,866	4,250	0.290	0.101	0.0549	11.3	11.7	7,390
		5	<49.8	340	<49.8	340	340	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	8,100
		6	125	749	<50.0	874	874	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	8,030
		7	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00200	4,880
		8	<49.9	742	<49.9	742	742	<0.00201	0.00245	0.00719	0.197	0.207	9,450
		9	<49.8	718	<49.8	718	718	0.00213	<0.00200	0.00825	0.0336	0.0440	6,510
		10	<50.0	3,610	<50.0	3,610	3,610	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	3,300
BH-1	11/16/2021	11	<49.9	2,890	<49.9	2,890	2,890	0.00493	<0.00200	0.0161	0.109	0.130	2,930
		0-1'	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	2,950
		2-3'	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	58.4
		4-5'	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	137
		6-7'	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	315
		9-10'	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	336
		11-12'	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	207
		14-15'	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	93.8

**Table 1 - Soil Analytical Results**  
**COG Operating, LLC**  
**COG Diamondback 22 State (8.30.21)**  
**Eddy County, New Mexico**

Sample ID	Date	Sample Depth (ft)	Total Petroleum Hydrocarbons (mg/kg)					Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	GRO + DRO	Total						
S-11	9/9/2021	0-1	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	7,420
		1-1.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	10,100
		2-2.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	15,200
		3-3.5	<50.0	103	<50.0	103	103	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	13,600
		4-4.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	14,100
Trench 5	9/22/2021	0-1	<49.9	424	<49.9	424	424	<0.00200	0.00227	0.00664	0.0470	0.0559	8,270
		1	123	595	<49.8	718	718	0.00729	<0.00201	<0.00201	0.169	0.176	8,720
		2	<50.0	<50.0	<50.0	<50.0	<50.0	0.00568	<0.00199	<0.00199	0.00773	0.0134	6,770
		3	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	37.1
		4	<49.9	<49.9	<49.9	<49.9	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	30.3
BH-2	11/16/2021	5	<49.9	308	<49.9	308	308	0.00417	<0.00202	<0.00202	0.0230	0.0272	7,750
		0-1'	482	3100	<50.0	3,582	3580	<0.398	<0.398	1.94	0.157	22.6	6,110
		2-3'	56.6	569	<49.8	626	626	<0.398	1.73	0.450	0.177	6.45	7,730
		4-5'	<50.0	140	<50.0	140	140	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	5,980
		6-7'	<49.9	315	<49.9	315	315	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	476
		9-10'	<50.0	304	<50.0	304	304	<0.00199	<0.00199	0.00582	0.122	0.128	4,720
		11-12'	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	2420
		14-15'	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2930
		19-20'	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	495
S-12	9/9/2021	25'	56.0	70.6	<49.8	127	127	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	275
		0-1	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	32.8
		1-1.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,650
		2-2.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	9,470
		3-3.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	7,050
Trench 6	9/22/2021	4-4.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	835
		0-1	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	0.00223	69.4
		1	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	<4.98
		2	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	10.6
		3	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00200	0.00218	<0.00200	<0.00401	0.00218	<5.02
		4	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00200	11.7
		5	<49.8	<49.8	<49.8	<49.8	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	5.25
S-13	9/9/2021	6	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00200	6.95
		0-1	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	12,900
		1-1.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	10,800
		2-2.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,910
		3-3.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,370
		4-4.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	375
		Horizontal Delineation Samples											
H-1	9/9/2021	0-0.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	11.4
H-2	9/9/2021	0-0.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	10.6

**Table 1 - Soil Analytical Results**  
**COG Operating, LLC**  
**COG Diamondback 22 State (8.30.21)**  
**Eddy County, New Mexico**

Sample ID	Date	Sample Depth (ft)	Total Petroleum Hydrocarbons (mg/kg)					Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	GRO + DRO	Total						
H-3	9/9/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	81.7
H-4	9/9/2021	0-0.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	38.9
H-5	9/9/2021	0-0.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	13.6
H-6	9/9/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	10.4
H-7	9/9/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	9.90
H-8	9/9/2021	0-0.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	10.9
H-9	9/9/2021	0-0.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	11.7
H-10	9/9/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	11.4
H-11	9/9/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	10.5
H-12	9/9/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	17.2
H-13	9/9/2021	0-0.5	<49.7	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<5.03
H-14	9/9/2021	0-0.5	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<4.98
Regulatory Limits <sup>A</sup>			N/A				1,000.0	2,500	10	N/A		50	10,000

- exceeds regulatory limit

ft - feet

mg/kg - milligram per kilogram

<sup>A</sup> - Table 1 - 19.15.29 NMAC

TABLE 2  
SUMMARY OF ANALYTICAL RESULTS  
SOIL REMEDIATION - NAPP2129931373  
CONOCOPHILLIPS  
DIAMONDBACK #22 STATE 2H RELEASE  
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
			C <sub>6</sub> - C <sub>10</sub>														> C <sub>10</sub> - C <sub>28</sub>		> C <sub>28</sub> - C <sub>36</sub>					
			ft. bgs	ppm			mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
FS-1	8/4/2022	4	301	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-2	8/4/2022	4	228	-	64.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-3	8/9/2022	4	351	-	336		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-4	8/9/2022	4	235	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-5	8/9/2022	4	131	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-6	8/9/2022	4	228	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-7	8/9/2022	4	320	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-8	8/4/2022	4	304	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-9	8/9/2022	2	413	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-10	8/9/2022	2	399	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-11	8/3/2022	1.5	269	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-12	8/3/2022	1.5	245	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-13	8/3/2022	1.5	395	-	192		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-14	8/3/2022	1.5	305	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-15	8/3/2022	4	376	-	144		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-16	8/3/2022	4	491	-	208		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-17	8/3/2022	3	465	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-18	8/3/2022	1.5	225	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-19	8/3/2022	1.5	273	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
FS-20	8/3/2022	1.5	361	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
NSW-1	8/3/2022	-	314	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
NSW-2	8/3/2022	-	202	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
NSW-3	8/9/2022	-	432	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
NSW-4	8/9/2022	-	243	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
NSW-5	8/9/2022	-	125	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
NSW-6	8/4/2022	-	221	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	

TABLE 2  
SUMMARY OF ANALYTICAL RESULTS  
SOIL REMEDIATION - NAPP2129931373  
CONOCOPHILLIPS  
DIAMONDBACK #22 STATE 2H RELEASE  
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride <sup>1</sup>		BTEX <sup>2</sup>										TPH <sup>3</sup>							
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
		C <sub>6</sub> - C <sub>10</sub>			> C <sub>10</sub> - C <sub>28</sub>												> C <sub>28</sub> - C <sub>36</sub>							
		ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
ESW-1	8/4/2022	-	109	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
ESW-2	8/4/2022	-	311	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
ESW-3	8/4/2022	-	162	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
SSW-1	8/9/2022	-	127	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
SSW-2	8/9/2022	-	160	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
SSW-3	8/9/2022	-	211	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
SSW-4	8/3/2022	-	221	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
SSW-5	8/3/2022	-	237	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-1	8/3/2022	-	373	-	192		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-2	8/3/2022	-	382	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-3	8/3/2022	-	448	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-4	8/3/2022	-	431	-	400		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-5	8/3/2022	-	418	-	208		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-6	8/3/2022	-	292	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
WSW-7	8/3/2022	-	209	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

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

Gold highlight represents soil horizons that were removed during deepening of excavation floors.

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

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

QUALIFIERS:

## **APPENDIX A C-141 Forms**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

## Initial Response

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

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

L48 Spill Volume Estimate Form												
Facility Name & Number:		Diamondback 22 St 2H										
Asset Area:		DBWN										
Release Discovery Date & Time:		8.30.21										
Release Type:		Oil Mixture										
Provide any known details about the event:		Flowline had puncture.										
Spill Calculation - On Pad Surface Pool Spill												
Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated <u>Pool</u> Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	50.0	80.0	0.50	4	4000.000	0.010	7.417	0.001	7.421	50.00%	3.710	3.710
Rectangle B	50.0	50.0	0.50	4	2500.000	0.010	4.635	0.001	4.638	50.00%	2.319	2.319
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Total Volume Release:									12.058		6.029	6.029

Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Jaqui Harris Date: 4/4/2022

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: Jacqui Herrera Date: 4/4/2022  
email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Jennifer Nobui Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure


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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_


Signature:  Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Closure Approved by:  Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

## **APPENDIX B**

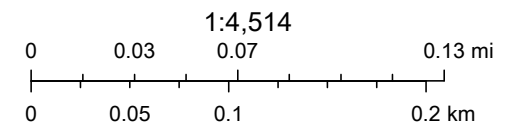
### **Site Characterization Data**

## OCD Well Locations



9/20/2022, 4:24:21 PM

- Override 1
- Oil, Active
- Salt Water Injection, Plugged
- Wells - Large Scale
- Oil, Cancelled
- OSE Streams
- Gas, Cancelled
- Oil, New
- PLSS Second Division



Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Maxar, NM OSE, BLM

New Mexico Oil Conservation Division

Medium Karst

COG Operating, LLC

Legend

- Diamondback 22 St. 2H (08.30.21)
- MEDIUM

Diamondback 22 St. 2H (08.30.21)





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">C 02160 S7</a>	CUB	ED	3	3	1	22	26S	28E	586638	3543998*		499	300	120	180
<a href="#">C 04022 POD1</a>	CUB	ED	4	4	2	15	26S	28E	588082	3545647		1747	220	175	45

Average Depth to Water: **147 feet**

Minimum Depth: **120 feet**

Maximum Depth: **175 feet**

Record Count: 2

### UTMNAD83 Radius Search (in meters):

**Easting (X):** 586785.28

**Northing (Y):** 3544474.83

**Radius:** 1800

\*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.

8/23/22 8:54 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



Project Name :	Diamondback 22 State 2H(08.30.2021)	Date :	November 16, 2021
Project No. :	214634	Sampler :	Clint Merritt
Location :	Eddy Co, New Mexico	Driller :	Scarborough Drilling
Coordinates :	32.03314°, -104.08201°	Method :	Air Rotary
Elevation :	2,991'		

Depth (ft.)	WL	Soil Description	Lithology	Depth (ft.)	WL	Soil Description	Lithology
0		(0') - Yellowish Orange/White well graded gravel with <50% coarse sand and caliche (GW). Dry		50		(50') - Light brown soft clay with <50% fine loose sand (CL). Dry	
5		(5') - Light reddish brown loose, medium sand with <50% fine well cemented gravel (SW). Dry		55			
10		(10') - Light reddish brown/ white loose fine sand with <25% fine well cemented gravel (SW). Dry		60		(59') - Light brown soft clay with 50% fine loose sand (CL). Moist	
15				65			
20		(20') - Light brown loose fine sand with <25% fine poorly cemented gravel and trace gypsum (SM). Dry		70			
25		(25') - White fine very loose sand with 100% gypsum (ML). Dry		75			
30				80			
35				85			
40				90			
45				95			
50				100			

Comments : Total Depth 59' bgs  
Drilling Terminated @ 14:00 CT No groundwater present

On 11/19/2021 No groundwater present

## **APPENDIX C**

### **Regulatory Correspondence**

**Llull, Christian**

---

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>  
**Sent:** Wednesday, July 20, 2022 3:30 PM  
**To:** Llull, Christian  
**Cc:** Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD  
**Subject:** RE: [EXTERNAL] (Extension Request 1) Incident ID: NAPP2129931373 - Diamondback # 22 State 2H Flowline Release

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

Christian

Your request for an extension to **October 17th, 2022** is approved. Have a closure report completed and loaded onto the payment portal by that date. Please include this e-mail correspondence in the remediation and/or closure report.

Thanks,  
Jennifer Nobui

---

**From:** Llull, Christian <Christian.Llull@tetrattech.com>  
**Sent:** Wednesday, July 20, 2022 1:13 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>  
**Cc:** Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Jester, Steve <STEVE.JESTER@tetrattech.com>  
**Subject:** [EXTERNAL] (Extension Request 1) Incident ID: NAPP2129931373 - Diamondback #22 State 2H Flowline Release

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

To whom it may concern:

On behalf of ConocoPhillips, Tetra Tech is requesting a 90-day extension (until October 17, 2022) to complete the remediation and associated reporting for the Diamondback #22 State 2H Flowline Release site (**NAPP2129931373**).

A thorough risk evaluation and hazard identification has been conducted at the project site. Coordinating the removal of surface lines, subsurface utility clearance and subcontractor procurement have led to scheduling delays, but the project is progressing and the proposed remediation work is scheduled to begin in the next two weeks. Notice of final confirmation sampling will be sent at that time.

Once the confirmation sampling data is collected, tabulated, and evaluated, a closure report will be submitted to the OCD.

Thank you in advance.

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

**Tetra Tech** | *Leading with Science®* | OGA  
8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | [tetrattech.com](http://tetrattech.com)

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



Please consider the environment before printing. [Read more](#)



**Poole, Nicholas**

---

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>  
**Sent:** Monday, August 1, 2022 12:27 PM  
**To:** Poole, Nicholas  
**Cc:** Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD  
**Subject:** RE: [EXTERNAL] Incident ID: NAPP2129931373- Confirmation Sampling

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

Nicholas

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

Thanks,  
Jennifer Nobui

---

**From:** Poole, Nicholas <NICHOLAS.POOLE@tetrattech.com>  
**Sent:** Monday, August 1, 2022 11:21 AM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>  
**Cc:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Jester, Steve <STEVE.JESTER@tetrattech.com>; Llull, Christian <Christian.Llull@tetrattech.com>  
**Subject:** [EXTERNAL] Incident ID: NAPP2129931373- Confirmation Sampling

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

Incident ID (n#) **NAPP2129931373** (Diamondback #22 State 2H)

To whom it may concern,

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

Remediation activities are beginning at the site Tuesday August 2, 2022.

Thus, on behalf of ConocoPhillips for the above referenced incident, Tetra Tech is duly providing this communication which serves as notification that final confirmation sampling will be conducted at this site Thursday, August 4 through Wednesday, August 10, 2022

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

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

**Tetra Tech** | *Leading with Science*® | OGA  
8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | [tetrattech.com](http://tetrattech.com)

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



Please consider the environment before printing. [Read more](#)



**TETRA TECH**

## **APPENDIX D**

### **Laboratory Analytical Data**



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

---

August 04, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: DIAMONDBACK 22 STATE 2H

Enclosed are the results of analyses for samples received by the laboratory on 08/03/22 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [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  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 11 (H223469-01)**

BTX 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	08/03/2022	ND	2.02	101	2.00	7.74	
Toluene*	<0.050	0.050	08/03/2022	ND	2.10	105	2.00	7.94	
Ethylbenzene*	<0.050	0.050	08/03/2022	ND	2.12	106	2.00	8.14	
Total Xylenes*	<0.150	0.150	08/03/2022	ND	6.50	108	6.00	8.67	
Total BTX	<0.300	0.300	08/03/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/04/2022	ND	432	108	400	7.14	

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 61.2 % 43-149

Surrogate: 1-Chlorooctadecane 63.0 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 12 (H223469-02)**

BTX 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	08/04/2022	ND	2.01	100	2.00	7.12	QM-07, QR-03
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	QM-07, QR-03
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	QR-03
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	QR-03
Total BTX	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/04/2022	ND	432	108	400	7.14	

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 70.5 % 43-149

Surrogate: 1-Chlorooctadecane 73.1 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 13 (H223469-03)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 70.1 % 43-149

Surrogate: 1-Chlorooctadecane 73.4 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 14 (H223469-04)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 71.2 % 43-149

Surrogate: 1-Chlorooctadecane 74.0 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 15 (H223469-05)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/04/2022	ND	432	108	400	7.14	

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 79.4 % 43-149

Surrogate: 1-Chlorooctadecane 82.3 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 16 (H223469-06)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 75.1 % 43-149

Surrogate: 1-Chlorooctadecane 78.1 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 17 (H223469-07)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 81.8 % 43-149

Surrogate: 1-Chlorooctadecane 85.7 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 18 (H223469-08)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 77.2 % 43-149

Surrogate: 1-Chlorooctadecane 80.8 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 19 (H223469-09)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 77.7 % 43-149

Surrogate: 1-Chlorooctadecane 82.4 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 20 (H223469-10)**

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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEx	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 76.7 % 43-149

Surrogate: 1-Chlorooctadecane 80.1 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: NSW - 1 (H223469-11)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	08/04/2022	ND	432	108	400	7.14	

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 64.5 % 43-149

Surrogate: 1-Chlorooctadecane 68.9 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: NSW - 2 (H223469-12)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 69.7 % 43-149

Surrogate: 1-Chlorooctadecane 73.8 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 1 (H223469-13)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 69.0 % 43-149

Surrogate: 1-Chlorooctadecane 72.4 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 2 (H223469-14)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 75.0 % 43-149

Surrogate: 1-Chlorooctadecane 77.4 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 3 (H223469-15)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEX	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 72.6 % 43-149

Surrogate: 1-Chlorooctadecane 75.6 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 4 (H223469-16)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTEX	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	08/04/2022	ND	432	108	400	7.14		

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 76.4 % 43-149

Surrogate: 1-Chlorooctadecane 79.8 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 5 (H223469-17)**

BTX 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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTX	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	08/04/2022	ND	432	108	400	7.14	

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	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 72.1 % 43-149

Surrogate: 1-Chlorooctadecane 76.0 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 6 (H223469-18)**

BTX 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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTX	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/04/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 66.9 % 43-149

Surrogate: 1-Chlorooctadecane 69.5 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: WSW - 7 (H223469-19)**

BTX 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	08/04/2022	ND	2.01	100	2.00	7.12	
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69	
Total BTX	<0.300	0.300	08/04/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/04/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 70.0 % 43-149

Surrogate: 1-Chlorooctadecane 72.0 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: SSW - 4 (H223469-20)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/04/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2022	ND	186	93.2	200	8.26	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.4	200	6.86	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 63.5 % 43-149

Surrogate: 1-Chlorooctadecane 67.3 % 42.5-161

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

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/04/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: SSW - 5 (H223469-21)**

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	08/04/2022	ND	2.01	100	2.00	7.12		
Toluene*	<0.050	0.050	08/04/2022	ND	2.08	104	2.00	6.67		
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.09	104	2.00	6.88		
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.34	106	6.00	5.69		
Total BTEx	<0.300	0.300	08/04/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/04/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2022	ND	233	116	200	8.34	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	221	110	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					

Surrogate: 1-Chlorooctane 71.1 % 43-149

Surrogate: 1-Chlorooctadecane 81.1 % 42.5-161

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

---

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

---

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.

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

---

Celey D. Keene, Lab Director/Quality Manager

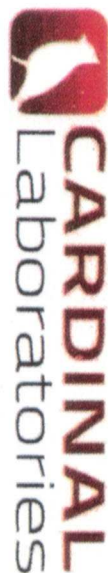


101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

[illegible]



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 3

Company Name: <b>Conoco Phillips</b>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>	
Project Manager: <b>Christian Liu</b>		P.O. #:			
Address:		Company: <b>Tetra Tech</b>			
City:		Attn: <b>Christian Liu</b>			
State:		Address:			
Zip:		City:			
Phone #:		State:			
Fax #:		Zip:			
Project #: <b>212-C-MD-02783</b>		Project Owner:			
Project Name: <b>Diamondback 22 State 2H</b>		Phone #:			
Project Location: <b>Eddy Co, NM</b>		Fax #:			
Sampler Name: <b>Andrew Garcia</b>		FOR LAB USE ONLY			
Lab I.D.		Sample I.D.			
H223469		11		NSW-1	
12		NSW-2		1045	
13		NSW-1		1100	
14		NSW-2		1115	
15		NSW-3		1130	
16		NSW-4		1145	
17		NSW-5		1200	
18		NSW-6		1215	
19		NSW-7		1230	
20		NSW-4		1245	
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising from whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.		(G)RAB OR (C)OMP.		2022	
Relinquished By: <b>Andrew Garcia</b>		# CONTAINERS		DATE	
Date: <b>03 AUG 22</b>		GROUNDWATER		TIME	
Time: <b>4:00 PM</b>		WASTEWATER		X	
Relinquished By: <b>Christian Liu</b>		SOIL		X	
Date: <b>03 AUG 22</b>		OIL		X	
Time: <b>4:00 PM</b>		SLUDGE		X	
Relinquished By: <b>Christian Liu</b>		OTHER:		X	
Date: <b>03 AUG 22</b>		ACID/BASE:		X	
Time: <b>4:00 PM</b>		ICE / COOL:		X	
Relinquished By: <b>Christian Liu</b>		OTHER:		X	
Date: <b>03 AUG 22</b>		BTEX		X	
Time: <b>4:00 PM</b>		TPH		X	
Relinquished By: <b>Christian Liu</b>		Chlorides 4500		X	
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>					
Time: <b>4:00 PM</b>					
Relinquished By: <b>Christian Liu</b>					
Date: <b>03 AUG 22</b>				</	



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 7 of 11

[illegible]



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

---

August 08, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: DIAMONDBACK 22 STATE 2H

Enclosed are the results of analyses for samples received by the laboratory on 08/05/22 13:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [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  
 CHRISTIAN LLULL  
 901 WEST WALL STREET , STE 100  
 MIDLAND TX, 79701  
 Fax To: (432) 682-3946

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 1 (H223514-01)**

BTX 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	08/05/2022	ND	2.04	102	2.00	1.25	
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23	
Total BTX	<0.300	0.300	08/05/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 91.9 % 43-149

Surrogate: 1-Chlorooctadecane 91.2 % 42.5-161

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

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 2 (H223514-02)**

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	08/05/2022	ND	2.04	102	2.00	1.25		
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767		
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35		
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23		
Total BTEx	<0.300	0.300	08/05/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 94.0 % 43-149

Surrogate: 1-Chlorooctadecane 92.6 % 42.5-161

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

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: ESW - 1 (H223514-03)**

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	08/05/2022	ND	2.04	102	2.00	1.25	
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23	
Total BTEx	<0.300	0.300	08/05/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 98.0 % 43-149

Surrogate: 1-Chlorooctadecane 97.3 % 42.5-161

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

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: ESW - 2 (H223514-04)**

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	08/05/2022	ND	2.04	102	2.00	1.25	
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23	
Total BTEx	<0.300	0.300	08/05/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 88.4 % 43-149

Surrogate: 1-Chlorooctadecane 85.4 % 42.5-161

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

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: ESW - 3 (H223514-05)**

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	08/05/2022	ND	2.04	102	2.00	1.25		
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767		
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35		
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23		
Total BTEx	<0.300	0.300	08/05/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 102 % 43-149

Surrogate: 1-Chlorooctadecane 101 % 42.5-161

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

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 8 (H223514-06)**

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	08/05/2022	ND	2.04	102	2.00	1.25		
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767		
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35		
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23		
Total BTEx	<0.300	0.300	08/05/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 91.1 % 43-149

Surrogate: 1-Chlorooctadecane 89.0 % 42.5-161

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

Received:	08/05/2022	Sampling Date:	08/04/2022
Reported:	08/08/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Tamara Oldaker
Project Location:	CP - EDDY CO., NM		

**Sample ID: NSW - 6 (H223514-07)**

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	08/05/2022	ND	2.04	102	2.00	1.25		
Toluene*	<0.050	0.050	08/05/2022	ND	2.11	106	2.00	0.767		
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.15	107	2.00	1.35		
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.57	109	6.00	1.23		
Total BTEx	<0.300	0.300	08/05/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	400	100	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	08/06/2022	ND	218	109	200	6.62	
DRO >C10-C28*	<10.0	10.0	08/06/2022	ND	228	114	200	3.38	
EXT DRO >C28-C36	<10.0	10.0	08/06/2022	ND					

Surrogate: 1-Chlorooctane 93.9 % 43-149

Surrogate: 1-Chlorooctadecane 93.0 % 42.5-161

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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.

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

---

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

# **BILL TO**

## **ANALYSIS REQUEST**

Company Name:

Conoco Phillips

Project Manager:

Christian Lluhi

Address:

City:

State:

Zip:

Phone #:

Fax #:

Project #: 212C-MP-02783 Project Owner:

Project Name: Diamondback 22 State 2H

Project Location: Eddy Co, NM

Sample Name: Andrew Garcia

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H23514  
1 FS-1  
2 ES-2  
3 ESW-1  
4 ESW-2  
5 ESW-3  
6 ES-8  
7 NSW-6

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

2022  
DATE

TIME

BTEX

TPH

Chloride 4500

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

Relinquished By:

Date: 05 Aug 22

Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By:

Date:

Received By:

REMARKS:

Christian.Lluhi@TetraTech.com

Delivered By: (Circle One)

Observed Temp. °C

Sample Condition

CHECKED BY:

Turnaround Time:

Standard

☒

Bacteria (only)

Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Cool Intact

YES

Thermometer ID #113

24 HR

☐

Cool Intact

Observed Temp. °C

FORM-000 R-3.2 10/07/21

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



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

---

August 11, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: DIAMONDBACK 22 STATE 2H

Enclosed are the results of analyses for samples received by the laboratory on 08/10/22 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [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".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 3 (H223592-01)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857	
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113	
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04	
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23	
Total BTEx	<0.300	0.300	08/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 89.7 % 43-149

Surrogate: 1-Chlorooctadecane 95.9 % 42.5-161

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

Received: 08/10/2022  
 Reported: 08/11/2022  
 Project Name: DIAMONDBACK 22 STATE 2H  
 Project Number: 212C - MD - 02783  
 Project Location: CP - EDDY CO., NM

Sampling Date: 08/09/2022  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS - 4 (H223592-02)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857	
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113	
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04	
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23	
Total BTEx	<0.300	0.300	08/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 90.4 % 43-149

Surrogate: 1-Chlorooctadecane 97.9 % 42.5-161

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

Received: 08/10/2022  
 Reported: 08/11/2022  
 Project Name: DIAMONDBACK 22 STATE 2H  
 Project Number: 212C - MD - 02783  
 Project Location: CP - EDDY CO., NM

Sampling Date: 08/09/2022  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS - 5 (H223592-03)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEx	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/11/2022	ND	432	108	400	3.77		

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 97.3 % 43-149

Surrogate: 1-Chlorooctadecane 104 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 6 (H223592-04)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857	
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113	
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04	
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23	
Total BTEx	<0.300	0.300	08/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 91.3 % 43-149

Surrogate: 1-Chlorooctadecane 98.3 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 7 (H223592-05)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEx	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/11/2022	ND	432	108	400	3.77		

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 96.1 % 43-149

Surrogate: 1-Chlorooctadecane 102 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 9 (H223592-06)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEX	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 101 % 43-149

Surrogate: 1-Chlorooctadecane 108 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: FS - 10 (H223592-07)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEx	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/11/2022	ND	432	108	400	3.77		

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 95.4 % 43-149

Surrogate: 1-Chlorooctadecane 102 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: SSW - 1 (H223592-08)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857	
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113	
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04	
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23	
Total BTEx	<0.300	0.300	08/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 102 % 43-149

Surrogate: 1-Chlorooctadecane 109 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: SSW - 2 (H223592-09)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857	
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113	
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04	
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23	
Total BTEx	<0.300	0.300	08/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 90.5 % 43-149

Surrogate: 1-Chlorooctadecane 96.8 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: SSW - 3 (H223592-10)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEx	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 87.9 % 43-149

Surrogate: 1-Chlorooctadecane 94.9 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: NSW - 3 (H223592-11)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEx	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/11/2022	ND	432	108	400	3.77		

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 94.7 % 43-149

Surrogate: 1-Chlorooctadecane 101 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: NSW - 4 (H223592-12)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEX	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/11/2022	ND	432	108	400	3.77		

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 92.9 % 43-149

Surrogate: 1-Chlorooctadecane 99.3 % 42.5-161

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

Received:	08/10/2022	Sampling Date:	08/09/2022
Reported:	08/11/2022	Sampling Type:	Soil
Project Name:	DIAMONDBACK 22 STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02783	Sample Received By:	Shalyn Rodriguez
Project Location:	CP - EDDY CO., NM		

**Sample ID: NSW - 6 (H223592-13)**

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	08/10/2022	ND	1.92	96.1	2.00	0.857		
Toluene*	<0.050	0.050	08/10/2022	ND	2.05	102	2.00	0.113		
Ethylbenzene*	<0.050	0.050	08/10/2022	ND	2.08	104	2.00	1.04		
Total Xylenes*	<0.150	0.150	08/10/2022	ND	6.33	105	6.00	2.23		
Total BTEx	<0.300	0.300	08/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/11/2022	ND	432	108	400	3.77	

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	08/11/2022	ND	192	95.8	200	6.09	
DRO >C10-C28*	<10.0	10.0	08/11/2022	ND	208	104	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	08/11/2022	ND					

Surrogate: 1-Chlorooctane 98.7 % 43-149

Surrogate: 1-Chlorooctadecane 104 % 42.5-161

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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.

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

---

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 16 of 17



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

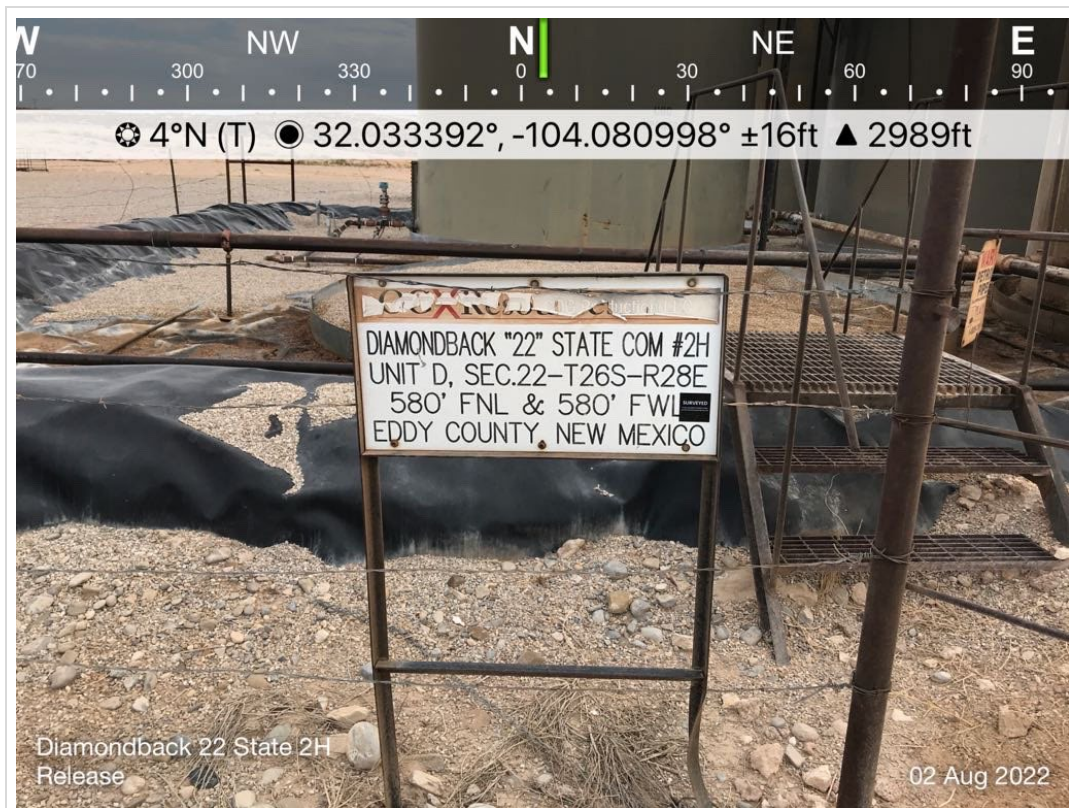
## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 2

[illegible]

## **APPENDIX E**

# **Photographic Documentation**



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	Site signage and location information; Diamondback "22" State Com #2H	1
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/2/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View northeast. Southwest end of release, 1.5' BGS excavation.	2
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/4/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View east. Northwest end of release, 4' to 1.5' BGS excavation.	3
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/4/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View west. Central west end of release, 3' BGS excavation.	4
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/4/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View southeast. Northeastern end of release, 4' BGS excavation.	5
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/8/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View northwest. Southeastern end of release, 4' BGS excavation.	6
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/8/2022



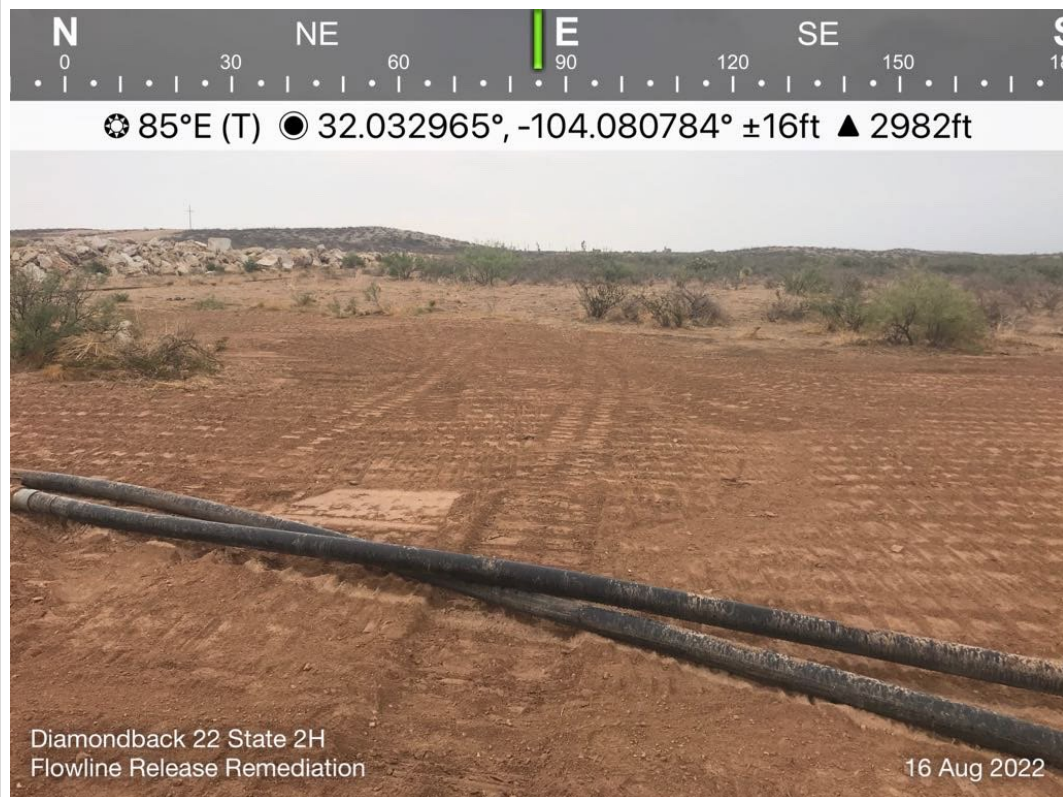
TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View south. Central area of release in lease road, 2' BGS excavation. Left side of image with liner.	7
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/11/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View northeast. Northeastern area of release, 4' BGS with liner.	8
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/10/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View north. East of the lease road, backfilled and seeded.	9
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/16/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02783	DESCRIPTION	View east. West of the lease road, backfilled and seeded.	10
	SITE NAME	ConocoPhillips Diamondback #22 State 2H Flowline Release	8/16/2022

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

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

CONDITIONS  
  
Action 145237

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 145237
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	9/22/2022