

April 17, 2023

Brittany Hall Projects Environmental Specialist New Mexico Energy, Minerals, and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Release Characterization and Closure Request ConocoPhillips Heritage Concho White Falcon 16 Federal CTB Release Unit Letter C, Section 16, Township 25 South, Range 35 East Lea County, New Mexico Incident ID# nCH1821232087

Ms. Hall,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess and evaluate a historic release associated with the White Falcon 16 Federal Central Tank Battery (CTB), which occurred on the White Falcon 16 Fed Com #021H well pad (API No. 30-025-43931). The release footprint is located in Public Land Survey System (PLSS) Unit Letter C, Section 16, Township 25 South, Range 35 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.13580°, -103.37320°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release occurred on July 27, 2018 when a third-party driver overfilled a trailer. Approximately 6 barrels (bbls) of oil were released on the lease pad. No liquids were recovered. The NMOCD approved the initial C-141 on July 31, 2018, and subsequently assigned the release the Incident ID nCH1821232087. The initial C-141 form is included in Appendix A.

This incident is included in an Agreed Compliance Order-Releases (ACO-R) between COG Operating LLC (Concho) and the NMOCD signed on November 20 and 26, 2018, respectively.

INITIAL SITE ASSESSMENT SUMMARY

On August 6, 2018, TRC Environmental Corporation (TRC) conducted an initial soil assessment at the Site on behalf of Concho. The approximate release extent provided by TRC is presented in Figure 3.

During the initial assessment, one (1) soil boring (HA-1) was installed using a hand auger to a depth of 1 foot bgs within the release extent. Two (2) samples (HA-1 @ 6" and HA-1 @ 1') were collected from the hand auger boring in an attempt to achieve vertical delineation of the release extent. Four (4) soil samples (N @ 6", E @ 6", S @ 6", and W @ 6") were collected from the inferred edges of the release margins in an effort to determine the horizontal extent of soil impact. The six (6) samples were submitted to Xenco Laboratories in Midland, TX to be analyzed for BTEX via EPA Method 8021B, TPH via EPA Method 8015M, and chloride via EPA Method 300.0.

TRC returned to the Site on August 29, 2018 to collect additional soil samples at step-out locations from the horizontal delineation sample locations (N, E, S, and W) to complete horizontal delineation of the release extent. The initial assessment sampling locations are indicated on Figure 4. The initial assessment results are summarized in Table 1.

2018 WORK PLAN

A Site Assessment Summary and Proposed Remediation Plan (2018 Work Plan) describing the Site assessment and proposed remedial actions was submitted to the NMOCD on October 10, 2018. The 2018 Work Plan was rejected by Brittany Hall via email on Wednesday, November 30, 2022 with the following comments:

- "The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.
- Horizontal delineation submitted was incomplete and did not meet the requirements of 19.15.29.11 NMAC. The values for determination of horizontal impact are derived by either approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for "on-pad" releases to ensure the release did not extend to the "off-pad"/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation.
- Applicable pages from C-141 are not included.
- Siting/ranking criteria appear to be a mixture of the old rules and the new rules.
- 1RP-5137 closed. Please refer to incident #NCH1821232087 in future correspondence.
- Please submit a complete report through the OCD Permitting website by 3/3/2023."

An extension request for a due date of June 3, 2023 was approved via email on Tuesday, February 28, 2023. Regulatory correspondence is included in Appendix B.

SITE CHARACTERIZATION

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

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately ½ mile (800 meters) of the site. According to data from seven (7) water well listed in the NMOSE database within approximately 3.7 miles (6,000 meters) of the Site, the minimum depth to groundwater is 165 feet below ground surface (bgs).

To comply with the NMOCD directive presented in the November 30, 2022, email rejection, a licensed well drilling subcontractor was onsite on March 3, 2023 to drill a groundwater determination borehole (DTW-1) to 55 feet bgs in the southwestern corner of the White Falcon 16 Federal CTB lease pad, located approximately 220 feet southwest of the release Site. The borehole location is indicated on Figure 3. The borehole was temporarily set and screened using 2-inch PVC well materials: 20 feet of blank casing and 35 feet of 0.010-inch slotted screen. The borehole was left for 72 hours and checked for the presence of groundwater. The borehole was dry upon drilling, and no water was present in the well after 72 hours. The well screen and casing were removed, and the borehole was plugged with 3/8-inch bentonite chips. The site characterization data and boring log are presented in Appendix C. The DTW location is indicated in Figure 4.

REGULATORY FRAMEWORK

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

Based on the site characterization, and 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

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

Tetra Tech personnel visited the Site on February 7, 2023, to document current site conditions. Photographic documentation of the visual inspection is presented in Appendix D.

Based on the directive provided by NMOCD, Tetra Tech was onsite on March 1, 2023, to conduct assessment activities on behalf of ConocoPhillips. One additional assessment boring (BH-1) was installed using an air rotary drill rig within the release footprint to 10 feet bgs to complete vertical delineation of the release extent. Six additional hand auger borings (AH-23-1 through AH-23-6) were installed to 1 feet bgs within and around the release footprint.

On March 20, 2023, Tetra Tech personnel returned to the site to complete horizontal delineation of the release. One boring (AH-23-7) was installed using hand auger to 1-foot bgs. The sample locations are shown on Figure 4.

A total of fourteen (14) samples were collected from the eight assessment borings and submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by method SM4500CI-B. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

Analytical results from the 2023 assessment activities are summarized in Table 2. All analytical results were below the Site RRALs for all constituents for on-pad releases.

CONCLUSION

Based on the site characterization, the remaining soils on the production lease pad meet the closure criteria of Table I of 19.15.29.12 NMAC. All analytical results associated with the 2023 assessment results were below the Site RRALs; therefore, no remediation of the release footprint is necessary.

Based on the above, ConocoPhillips respectfully requests closure of the White Falcon 16 Federal CTB Release (nCH1821232087). Final reclamation of the well pad shall take place in accordance with 19.15.29.13 NMAC once the Site is no longer being used for oil and gas operations. The final C-141 forms are enclosed in Appendix A.

ConocoPhillips

If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 739-7874.

Sincerely, Tetra Tech, Inc.

Samantha K. Abbott, P.G. Project Geologist

CC:

Mr. Charles Beauvais, PBU – ConocoPhillips Mr. Moises H. Cantu, PBU - ConocoPhillips

Christian M. Llull, P.G. Program Manager

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LIST OF ATTACHMENTS

Figures:

Figure 1 – Overview Map

Figure 2 – Topographic Map

Figure 3 – Inferred Release Extent and Site Assessment (TRC)

Figure 4 – Inferred Release Extent and Additional Assessment (Tetra Tech)

Tables:

Table 1 – Summary of Analytical Results – 2018 Soil Assessment Table 2 – Summary of Analytical Results – 2023 Soil Assessment

Appendices:

Appendix A – C-141 Forms

Appendix B – Regulatory Correspondence

Appendix C – Site Characterization Data

Appendix D – Photographic Documentation

Appendix E – Laboratory Analytical Data

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FIGURES



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TABLES

										BTEX ²							L	PH ³			
Sample ID	Sample Date	sample Depth	Chloride		Benzene		Toluene	Eth	ylbenzene	m,p-Xylenes	o-Xylene	Total Xylene	ş	Total BTEX	GRO		DRO	MRC		Total TPH	
		ft. bgs	mg/kg	ď	mg/kg	ď	ng/kg Q	ű	g/kg Q	mg/kg Q	mg/kg	2 mg/kg	Ø	mg/kg Q	mg/kg	α	mg/kg Q	mg/kg	Ø	mg/kg	č
	0100/2/0	0.5	NS		<0.0192	Ŷ	0.0192	<0.	0192	0.110	0.0212	0.1312		0.1312	14.9		1,020	287		1,321.9	
T-ML	9T N7 /0/9	1	<25.0		<0.0175	ÿ	0.0175	<0.	0175	<0.0349	<0.0175	<0.0175		<0.0175	<3.49		<24.8	<24.8			
2	8/6/2018	L C	NS		<0.0171		0.275	.0	606	1.98	1.26	3.24		4.121	165		4,360	760		5,285	
z	8/29/2018	c.0	19.4		<0.00201	0>	.00201	<0.L	20201	<0.00402	<0.00201	<0.00201		<0.00201	<15.0		33.5	<15.0		33.5	
L	8/6/2018		NS		<0.0187	0	.0617	0.0	1561	0.174	0.107	0.281		0.3988	13.8		3,590	693	_	4,296.8	
J	8/29/2018	C.D	34.5		<0.00199	0>	.00199	<0.L	0199	<0.00398	<0.00199	<0.00199		<0.00199	<15.0		29.4	<15.0		29.4	
	8/6/2018		NS		<0.0194	V	0.0194	<0.	0194	<0.0388	<0.0194	<0.0194		<0.0194	⊲.88		1,070	297	_	1,367	
n	8/29/2028	C.D	20.0		<0.00202	0>	.00202	<0.L	30202	<0.00404	<0.00202	<0.00202		<0.00202	<15.0		99.1	<15.0		99.1	
m	8/6/2018	3	NS		<0.0175	0	:0175	0,	0175	0.0455	<0.0175	0.0455		0.063	<3.50		1,450	308	_	1,758	
~	8/29/2018	0	17.2		<0.00202	0>	.00202	<0.t	20202	<0.00404	<0.00202	<0.00202		<0.00202	<15.0		457	<15.0		457	
NOTES: ft. Feet																					
bgs Below ground s	surface																				
mg/kg Milligrams per	kilogram																				
TPH Total Petroleun	m Hydrocarbons																				
GRO Gasoline range	erganics																				
DRO Diesel range or	ganics																				
MRO Motor Oil range	te organics																				
NS Sample not ana	alyzed for parameter																				
1 EPA Method 30	0.00																				
2 EPA Method 80	021B																				
3 Method SW801	15 Mod																				

2018 SOIL ASSESSMENT- nCH1821232087 SUMMARY OF ANALYTICAL RESULTS

TABLE 1

White Falcon 16 Federal Com #021H LEA COUNTY, NM CONOCOPHILLIPS

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Received by OCD: 4/18/2023 8:58:14 AM

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TABLE 2	SUMMARY OF ANALYTICAL RESULTS	2023 SOIL ASSESSMENT- nCH1821232087	CONOCOPHILLIPS	White Falcon 16 Federal Com #021H	LEA COUNTY, NM
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			Field						BTEX ²								TPH3			
Sample ID	Sample Date	Sample Depth	Screening Results	Chloride ¹	Be	nzene	Toluer	e	Ethvlbenze	euc	Total Xvlene	s	Total BTEX	9	iro	DRO		EXT DRO		Total TPH
			Chloride											c	- C ₁₀	> C ₁₀ - C	88	> C ₂₈ - C ₃₆	(G	RO+DRO+EXT DRO)
		ft. bgs	bpm	mg/kg Q	mg/k	g	mg/kg	۵	mg/kg	σ	mg/kg	۵	mg/kg Q	mg/kg	Ø	mg/kg	Q	mg/kg	۵	mg/kg
AH-23-1	3/3/2023	0-1	15.6	48.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		<10.0		<10.0		
AH-23-2	3/3/2023	0-1	88.7	32.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		50.3		<10.0		50.3
AH-23-3	3/3/2023	0-1	133	32.0	<0.05	0	<0.050		<0.050		<0.150		<0.300	<10.0		10.5		<10.0		10.5
AH-23-4	3/3/2023	0-1	126	64.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		19.9		<10.0		19.9
AH-23-5	3/3/2023	0-1	169	32.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		<10.0		<10.0		
AH-23-6	3/3/2023	0-1	75.5	32.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		14.1		<10.0		
AH-23-7	3/20/2023	0-1		32.0	<0.05	0	<0.050		<0.050	Η	<0.050	Η	<0.300	<10.0		<10.0	_	<10.0	Η	-
		0-1		48.0	<0.05	0	<0.050		<0.050		<0.150		<0.300	<10.0		<10.0		<10.0	┝	-
		2-3		48.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		<10.0		<10.0		
		3-4		32.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		<10.0		<10.0		
BH-23-1	3/3/2023	4-5		32.0	<0.05	0	<0.050		<0.050	-	<0.150		<0.300	<10.0		<10.0		<10.0		
		6-7		32.0	<0.05	0	<0.050		<0.050		<0.150	\square	<0.300	<10.0		<10.0		<10.0		
		7-8		48.0	<0.05	0	<0.050		<0.050		<0.150	\square	<0.300	<10.0		<10.0		<10.0		
	_	9-10		128	<0.05	0	<0.050		<0.050		<0.150		<0.300	<10.0		<10.0		<10.0		
IOTES:																				

 ft.
 Feet

 bgs
 Below ground surface

 mg/vg
 Milligarns per klogram

 TPH
 Total Petroleum Hydrocarbons

 GRO
 Gasoline range organics

 DRO
 Diseal range organics

 1
 Method 8021B

 2
 Method 8025M

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APPENDIX A C-141 Forms

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised April 3, 2017

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Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

		OPERATO	R	🛛 Initial	Report 🗌 F	inal Report
Name of Company: COG Operat	ing LLC (OGRID #)	Contact:	Robert McNeill			
Address: 600 West Illinois Av	enue, Midland TX 79701	Telephone No.	432-683-7443			
Facility Name: White Falcon 16 F	ederal Com CTB	Facility Type:	Flowline			
Surface Owner: State	Mineral Owner	: State		API No.	30-025-4393	31

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
С	16	25S	35E	226	North	2,020	West	Lea

Latitude 32.1358 Longitude -103.3732 NAD83

NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered:
Oil	6 bbl.	0 bbl.
Source of Release:	Date and Hour of Occurrence:	Date and Hour of Discovery:
Trailer Overfill	July 27, 2018 10:22pm	July 27, 2018 10:22pm
Was Immediate Notice Given?	If YES, To Whom?	
🗋 Yes 🖾 No 🖾 Not Required		
By Whom?	Date and Hour:	
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted Describe Fully *	DECEIVED	
n a watereouise was impacted, Deserve Funy.	RECEIVED	
	By CHernandez a	t 8:47 am Jul 31 2018
	By Orientanacz a	10.47 uni, oui or, 2010
Describe Cause of Problem and Remedial Action Taken.*		
The release was caused by a 3 th party driver overfilling trailer.		
Describe Area Affected and Cleanup Action Taken.*		
The release was on location A vacuum truck was dispatched to remove all	freestanding fluids. Concho will have	the spill area sampled to delineate any
possible impact from the release and we will present a remediation work p	blan to the NMOCD for approval prior	to any significant remediation activities.
I hereby certify that the information given above is true and complete to the	ne best of my knowledge and understa	nd that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release ne	otifications and perform corrective act	ions for releases which may endanger
public health or the environment. The acceptance of a C-141 report by the	e NMOCD marked as "Final Report" d	loes not relieve the operator of liability
should their operations have failed to adequately investigate and remediate	e contamination that pose a threat to g	round water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respons	ibility for compliance with any other
federal, state, or local laws and/or regulations.		
	<u>OIL CONSERV</u>	ATION DIVISION
Signature: Down Owner		γ_{1}
	Annuousd by Environmental Specialia	
Printed Name: DeAnn Grant	Approved by Environmental Specialis	t. 🕑 🖸
	7/21/2019	
Title: HSE Administrative Assistant	Approval Date: 7/31/2010	Expiration Date:
E-mail Address: agrant@concho.com	Conditions of Approval:	Attached M
Deter July 20, 2019 Disease 422, 252, 4512	See attached directive	
Date: July 30, 2018 Phone: 432-253-4513	L	
Auach Additional Sheets II Necessary		
	1RP-5137	nCH1821232087
		L

pCH1821232420

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _7/31/2018/_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5137__ has been assigned. Please refer to this case number in all future correspondence.

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete <u>division-approved corrective action</u> for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _8/31/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

• Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

• Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

• Nominal detection limits for field and laboratory analyses must be provided.

• Composite sampling is not generally allowed.

• Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us Received by OCD: 4/18/2023 8:58:14 AM Form C-141 State of New Mexico

Oil Conservation Division

	Page 18 of 5
Incident ID	nCH1821232087
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>50</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🗸 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🖌 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🖌 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🖌 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🖌 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🖌 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🖌 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🖌 No
Are the lateral extents of the release within a 100-year floodplain?	□ Yes 🗸 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🗸 No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
 Field data
- Data table of soil contaminant concentration data
- \checkmark 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.

Page 3

Received by OCD: 4/18/202	23 8:58:14 AM			Page 19 of
TOIIII C-141			Incident ID	nCH1821232087
Page 4	Oil Conservation Divi	sion	District RP	
			Facility ID	
			Application ID	
regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance o and/or regulations. Printed Name: <u>Moises H.</u> Signature: <u>Moises F</u> email: <u>Moises.H.CantuGa</u>	Ination given above is the and complete required to report and/or file certain relea nent. The acceptance of a C-141 report b ate and remediate contamination that pos f a C-141 report does not relieve the oper Cantu Garcia I Cantu Garcia rcia@conocophillips.com	Title: Sr. Environm Date: 4/17/202 Telephone: 432-685	and understand that put corrective actions for rel ne operator of liability sl face water, human health pliance with any other for ental Engineer 23	eases which may endanger nould their operations have n or the environment. In ederal, state, or local laws
OCD Only Received by: Jocely	n Harimon	Date:0	4/18/2023	

Page 6

Oil Conservation Division

Incident ID	nCH1821232087
District RP	
Facility ID	
Application ID	

Page 20 of 57

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: Moises H. Cantu Garcia Title: Sr. Environmental Engineer Signature: Moises H Cantu Garcia Date: 4/17/2023 email: Moises.H.CantuGarcia@conocophillips.com Telephone: 432-688-6090 **OCD Only** Jocelyn Harimon Received by: Date: 04/18/2023 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: Buttan Hall	Date: <u>6/5/2023</u>
Printed Name: Brittany Hall	Title: Environmental Specialist

APPENDIX B Regulatory Correspondence

Poole, Nicholas

From:	OCDOnline@state.nm.us
Sent:	Wednesday, November 30, 2022 11:41 AM
То:	Beauvais, Charles R
Subject:	[EXTERNAL]The Oil Conservation Division (OCD) has rejected the application, Application ID: 162514

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o Charles Beauvais for COG OPERATING LLC),

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nCH1821232087, for the following reasons:

- The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.
- Horizontal delineation submitted was incomplete and did not meet the requirements of 19.15.29.11 NMAC. The values for determination of horizontal impact are derived by either approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for "on-pad" releases to ensure the release did not extend to the "off-pad"/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation.
- Applicable pages from C-141 are not included.
- Siting/ranking criteria appear to be a mixture of the old rules and the new rules.
- 1RP-5137 closed. Please refer to incident #NCH1821232087 in future correspondence.
- Please submit a complete report through the OCD Permitting website by 3/3/2023.

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 162514. Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

Thank you, Brittany Hall Projects Environmental Specialist - A 505-517-5333 Brittany.Hall@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive Santa Fe, NM 87505

Poole, Nicholas

From: Sent:	Hall, Brittany, EMNRD <brittany.hall@emnrd.nm.gov> Tuesday, February 28, 2023 9:43 AM</brittany.hall@emnrd.nm.gov>
To:	Abbott, Sam
Cc: Subject:	RE: [EXTERNAL] Extension Request - Application ID 162514 (Incident ID nCH1821232087)

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

Sam,

Your extension request for nCH1821232087 is approved. The new due date is June 3, 2023.

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.

Thank you, **Brittany Hall** • Environmental Specialist Environmental Bureau Projects Group EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87110 505.517.5333 | <u>Brittany.Hall@emnrd.nm.gov</u> http://www.emnrd.nm.gov/ocd/

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Tuesday, February 28, 2023 7:51 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>; Llull, Christian <Christian.Llull@tetratech.com>;
Chavira, Lisbeth <LISBETH.CHAVIRA@tetratech.com>
Subject: [EXTERNAL] Extension Request - Application ID 162514 (Incident ID nCH1821232087)

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

Ms. Hall:

On behalf of ConocoPhillips, Tetra Tech is requesting a 90-day extension (until June 3, 2023) to complete additional assessment activities and associated reporting for the White Falcon 16 Federal Release site (**nCH1821232087**).

ConocoPhillips recently received a large volume of NMOCD determinations related to unresolved releases from ConocoPhillips' predecessor-in-interest ("COG") via the *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF) process.

Given the difficulties inherent with available resource allocation for several projects with similar deadlines within a short period of time, this extension is required to safely complete the additional assessment. ConocoPhillips plans to conduct the additional assessment in the coming month however, and once the sampling data is collected, tabulated, and evaluated, a revised report will be submitted to the OCD.

Please let me know if you have any questions or concerns.

Sam

Samantha Abbott, PG | Project Manager

Direct Mobile +1 (512) 739-7874 | Business +1 (512) 338-1667 | Sam.Abbott@tetratech.com

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8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetratech.com

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F 💟 in 🔟 Please consider the environment before printing. <u>Read more</u>



APPENDIX C Site Characterization



NM OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division NN OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division NN OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division NN OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division NN OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division NN OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division Division NN OCD Oil and Gas Map. http://mn-emnid.maps.arcgis.com/apps/webappviewer/Index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division Divisi



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)	1,	(quai (quai	rters	s ai s ai	re 1: re sr	=NW 2 malles	2=NE (st to lar	3=SW 4=SE gest) (N	:) AD83 UTM in me	eters)	(In feet)	
POD Number	POD Sub- Code basin (Count	Q y 64	Q 16	Q 4	Sec	Tws	Rng	x	Y	Distance	Depth Well	Depth Water	Water Column
C 02298	CUB	LE	2	2	1	21	25S	35E	653484	3555216 🌍	1429	250	205	45
<u>C 02297</u>	CUB	LE	2	2	1	21	25S	35E	653475	3555216 🌍	1430	300	230	70
<u>C 02296</u>	CUB	LE	3	4	2	18	25S	35E	650846	3556088 🌍	2667	300	230	70
<u>C 02388</u>	CUB	LE			3	05	25S	35E	651467	3558832* 🌍	2954	180	165	15
CP 00624	CP	LE	4	1	1	11	25S	35E	656206	3558197* 🌍	3159	510		
<u>C 02299</u>	CUB	LE	4	2	4	24	25S	34E	649517	3554125 🌍	4674	350	300	50
<u>C 02401</u>	CUB	LE	2	2	1	01	25S	34E	648534	3559896* 🌍	5896	275	260	15
CP 01305 POD1	CP	LE		1	4	31	25S	37E	655628	3551065 🌍	5989	420	230	190
										Avera	ge Depth to	Water:	231	feet
											Minimum	Depth:	165	feet
											Maximum	Depth:	300	feet
Record Count: 8				=		_								

UTMNAD83 Radius Search (in meters):

Easting (X): 653453.94

Northing (Y): 3556645.95

Radius: 6000

*UTM location was derived from PLSS - see Help

Released to Imaging: 6/5/2023 1:41:53 PM

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

3/31/23 2:08 PM

Page 28 of 57

212C	-MD	0-02990		Ŀ	ETR/	A TEC	сн				LOG OF BORING White Falcon 16 Fed Com #021H DTW	Page 1 of 1
Proiect	t Na	me: Cors	sair Sta	ite #	0021	4				[
, Soreho	ole I	ocationGPS	Coordin	ates:	32 13	35490	° -103	3737	'33°		Surface Elevation: 3245 ft	
Boreho		Number:Wh	ite Falco	on 16	6 Fed	Com	, 100 n #02 ⁻	1H D	TWE	Boreh	ble Bolte Started: Date Finished	: 3/3/2023
										lame		
				(%)	(%)						While Drilling V DRY ft Upon Completion of Drilling V D	RY_ft
		Q m	(mq	RY (9	ENT (DEX			Remarks:	
DEPTH (ft)	OPERATION TYPE	SAMPLE CHLORIDE FIEL SCREENING (pl	UNC FIELD	SAMPLE RECOVE	MOISTURE CONTE	DRY DENSITY (pcf		D PLASTICITY IN	MINUS NO. 200 (%	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS
=											-SM- SAND: Brown to dark brown, loose, dry,	
\exists											-SP- SAND: Brown, loose, dry, very fine- to	
5											fine-grained, partially cemented	
											-SP- SAND: Pale brown, loose, fine- to	
10-()											caliche	
={											very fine- to fine-grained, trace caliche	
5											-SP- SAND: Brown, loose, fine- to	
											coarse-grained, dry, trace gravel	
											19	
											-SM- SAND: Brown, loose, dry, very fine- to	
=												
25											-SM- SILTY SAND: Light brown to brown, loose,	
=											ary, very fine-grained	
30-)											-SM- SILTY SAND: Light brown, loose, dry, very	
											fine-grained	
35												
$\tilde{=}$												
=												
10												
<u>15</u>												
50-7											Transitions to Yellowish brown	
\exists												
]>												
<u>55</u>	ΔĘ										Bottom of borehole at 55.0 feet.	
ampl	er	Split		cetat	e Line	r G	Opera	tion			Hand Auger Notes:	
ypes:	•	Shelby		/ane (Shear		ypes	Muo	d	\square	□	ed from
		Bulk		Discre	te				ary ntinuou:	s 📕	└┘ ´ Google Earth data. ∎ Direct Push	
		Sample M Grab		Sample	e :+			∃ Flig] Wa	nt Auge sh	er 🔳		
		Sample		est P	ıt		1] Rot	ary	\Box		

 Logger:
 Colton Bickerstaff
 Drilling Equipment: Air Rotary
 Driller:
 Scarborough Drilling

 WHITE FALCON 16 FED COM/24HDTW CP1: 47-23
 TT AUSTIN_GEOTECH_NOWELL3 ' 2015 TT TEMPLATE DECEMBER WELL.GDT' '
 Released to Imaging: 0/5/2023 1:41:53
 TM
 PM

APPENDIX D Photographic Documentation













APPENDIX E Laboratory Analytical Data



March 08, 2023

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

RE: WHITE FALCON 16 FEDERAL COM #021H

Enclosed are the results of analyses for samples received by the laboratory on 03/06/23 8:00.

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.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 1 (0-1') (H230995-01)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	6 71.5-13	4						
Chloride, SM4500Cl-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	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/06/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/06/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/06/2023	ND					
Surrogate: 1-Chlorooctane	100 %	<i>6 48.2-13</i>	4						
Surrogate: 1-Chlorooctadecane	110 %	6 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 2 (0-1') (H230995-02)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/06/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	50.3	10.0	03/06/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/06/2023	ND					
Surrogate: 1-Chlorooctane	87.3 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.69	49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 3 (0-1') (H230995-03)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 %	% 71.5-13	4						
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	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/06/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	10.5	10.0	03/06/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/06/2023	ND					
Surrogate: 1-Chlorooctane	79.9 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	85.2 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 4 (0-1') (H230995-04)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	% 71.5-13	4						
Chloride, SM4500Cl-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	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/06/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	19.9	10.0	03/06/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/06/2023	ND					
Surrogate: 1-Chlorooctane	72.5 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	75.7 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 5 (0-1') (H230995-05)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 %	71.5-13	4						
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	03/06/2023	ND	400	100	400	7.69	
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	03/06/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/06/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/06/2023	ND					
Surrogate: 1-Chlorooctane	87.0 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.0 9	49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 6 (0-1') (H230995-06)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	6 71.5-13	4						
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	03/06/2023	ND	400	100	400	7.69	
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	03/06/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	14.1	10.0	03/06/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/06/2023	ND					
Surrogate: 1-Chlorooctane	82.0	48.2-13	4						
Surrogate: 1-Chlorooctadecane	87.5	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (0-1') (H230995-07)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 %	6 71.5-13	4						
Chloride, SM4500Cl-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	03/06/2023	ND	400	100	400	7.69	
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	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	87.3 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.5 9	49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (2'-3') (H230995-08)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	6 71.5-13	4						
Chloride, SM4500Cl-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	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	90.3 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.0 %	49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (3'-4') (H230995-09)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	6 71.5-13	4						
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	03/06/2023	ND	400	100	400	7.69	
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	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	89.5 %	48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.2 %	49.1-14	8						

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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (4'-5') (H230995-10)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	89.0 %	48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.1 %	49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (6'-7') (H230995-11)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	70.8 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	74.6 %	<i>49.1-14</i>	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (7'-8') (H230995-12)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	78.1 %	48.2-13	4						
Surrogate: 1-Chlorooctadecane	81.0 %	49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/06/2023	Sampling Date:	03/03/2023
Reported:	03/08/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: BH - 23 - 1 (9'-10') (H230995-13)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/06/2023	ND	1.99	99.4	2.00	0.789	
Toluene*	<0.050	0.050	03/06/2023	ND	2.04	102	2.00	3.33	
Ethylbenzene*	<0.050	0.050	03/06/2023	ND	2.05	103	2.00	3.62	
Total Xylenes*	<0.150	0.150	03/06/2023	ND	6.19	103	6.00	2.67	
Total BTEX	<0.300	0.300	03/06/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/06/2023	ND	400	100	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/07/2023	ND	200	99.8	200	4.83	
DRO >C10-C28*	<10.0	10.0	03/07/2023	ND	200	100	200	8.96	
EXT DRO >C28-C36	<10.0	10.0	03/07/2023	ND					
Surrogate: 1-Chlorooctane	76.5 %	6 48.2-13	4						
Surrogate: 1-Chlorooctadecane	80.3 %	6 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Sampler - UPS - Bus - Ouher:	Delivered By: (Circle One)		Relinguished By:		Relinquished By: Colton Bio		event shall Cardinal be liable for incidental or con affiliates or successors arising out of or related to	DI EASE NOTE: Liability and Damages. Cardinal's lia	BH-23-1	G BH-23-1	BH-23-1	7 BH-23-1	6 AH-23-6	AH-23-5	AH-23-4	2 AH-23-3	AH-23-2	AH-23-1 (tascers		Lab I.D.		Sampler Name: Colton Bicker	Project Location: Lea County	Project Name: White Falcon 1	Project #: 212C-MD-0:	Phone #: (512)565-01	City: Austin	Address: 8911 Capital o Texas	Project Manager: Christian Ll	Company Name: Tetra Tech	10
	Observed Temp. °C	Time:	Date:	Time:0700	Kerstan	1	sequental damages, including without limitation, busin o the performance of services hereunder by Cardinal, n	ability and client's exclusive remedy for any claim arising whe	(4'-5')	(3'-4')	(2'-3')	(0-1')	(0-1')	(0-1')	(0-1')	(0-1')	(0-1')	(0-1')		Sample I.D.			rstaff	, New Mexico	6 Federal Com #021H	2987 Project Owner:	90 Fax #:	State: TX	s Hwy, Suite 2310	ull		1 East Marland, Hobbs, NM 8 575) 393-2326 FAX (575) 393-
A. Dave	Sample Con		Received By:	o SAR		Received Rv:	ness interruptions, loss of use, or loss of prot regardless of whether such claim is based up	ether based in contract or tort, shall be limited to	G 1 X	G 1 X	G 1 X	G 1 X	G 1 X	G 1 X	G 1 X	G 1 X	G 1 X	G 1 X	(() # G × S 0	G)RAB OR (C)OM CONTAINERS GROUNDWATER VASTEWATER GOIL	1P.	MATRIX				ConocoPhill		Zip:	!			-2476
R	dition CHECKED BY:		-	MUN INN	n n n n n		its incurred by client, as success or otherwis pon any of the above stated reasons or otherwis	the amount paid by the client for the analyses. All	X 3/3/200	X 3/3/200	X 3/3/200	X 3/3/200	X 3/3/202	X 3/3/202	X 3/3/202	X 3/3/202	X 3/3/202	X 3/3/202	S O A Z O	DTHER : ACID/BASE: CE / COOL DTHER :		PRESERV. SA	Fax #:	Phone #:	State: Lip.	ips City:	Address: EMAIL	Ault: Cillisuali Liui	Company: Terra Terri	P.U. #:	BILL TO	
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† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

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FORM-006 R 3.2 10/07/21

aboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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06 R 3.2 10/07/21	bus - Other:				: Colton Bickerstaff	for incidental or consequental damages g out of or related to the performance of	amages. Cardinal's liability and client's excl							BH-23-1 (9'-10')	BH-23-1 (7'-8')	BH-23-1 (6'-7')		Sample		olton Bickerstaff	Lea County, New Mexic	ite Falcon 16 Federal C	212C-MD-02987 P	(512)565-0190 F		oital o Texas Hwy, Suite	Christian Llull	etra Tech	101 East Mari (575) 393-23	aborato	ARDIN
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Page 17 of 17



March 22, 2023

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

RE: WHITE FALCON 16 FEDERAL COM #021H

Enclosed are the results of analyses for samples received by the laboratory on 03/20/23 12:48.

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.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/22/2023	Sampling Type:	Soil
Project Name:	WHITE FALCON 16 FEDERAL COM #021	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02987	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: AH - 23 - 7 (0-1') (H231241-01)

BTEX 8021B	mg/	'kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2023	ND	2.03	102	2.00	1.54	
Toluene*	<0.050	0.050	03/21/2023	ND	2.07	104	2.00	2.77	
Ethylbenzene*	<0.050	0.050	03/21/2023	ND	2.10	105	2.00	1.31	
Total Xylenes*	<0.150	0.150	03/21/2023	ND	6.36	106	6.00	1.10	
Total BTEX	<0.300	0.300	03/21/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	rrogate: 4-Bromofluorobenzene (PID 108 % 71.5-13		4						
Chloride, SM4500Cl-B	kg	Analyze	d By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/21/2023	ND	416	104	400	3.92	
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	03/21/2023	ND	198	99.1	200	0.228	
DRO >C10-C28*	<10.0	10.0	03/21/2023	ND	187	93.3	200	1.89	
EXT DRO >C28-C36	<10.0	10.0	03/21/2023	ND					
Surrogate: 1-Chlorooctane	89.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.6	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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 SM4500CI-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

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

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District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	208640
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	d Condition	Condition Date
bhall	Closure approved. Site will need to meet the requirements of 19.15.29.13 NMAC at time of plugging and abandonment or when the site is no longer needed for oil and gas operations, whichever comes first.	6/5/2023

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Action 208640