



August 18, 2023

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

**Re: REVISED Release Characterization and Remediation Work Plan
ConocoPhillips
Heritage Concho
Lychee BWS State Com #001H Release
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico
Incident ID nOY1815234060**

Ms. Hall:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (COPC) to assess a historical release that occurred from the Lychee BWS State Com #001H Release (API # 30-025-42445). The approximate release site coordinates are 32.457433°, -103.456074°, located in the Public Land Survey System (PLSS) Unit Letter O, Section 22, Township 21 South, Range 34 East, Lea County, New Mexico (Site). The Site location is shown on Figures 1 and 2. The site is located on state lands managed by the New Mexico State Land Office (NMSLO).

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report (Appendix A), the release was discovered on May 26, 2018. The release occurred due to a water dump valve eroding allowing fluid to form a hole in the liner. Approximately 200 barrels (bbls) of produced water and 20 bbls of oil were released, of which 105 bbls of produced water and 15 bbls of oil were recovered. The NMOCD received the initial C-141 on June 1, 2018, and subsequently assigned the release the Remediation Permit (RP) 1RP-5077 and the Incident ID nOY1815234060.

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.

According to the NMOSE reporting system, there are no water wells within ½ mile (800 meters) of the Site. There are two (2) wells within 1.05 miles (1,695 meters) of the Site with an average depth to groundwater of 140 feet below ground surface (bgs). There is one (1) USGS groundwater monitoring well located within 0.6 miles of the Site with a depth to groundwater of 774.99 feet bgs.

Due to the limit of groundwater monitoring wells within 800 meters of the site, a licensed well drilling subcontractor was onsite on July 19, 2023, to drill a groundwater determination borehole (DTW-1) to 55 feet bgs at the southeastern edge of the Lychee BWS State Com #001H lease pad, located approximately

Tetra Tech

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

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com

315 feet east of the approximate release point. The borehole location is indicated on Figure 5. The borehole was temporarily set and screened using 2-inch PVC well materials: 20 feet of blank casing and 35 feet of 0.010" 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, boring log, and temporary well diagram are presented in Appendix B.

REGULATORY FRAMEWORK

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

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

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

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

Constituent	Reclamation Requirement
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg

INITIAL ASSESSMENT AND BBC WORK PLAN

Based on information provided by ConocoPhillips, BBC International Incorporated (BBC) was initially contracted to mobilize to the release Site, map the extent and sample the release footprint and the surrounding vicinity. Based on the initial extent provided by BBC, the release area footprint was mapped as approximately 4,800 square feet of lease pad and pastureland.

On July 6 and 9, 2018, BBC installed eight (8) borings (SP-1 through SP-8) within the release footprint to a maximum depth of 3 ft bgs. Eight borings were completed (North, East, South, West, North 2, East 2, South 2, West 2) in the cardinal directions to establish horizontal delineation. Additionally, BBC installed three (3) borings (SP1 through SP3) within the lined area to a depth of 2 feet bgs on December 5, 2018. Boring locations from the July and December 2018 sampling event are shown on Figure 3.

A total of forty-nine (49) samples were collected from the sample locations and transferred under chain of custody by Cardinal Laboratories (Cardinal). All soil samples were analyzed for chloride via Method SM4500Cl-B. Selected samples were analyzed for TPH via Method 8015 Modified and BTEX via Method 8021B.

Based on the results of the July and December 2018 sampling events, BBC prepared a Delineation Work Plan. This work plan proposed to remediate areas in the pastureland to the west to a depth of 1.5 feet bgs and the lease pad area to the east to a depth of 2.5 feet bgs. Sidewall and bottom confirmation samples

were proposed to be collected at no greater than 50-foot intervals within the excavated areas. The estimated volume of material proposed to be remediated was approximately 80 cubic yards. As part of the work plan, BBC requested that the area inside the lined facility be deferred until decommissioning of the facility. Photographic documentation was not provided in the Delineation Workplan.

The Delineation Workplan completed by BBC was submitted to NMOCD through CentreStack by COG in 2018. Via the Internal Manual Incident File Supporting Documentation (ENV) (IM-BNF) review by NMOCD, the Delineation Workplan was approved by Brittany Hall via email on Monday November 28, 2022, with the following comments:

- *Remediation plan approved with the condition that the remediation meets 19.15.29.12 and 19.15.29.13 NMAC.*
- *Lined facility area deferral request is denied. Delineation, both vertically and horizontally, in this area is incomplete. Delineation vertically and horizontally must be completed to the most stringent standards of Table I in 19.15.29.12 NMAC.*
- *1RP-5077 closed. Refer to incident #nOY1815234060 in all future communications.*
- *Submit a complete closure and deferral report through the OCD Permitting website by 3/3/2023.*

A 90-day extension request to June 3, 2023, was approved in an email dated March 22, 2023. Figure 3 shows the initial release extent and the 2018 soil boring locations as depicted in the BBC Workplan.

A copy of the BBC Delineation Work Plan along with the associated laboratory analytical data is included in Appendix C. Regulatory correspondence is also included in Appendix C.

ADDITIONAL ASSESSMENT ACTIVITIES AND SAMPLING RESULTS

Based on the lapse of time, Tetra Tech was contracted by COP to conduct additional assessment activities at the site prior to the NMOCD approval. In September 2022, Tetra Tech personnel conducted a site visit on behalf of ConocoPhillips. No obvious signs of staining nor residual impact on the lease pad and the adjacent pastureland were observed. Photographic documentation of the visual Site inspection is included in Appendix D.

In October 2022, Tetra Tech personnel returned to the Site to conduct a soil sampling event to determine if the site remained impacted at concentrations noted by BBC. Twenty-five (25) borings (AH-22-1 through AH-22-25) were installed using a hand auger within and around the release extent to depths ranging from 1 to 3 feet bgs to confirm vertical and horizontal delineation, as depicted in Figure 4. No sampling was conducted in the interior of the lined containment as it would destroy the liner integrity. Thus, no discrete samples were collected.

A total of twenty-eight (28) samples were collected from the twenty-five (25) borings and submitted to Cardinal Laboratories to be analyzed for chlorides via EPA Method 4500.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Results from the October 2022 soil sampling event are summarized in Table 2. The analytical results associated with interior boring locations AH-22-14, AH-22-15, AH-22-16 and AH-22-19 exceeded the reclamation requirement for TPH (100 mg/kg) in surface soils (0-4 feet bgs) outside of active oil and gas operations. In addition, AH-22-19 exceeded the reclamation requirements for chloride (600 mg/kg). All other analytical results from the October 2022 sampling event were below Site RRALs and reclamation requirements in surface soils outside of active oil and gas operations.

Results of the additional assessment indicated that the release footprint provided by BBC no longer appears to reflect current site conditions. This discrepancy, given the age of the release, may be due to rain, sheet flow and/or natural attenuation which has condensed the release footprint over time. The release extent observed by Tetra Tech is presented in Figures 4 and 5.

REMEDIATION WORK PLAN

Based on the analytical results from the additional assessment, impacted material within the release extent is proposed to be removed as indicated in Figure 6. Impacted soils will be excavated to a maximum depth of 1 and 3 feet below ground surface or until a representative sample from the walls and bottom of the excavation is below the Site RRALs and/or reclamation requirements for surface soils (0-4 feet bgs) outside of active oil and gas operations. Heavy equipment (backhoe and trackhoe) will be utilized to excavate areas outside the immediate vicinity of pressurized lines and will come no more than 4 feet from any pressurized lines. Impacted soils within the vicinity of the surface and subsurface lines will be dug by hand to the maximum extent practicable. Prior to inception of remedial activities, a request for approval of this Remediation Work Plan will be sent via email to the New Mexico State Land Office (NMSLO).

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. In accordance with Subsection D of 19.15.29.12 NMAC, the responsible party will notify the appropriate division district office prior to conducting confirmation sampling. The estimated volume of material to be remediated is approximately 140 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. Approximately four (4) confirmation floor samples and four (4) confirmation sidewall samples are proposed for verification of remedial activities in the proposed excavation area. The proposed excavation encompasses an area of approximately 2,382 square feet. These confirmation sidewall and floor samples will be representative of no more than approximately 400 square feet of excavated area. Confirmation samples will be sent to an accredited laboratory for analysis of TPH, BTEX, and chloride. Once results are received, NMOCD will be notified, and the excavation will then be backfilled with clean material to surface grade.

SITE RECLAMATION AND RESTORATION PLAN

The backfilled areas in the adjacent pasture will be seeded in the first favorable growing season following backfilling, to aid in revegetation. Based on the soils of the site, the NMSLO Loamy Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equip with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details in corresponding pounds per live seed per acre are included in Appendix F.

DEFERRAL REQUEST

The NMOCD approval comments stated that the deferral request was denied based on incomplete vertical and horizontal delineation. However, due to maintaining the integrity of the liner and based on the proximity to oil and gas production equipment, COP respectfully requests that further remediation of soils within the lined area of the facility with TPH concentrations greater than the Site RRAL of 100 mg/kg be deferred until facility deconstruction. Any additional excavation and remediation efforts currently pose safety risks associated with excavating in close proximity to production equipment, the containment wall, and associated liner via aggressive excavation methods (i.e., backhoe/trackhoe, excavators, hydraulic hammer, etc.). A depth to groundwater boring was drilled and verified that groundwater is not present at 50 feet bgs or less and the remaining contamination does not pose a threat to freshwater, human health, or the environment.

REVISED Release Characterization and Remediation Work Plan
August 18, 2023

ConocoPhillips

CONCLUSION

Based on the current assessment activities, this Revised Release Characterization and Remediation Work Plan encompasses the most up to date site conditions and will precede the BBC Delineation Workplan. Remediation activities at the Site are proposed to begin within 90 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD. The area shall be reclaimed in accordance with 19.15.29.13 NMAC and as the Site is no longer being used for oil and gas operations. The completed C-141 forms are enclosed in Appendix A.

If you have any questions concerning the additional soil assessment or the proposed remediation activities for the Site, please call Ryan at (832) 251-5161.

Sincerely,

Tetra Tech, Inc.



Lisbeth Chavira
Staff Geoscientist



Ryan F. Carroll
Senior Project Manager

cc:
Mr. Ike Tavarez, RMR – ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Inferred Release Extent
- Figure 4 – Additional Site Assessment (Tetra Tech)
- Figure 5 – Additional Site Assessment and DTW Location
- Figure 6 – Proposed Remediation

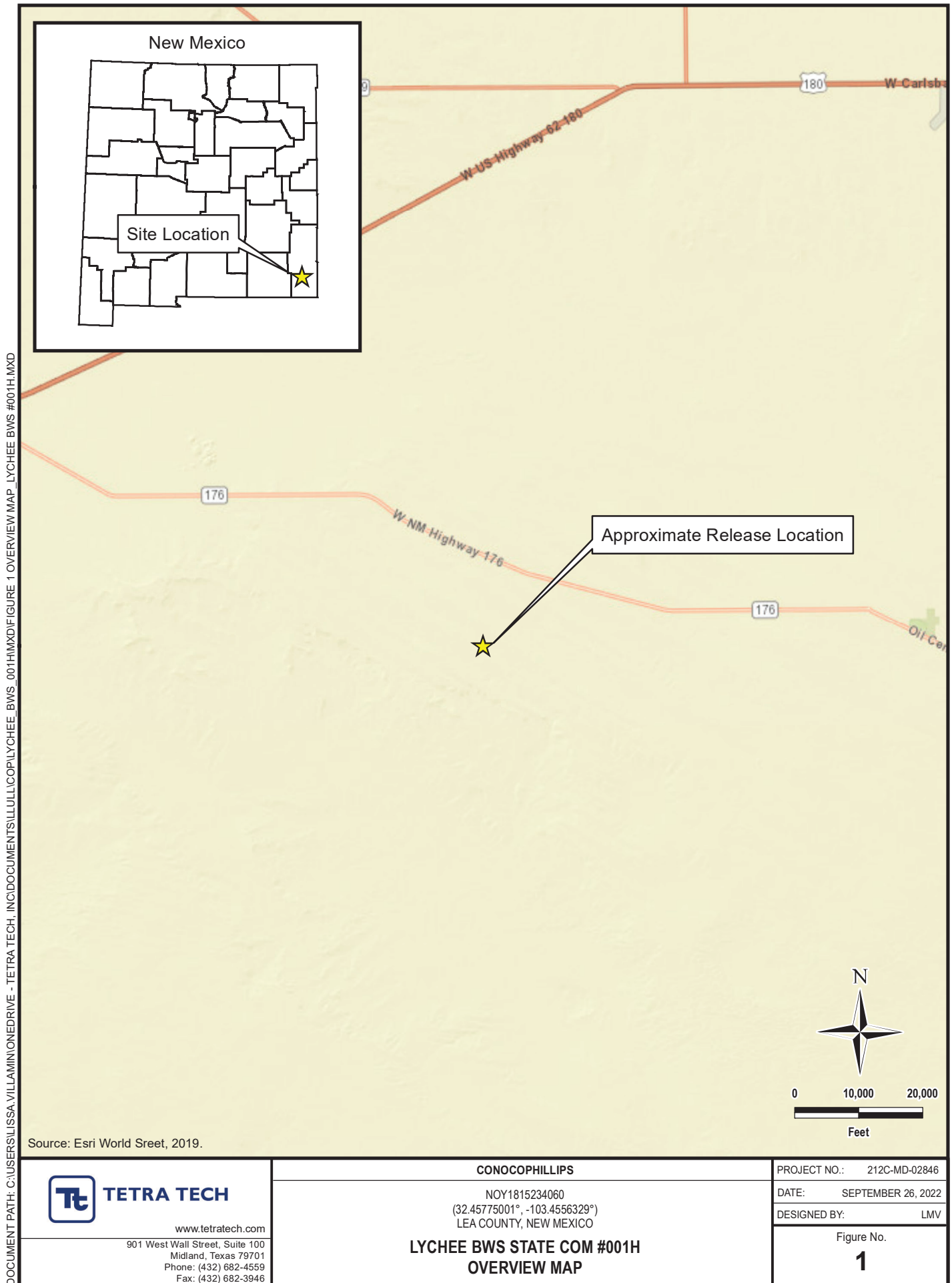
Tables:

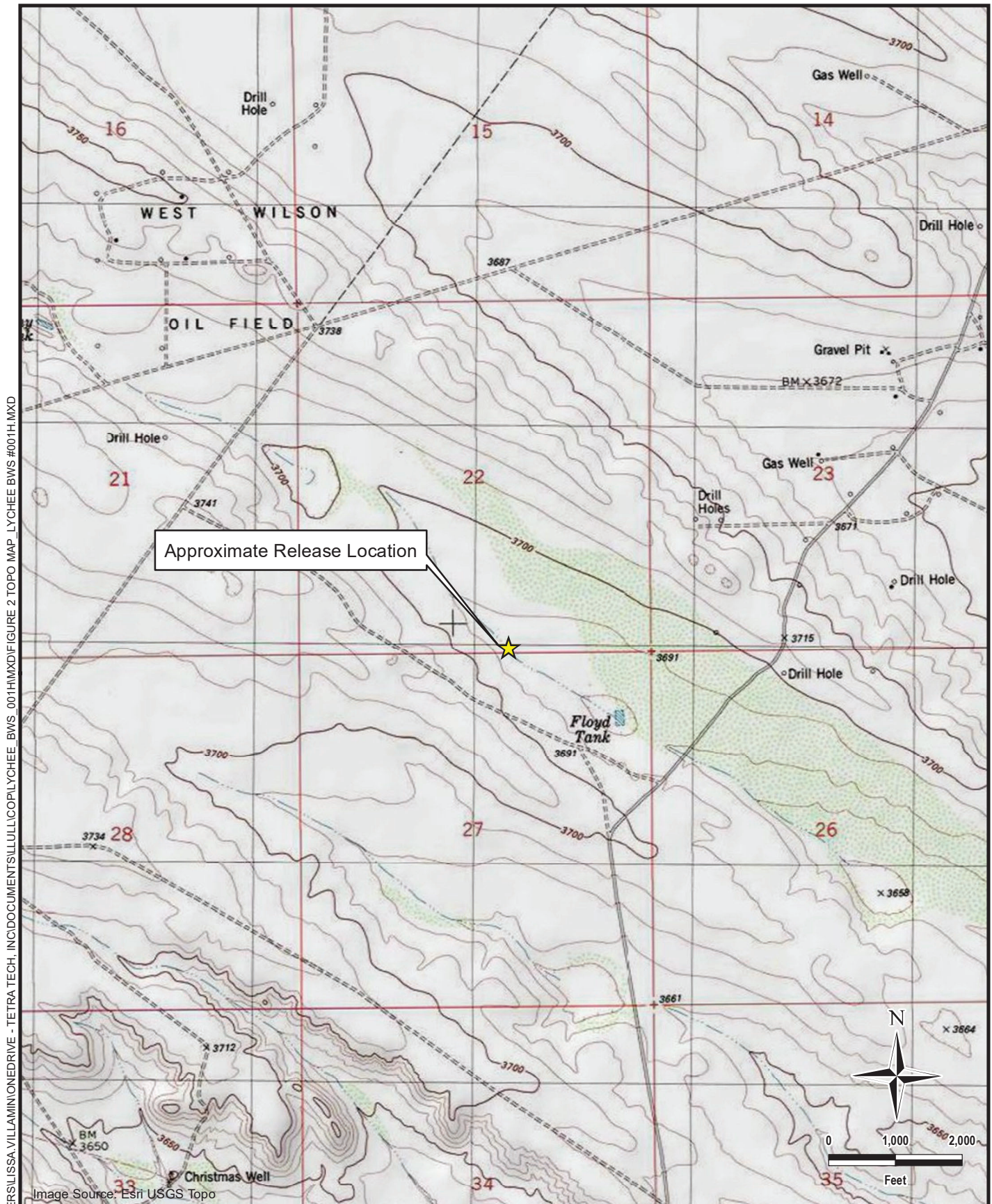
- Table 1 – Summary of Analytical Results – 2018 Soil Assessment
- Table 2 – Summary of Analytical Results – 2022 Soil Assessment

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Delineation Workplan (BBC International Incorporated, 2018) and Regulatory Correspondence
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Analytical Data
- Appendix F – Seed Mixture Details

FIGURES





TETRA TECH

www.tetrattech.com

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

CONOCOPHILLIPS

NOY1815234060
(32.45775001°, -103.4556329°)
LEA COUNTY, NEW MEXICO

**LYCHEE BWS STATE COM #001H
TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-02846

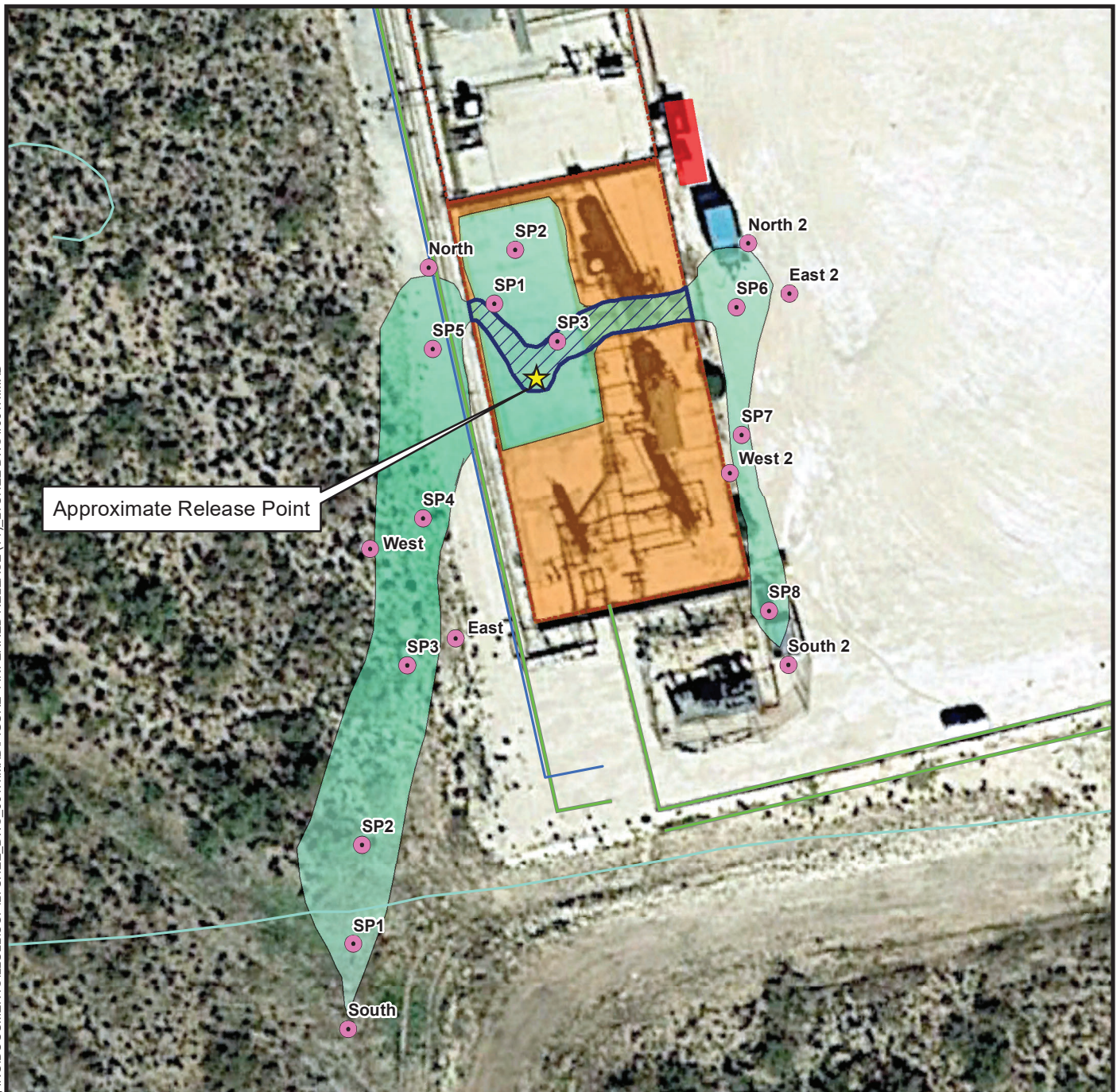
DATE: SEPTEMBER 26, 2022

DESIGNED BY: LMV

Figure No.










2

DOCUMENT PATH: C:\USERS\LISSA.VILLAMINON\DRIVE - TETRA TECH, INC\DOCUMENTS\TETRA\LYCHEE BWS_001H.MXD\FIGURE 4 INFERRED RELEASE (TT)_LYCHEE BWS #001H.MXD



Approximate Release Point

Legend

- | | |
|--|---|
|  Inferred Release Extent (Tetra Tech) |  Sample Location (BBC International) |
|  Inferred Extent Beneath Liner (Tetra Tech) |  Raised Steel Line |
|  Steel Containment Wall |  Surface Polyline |
|  Lined Area |  Surface Steel Line |
|  Electrical Panel | |

Source: Google Earth, 2017

**TETRA TECH**

www.tetrattech.com

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

CONOCOPHILLIPS

NOY1815234060
(32.45775001°, -103.4556329°)
LEA COUNTY, NEW MEXICO

**LYCHEE BWS STATE COM #001H
INFERRED RELEASE EXTENT**

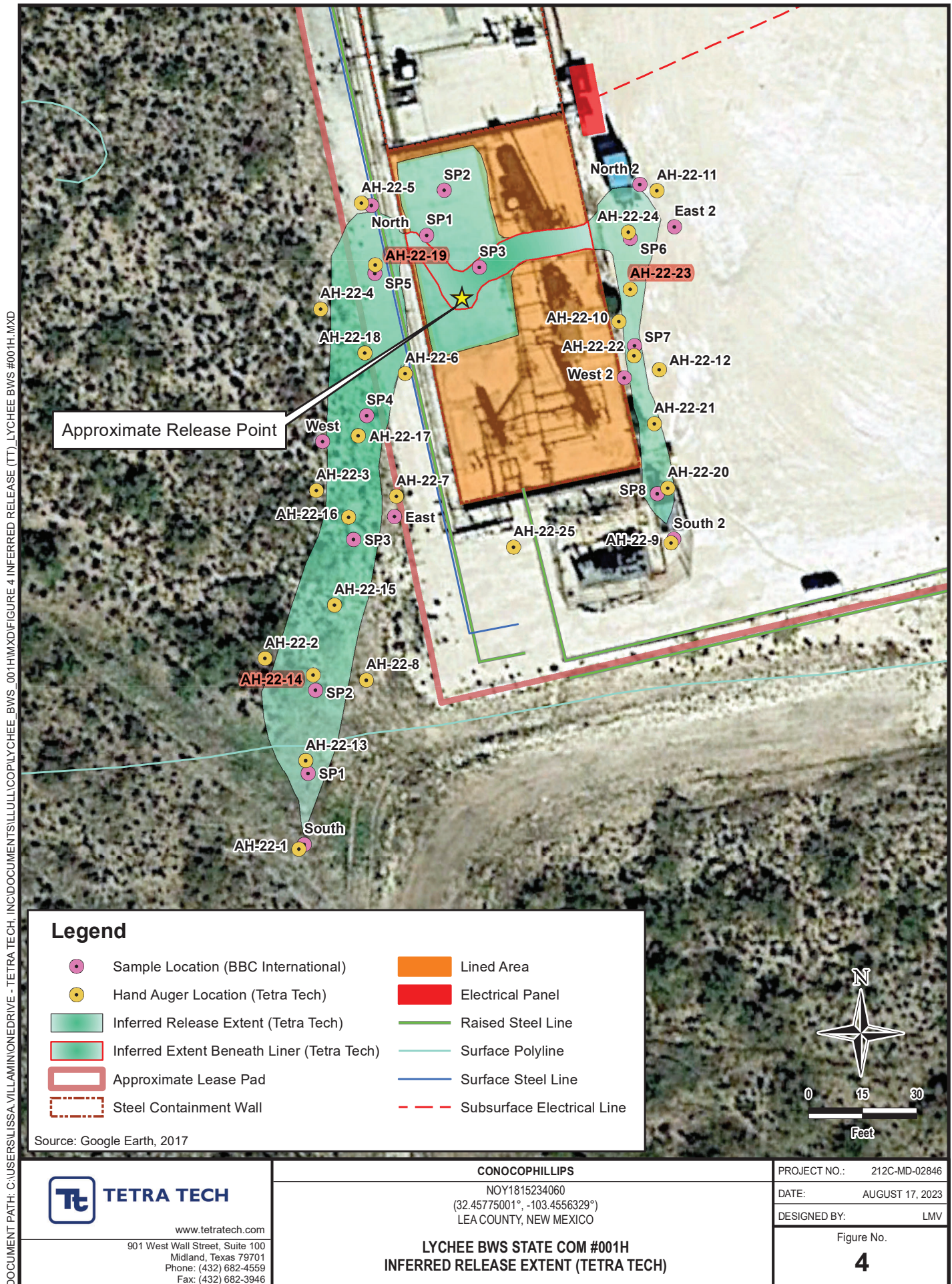
PROJECT NO.: 212C-MD-02846

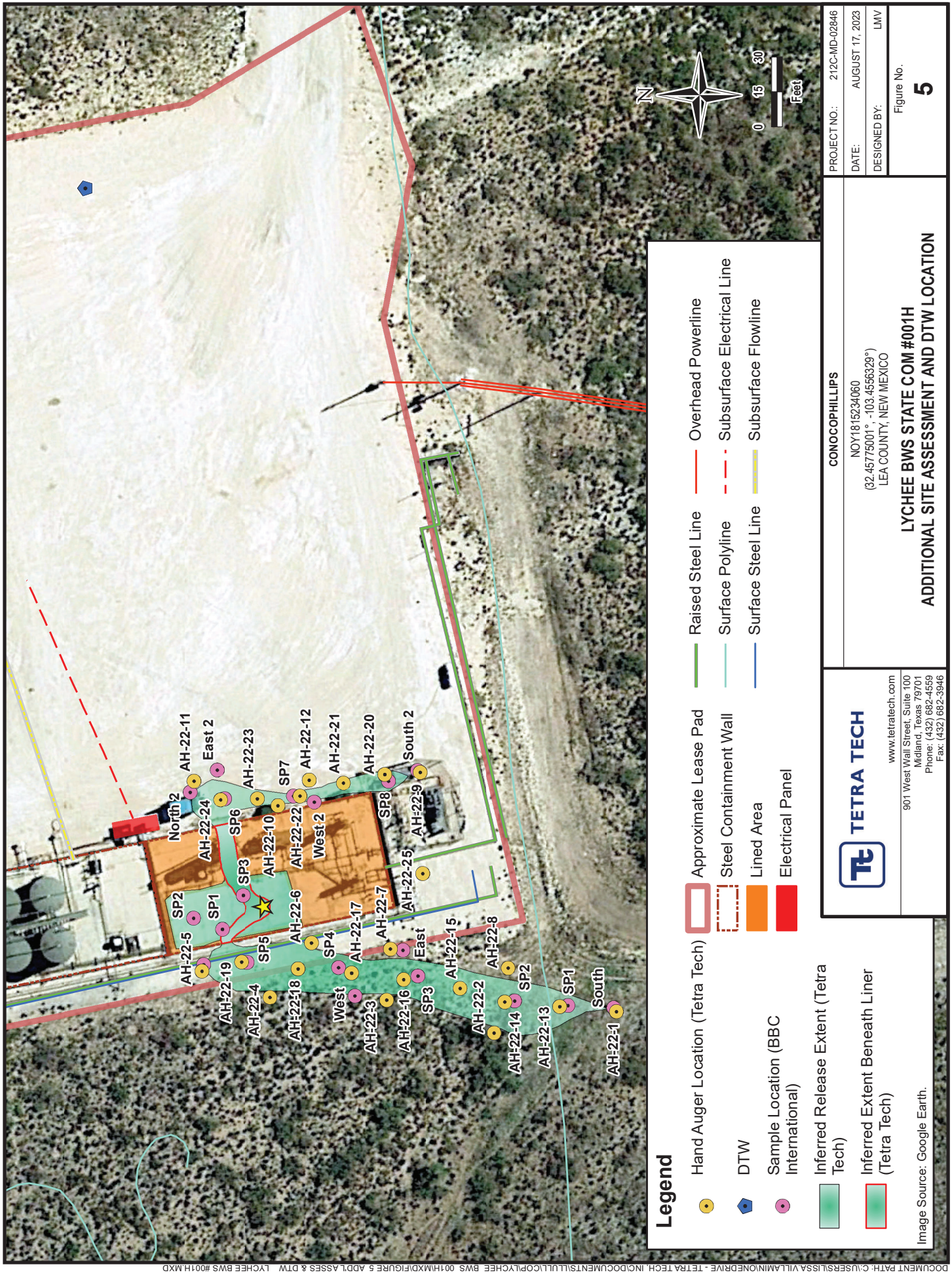
DATE: OCTOBER 05, 2022

DESIGNED BY: LMV

Figure No.

3





DOCUMENT PATH: C:\USERS\LISSA.VILLAMINIONEDRIVE - TETRA TECH\INC\DOCUMENTS\ILLULICOP\LYCHEE_BWS_001H\MXD\FIGURE 6 PROPOSED REMEDIATION_LYCHEE_BWS #001H.MXD



Legend

- | | |
|--|------------------------------|
| Boring Location - Hand Auger | Proposed Excavation - 3' BGS |
| Inferred Release Extent (Tetra Tech) | Steel Containment Wall |
| Inferred Extent Beneath Liner (Tetra Tech) | Lined Area |
| Area To Be Deferred | Electrical Panel |
| Proposed Excavation - 1' BGS | Approximate Lease Pad |
| | Raised Steel Line |
| | Surface Polyline |
| | Surface Steel Line |

*BGS: Below Ground Surface
Source: Google Earth, 2017



TETRA TECH

www.tetrattech.com

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

CONOCOPHILLIPS

NOY1815234060
(32.45775001°, -103.4556329°)
LEA COUNTY, NEW MEXICO

**LYCHEE BWS STATE COM #001H
PROPOSED REMEDIATION**

PROJECT NO.: 212C-MD-02846

DATE: AUGUST 17, 2023

DESIGNED BY: LMV

Figure No.

6

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2018 SOIL ASSESSMENT - 1RP-5077 / NOY1815234060
CONOCOPHILLIPS
LYCHEE BWS STATE COM #001H VALVE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹	BTEX ²						TPH ³											
				Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		TPH (GRO + DRO)	Total TPH (GRO-DRO-EXT DRO)
				mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q		
SP-1	7/6/2018	ft. bgs																			
		SURFACE	2,200	<0.100	0.998	4.34	1.32	6.66	187	35,000	7,650	35,187	42,837	mg/kg							
		1	96.0	<0.050	<0.050	0.350	0.175	0.526	36.9	1,470	238	1,507	1,745	mg/kg							
		2	32.0	<0.050	<0.050	<0.150	<0.050	<0.300	<10.0	<10.0	<10.0	-	-	mg/kg							
SP-2	7/6/2018	3	176	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	3,200	<0.100	0.773	3.73	0.992	5.49	148	41,100	8,990	41,248	50,090	mg/kg							
		1	128	<0.050	0.083	0.769	0.362	1.21	96.2	3,210	503	3,306	3,809	mg/kg							
		2	32.0	<0.050	<0.050	<0.150	<0.050	<0.300	<10.0	<10.0	<10.0	30.4	30.4	mg/kg							
SP-3	7/6/2018	3	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	1,920	<0.050	0.378	2.49	0.654	3.52	108	34,200	8510	34,308	42,818	mg/kg							
		1	112	<0.050	<0.050	0.62	0.246	0.866	36.3	2,330	387	2,366	2,753	mg/kg							
		2	160	<0.050	<0.050	<0.150	<0.050	<0.300	<10.0	<10.0	<10.0	20.1	20.1	mg/kg							
SP-4	7/6/2018	3	176	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	2,200	<0.100	0.846	3.55	0.926	5.12	141	42,000	9,440	42,141	51,581	mg/kg							
		1	96.0	<0.050	<0.050	0.546	0.818	61.6	389	2,400	2,462	2,462	2,851	mg/kg							
		2	32.0	<0.050	<0.050	<0.150	<0.050	<0.300	<10.0	<10.0	<10.0	29.3	29.3	mg/kg							
SP-5	7/6/2018	3	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	1,460	<0.050	0.407	2.68	0.643	3.73	129	43,700	9,720	43,829	53,549	mg/kg							
		1	96.0	<0.050	<0.050	0.647	0.305	0.953	55.4	2,460	390	2,515	2,905	mg/kg							
		2	16.0	<0.050	<0.050	<0.150	<0.050	<0.300	<10.0	<10.0	<10.0	37.8	37.8	mg/kg							
SP-6	7/9/2018	3	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	7,600	<0.100	0.988	8.56	2.12	11.7	202	17,500	3,510	17,702	21,212	mg/kg							
		1	2,200	<0.200	0.443	4.80	2.08	7.33	377	4,770	691	5,147	5,838	mg/kg							
		2	1,230	<0.050	0.061	1.43	0.380	1.87	188	1,260	188	1,325	1,513	mg/kg							
SP-7	7/9/2018	3	80.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	13,300	<0.100	1.23	7.29	1.67	10.2	150	18,000	3,580	18,150	21,730	mg/kg							
		1	2,360	<0.200	0.638	12.6	3.64	16.9	433	4,470	653	4,903	5,556	mg/kg							
		2	1,250	<0.050	<0.050	0.853	0.226	1.08	47.4	1,430	238	1,477	1,715	mg/kg							
SP-8	7/9/2018	3	96.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	15,000	<0.050	0.998	6.12	1.29	8.41	133	17,900	3,560	18,033	24,593	mg/kg							
		1	2,360	<0.050	0.526	10.5	3.21	14.2	488	5,220	740	5,708	6,448	mg/kg							
		2	1,300	<0.050	0.066	0.716	0.325	1.11	60.8	1,490	229	1,551	1,780	mg/kg							
SP-9	7/9/2018	3	96.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SURFACE	15,000	<0.050	0.998	6.12	1.29	8.41	133	17,900	3,560	18,033	24,593	mg/kg							
		1	2,360	<0.050	0.526	10.5	3.21	14.2	488	5,220	740	5,708	6,448	mg/kg							
		2	1,300	<0.050	0.066	0.716	0.325	1.11	60.8	1,490	229	1,551	1,780	mg/kg							

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2018 SOIL ASSESSMENT - 1RP-5077 / NOY1815234060
CONOCOPHILLIPS
LYCHEE BWS STATE COM #001H VALVE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth ft. bgs	Chloride ¹		BTEX ²						TPH ³					Total TPH (GRO+DRO+EXT DRO) mg/kg					
			mg/kg	Q	Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX mg/kg	GRO C _P -C ₁₀ mg/kg	DRO >C ₁₀ -C ₂₈ mg/kg		EXT DRO >C ₂₈ -C ₃₆				
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q					mg/kg	Q			
NORTH	7/9/2022	-	160		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
EAST	7/9/2022	-	128		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
SOUTH	7/9/2022	-	176		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
WEST	7/9/2022	-	128		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
NORTH 2	7/9/2022	-	80.0		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
EAST 2	7/9/2022	-	80.0		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
SOUTH 2	7/9/2022	-	112		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
WEST 2	7/9/2022	-	96.0		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		-		
SP-1	12/5/2018	SURFACE	1,040		0.237		5.36		<0.050		16.6		22.2		462		3,540		619	4,002	4,621
		1	3,000		<0.050		0.115		<0.050		0.666		0.780		22.4		379		92.7	401	494
		2	912		<0.050		0.176		<0.050		0.958		1.13		31.1		814		166	845.1	1,011
SP-2	12/5/2018	SURFACE	3,200	QM-07	<0.500		15.7		12.8		59.2		87.7		977		6,010		957	6,987	7,944
		1	3,600		2.91		60.8		45.7		121		230		1380		5,730		866	7,110	7,976
		2	2,720		<0.050		1.12		1.66		6.57		9.36		153		1,780		331	1,933	2,264
SP-3	12/5/2018	SURFACE	5,040		3.04		28.2		12.2		47.4		101		1,670		11,800		2,020	13,470	15,490
		1	3,480		0.672		23.7		21.3		88.3		134		1,240		5,510		820	6,750	7,570
		2	4,400		0.122		5.53		7.64		28.2		41.5		562		3,790		605	4,352	4,957

NOTES:

- ft. Feet
- bgs Below ground surface
- ppm Parts per million
- mg/kg Milligrams per kilogram
- NA Sample not analyzed
- GRO Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 Method SM4500C1-8
- 2 Method 8021B
- 3 Method 8015M
- QUALIFIERS:
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS
- 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.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
OCTOBER 2022 SOIL ASSESSMENT- (NOY1815234060)
CONOCOPHILLIPS
LYCHEE BWS STATE #001H VALVE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth ft. bgs	Field Screening Results	Chloride ¹ mg/kg	Benzene				Toluene				Ethylbenzene				Total Xylenes				Total BTEX				TPH ²				Total TPH (GRO-DRO+EXT DRO) mg/kg	(GRO+DRO) mg/kg
					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	Q	mg/kg	Q	mg/kg	mg/kg
AH-22-1	10/26/2022	0-1	96	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-2	10/26/2022	0-1	77.9	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-3	10/26/2022	0-1	50.6	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		58		16.5		74.5		58.0	
AH-22-4	10/26/2022	0-1	40.4	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		12.7		<10.0		12.7		12.7	
AH-22-5	10/26/2022	0-1	67.8	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-6	10/26/2022	0-1	62.6	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-7	10/26/2022	0-1	69.1	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-8	10/26/2022	0-1	90.4	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-9	10/26/2022	0-1	71.9	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-10	10/26/2022	0-1	54.7	<16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		26.9		65.0		91.9		26.9	
AH-22-11	10/26/2022	0-1	144	64.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-12	10/26/2022	0-1	293	64.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-13	10/26/2022	0-1	-	48.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-14	10/26/2022	2-3	95.7	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-15	10/26/2022	0-1	125	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		66.9		33.3		100.2		66.9	
AH-22-16	10/26/2022	0-1	-	160	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		1,890		563		2453		1,890	
AH-22-17	10/26/2022	0-1	80.0	80.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		209		85.5		294.5		209	
AH-22-18	10/26/2022	0-1	53.6	16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-19	10/26/2022	0-1	75.4	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-20	10/26/2022	0-1	-	1,140	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		14,100		3,710		17,810		14,100	
AH-22-21	10/26/2022	2-5	-	224	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		974		216		1,190		974	
AH-22-22	10/26/2022	0-1	152	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-23	10/26/2022	0-1	159	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-24	10/26/2022	0-1	358	16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-25	10/26/2022	0-1	1.44	1.630	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-26	10/26/2022	0-1	529	272	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-27	10/26/2022	2-3	183	32.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-28	10/26/2022	0-1	129	16.0	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.150		<0.300		<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 SW4500C18

2 Method 8021B

3 Method 8015M

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

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

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.

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

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating, LLC (OGRID #229137)	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-683-7443
Facility Name: Lychee BWS State Com #001H	Facility Type: Tank Battery
Surface Owner: State	Mineral Owner: State
API No. 30-025-42445	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	22	21S	34E	200	South	1,980	East	Lea

Latitude 32.45775001 Longitude -103.4556329 NAD83

NATURE OF RELEASE

Type of Release Oil & Produced Water	Volume of Release 20 bbl. – Oil 200 bbl. – Produced Water	Volume Recovered 15 bbl. – Oil 105 bbl. – Produced Water
Source of Release Valve Erosion	Date and Hour of Occurrence May 26, 2018 6:30am	Date and Hour of Discovery May 26, 2018 6:30am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu – NMOCD Ryan Mann – SLO	
By Whom? Dakota Neel	Date and Hour May 26, 2018 10:58pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

By Olivia Yu at 9:24 am, Jun 01, 2018

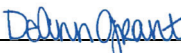

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by the water dump valve eroding allowing fluid to form a hole in the liner. The dump valve is being replaced and the oil dump is being inspected for damage.

Describe Area Affected and Cleanup Action Taken.*

The release was in the lined facility, on location and in the pasture. 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 plan 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 best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: DeAnn Grant		Approved by Environmental Specialist: 	
Title: HSE Administrative Assistant	Approval Date: 6/1/2018	Expiration Date:	
E-mail Address: agrant@concho.com	Conditions of Approval: See attached directive.	Attached <input checked="" type="checkbox"/>	
Date: May 29, 2018	Phone: (432) 253-4513		

* Attach Additional Sheets If Necessary

nOY1815234060

pOY1815234776

1RP-5077

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/26/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5077_ 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 division-approved corrective action 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 7/1/2018__. 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

From: Dakota Neel
To: [Ryan Mann](#); [Yu, Olivia, EMNRD](#)
Cc: [Sheldon Hitchcock](#); [Rebecca Haskell](#); [Robert McNeill](#); [DeAnn Grant](#); [Billings, Bradford, EMNRD](#)
Subject: (Notification) LYCHEE BWS STATE COM #001H (30-025-42445) 5-26-18
Date: Saturday, May 26, 2018 10:57:58 PM

Ms. Yu/Mr. Mann,

COG Operating LLC is reporting a release from the LYCHEE BWS STATE COM #001H (30-025-42445).

Release location: Unit O Section 22, Township 21S, Range 34E

The release occurred on May 26th, 2018.

Released: Approximately >25 barrels of produced water.

This release occurred within a lined facility and the area is being evaluated and a C-141 will be submitted. If you have any questions please don't hesitate to contact me.

Thanks,

Dakota Neel
Concho Resources
HSE Coordinator
432-215-2783

NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Further, any contract terms proposed or purportedly accepted in this email are not binding and are subject to management's final approval as memorialized in a separate written instrument, excluding electronic correspondence, executed by an authorized representative of COG Operating LLC or its affiliates.

Incident ID	NOY1815234060
District RP	1RP-5077
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" 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	NOY1815234060
District RP	1RP-5077
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: Ike Tavaréz Title: Program Manager, RemediationSignature:  Date: 8/18/23email: ike.tavaréz@conocophillips.com Telephone: 432-685-2573**OCD Only**

Received by: _____ Date: _____

Incident ID	NOY1815234060
District RP	1RP-5077
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: Ike TavarézTitle: Program Manager, Remediation

Signature: _____

Date: 8/18/23email: ike.tavaréz@conocophillips.comTelephone: 432-685-2573**OCD Only**

Received by: _____ Date: _____

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

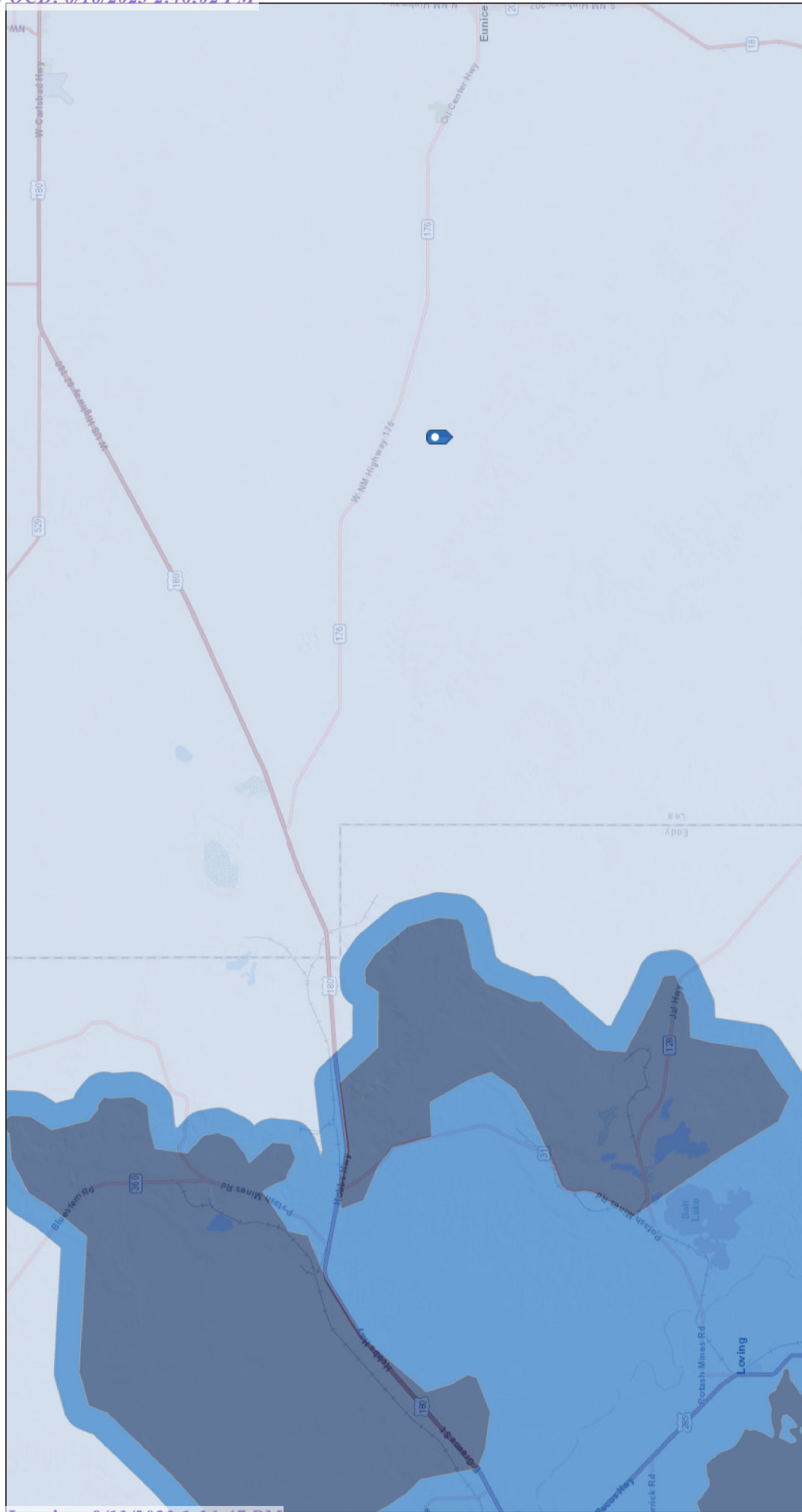
Signature: _____

Date: 09/13/2023

APPENDIX B

Site Characterization Data

OCD Karst Potential Map



9/19/2022, 11:19:56 AM

Karst Occurrence Potential

High

Medium

Low

BLM, OCD, New Mexico Tech, Bureau of Land Management, Esri, HERE, Garmin, NGA, USGS, NPS

New Mexico Oil and Gas Map. <http://nm-emmd.maps.arcgis.com/apps/webappviewer/index.html?id=4d0172306164de29fd2b9835ca75>. New Mexico Oil Conservation Division

OCD USGS Well Data Map

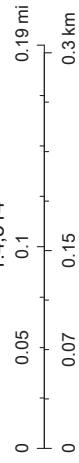


9/20/2022, 1:05:53 PM

▲ USGS Historical GW Wells

▲ USGS Active Monitoring GW Wells

1:4,514



Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, Maxar

212C-MD-02846		TETRA TECH		LOG OF BORING DTW			Page 1 of 1	
Project Name: Lychee BWS State Com #001H								
Borehole Location: GPS Coordinates: 32.457595°, -103.455101°				Surface Elevation: 3694 ft				
Borehole Number: DTW			Borehole Diameter (in.): 8		Date Started: 7/19/2023		Date Finished: 7/19/2023	

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		DEPTH (ft)	REMARKS
												While Drilling	Upon Completion of Drilling		
			ExStik	PID									While Drilling <u>▽</u> DRY ft Upon Completion of Drilling <u>▽</u> DRY ft Remarks:		
MATERIAL DESCRIPTION															
5												-GP- GRAVEL: Light brown to reddish brown, dry, fine- to coarse-grained, pad material	2		
												-SM- SAND: Brown to dark brown, dry, fine- to coarse-grained, with Caliche fragments	3		
10												-GM- GRAVEL (Caliche): Light gray to white, dry, fine-grained			
15												-SM- SAND: Light brown to tan, dry, very fine- to fine-grained, trace gravel-sized Caliche	19		
20												-SP- SAND: Brown, loose, dry, very fine-grained, trace Caliche fragments	24		
25												-SM- SAND: Light brown, very loose to loose, dry, very fine-grained	34		
30															
35															
40															
45															
50															
55															
												-- Cuttings collected at 54 to 55 feet, soil sample dry		55	
Bottom of borehole at 55.0 feet.															

Sampler Types: Split Spoon Shelby Bulk Sample Grab Sample	Acetate Liner Vane Shear Discrete Sample Test Pit	Operation Types: Mud Rotary Continuous Flight Auger Wash Rotary	Hand Auger Air Rotary Direct Push Core Barrel	Notes: Surface elevation is an approximate value obtained from Google Earth data.
--	--	---	--	---

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



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
CP 01066 POD1	CP	LE		4	3	2	28	21S	34E	643735	3591345	1614	210	140	70
CP 01069 POD1	CP	LE		2	1	4	28	21S	34E	643737	3591191	1698	210	140	70

Average Depth to Water: **140 feet**

Minimum Depth: **140 feet**

Maximum Depth: **140 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 645110.91

Northing (Y): 3592189.94

Radius: 1700

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.

11/30/22 2:38 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

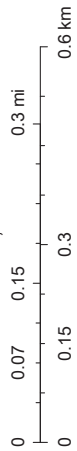
OCD Waterbodies Map



9/20/2022, 12:17:39 PM

- OSW Water Bodys
- OSE Probable Playas

1:9,028



Esri, HERE, Garmin, GeoTechnologies, Inc., Maxar, NM
OSE

National Flood Hazard Layer FIRMette



32°27'41"W 32°27'42"N

Legend

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

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth
Zone AE, AO, AH, VE, AP

Regulatory Floodway

SPECIAL FLOOD HAZARD AREAS

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X

Future Conditions 1% Annual Chance Flood Hazard
Zone X

Area with Reduced Flood Risk due to Levee. See Notes.
Zone X

Area with Flood Risk due to Levee
Zone X

OTHER AREAS OF FLOOD HAZARD

NO SCREEN

Area of Minimal Flood Hazard
Zone X

Effective LOMRs

Area of Undetermined Flood Hazard
Zone D

OTHER AREAS

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

MAP PANELS

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/5/2022 at 3:45 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



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

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

APPENDIX C

Laboratory Analytical Data



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

November 02, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: LYCHEE BWS STATE COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 10/26/22 14:11.

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 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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 1 (0-1') (H225049-01)

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	10/31/2022	ND	1.97	98.3	2.00	6.10	
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03	
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19	
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83	
Total BTEX	<0.300	0.300	10/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 90.6 % 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	10/28/2022	ND	432	108	400	3.64	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2022	ND	189	94.3	200	0.867	
DRO >C10-C28*	<10.0	10.0	11/01/2022	ND	189	94.5	200	4.05	
EXT DRO >C28-C36	<10.0	10.0	11/01/2022	ND					

Surrogate: 1-Chlorooctane 93.4 % 45.3-161

Surrogate: 1-Chlorooctadecane 109 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 2 (0-1') (H225049-02)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEX	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.5 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2022	ND	189	94.3	200	0.867	
DRO >C10-C28*	<10.0	10.0	11/01/2022	ND	189	94.5	200	4.05	
EXT DRO >C28-C36	<10.0	10.0	11/01/2022	ND					

Surrogate: 1-Chlorooctane 83.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 95.4 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 3 (0-1') (H225049-03)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.7 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/01/2022	ND	189	94.3	200	0.867	
DRO >C10-C28*	58.0	10.0	11/01/2022	ND	189	94.5	200	4.05	
EXT DRO >C28-C36	16.5	10.0	11/01/2022	ND					

Surrogate: 1-Chlorooctane 88.2 % 45.3-161

Surrogate: 1-Chlorooctadecane 113 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 4 (0-1') (H225049-04)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.1 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	189	94.3	200	0.867	
DRO >C10-C28*	12.7	10.0	10/31/2022	ND	189	94.5	200	4.05	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 96.3 % 45.3-161

Surrogate: 1-Chlorooctadecane 115 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 5 (0-1') (H225049-05)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.9 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 104 % 45.3-161

Surrogate: 1-Chlorooctadecane 113 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 6 (0-1') (H225049-06)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.2 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 86.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 93.2 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 7 (0-1') (H225049-07)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.3 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 96.7 % 45.3-161

Surrogate: 1-Chlorooctadecane 104 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 8 (0-1') (H225049-08)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.7 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 69.7 % 45.3-161

Surrogate: 1-Chlorooctadecane 74.7 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 9 (0-1') (H225049-09)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 86.4 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 77.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 82.9 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 10 (0-1') (H225049-10)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.9 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	26.9	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	65.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 92.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 101 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 11 (0-1') (H225049-11)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.4 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 90.2 % 45.3-161

Surrogate: 1-Chlorooctadecane 102 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 12 (0-1') (H225049-12)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.1 % 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	10/28/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 98.3 % 45.3-161

Surrogate: 1-Chlorooctadecane 106 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 13 (0-1') (H225049-13)

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	10/31/2022	ND	1.97	98.3	2.00	6.10		
Toluene*	<0.050	0.050	10/31/2022	ND	2.10	105	2.00	5.03		
Ethylbenzene*	<0.050	0.050	10/31/2022	ND	2.04	102	2.00	5.19		
Total Xylenes*	<0.150	0.150	10/31/2022	ND	6.19	103	6.00	4.83		
Total BTEx	<0.300	0.300	10/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.5 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 96.7 % 45.3-161

Surrogate: 1-Chlorooctadecane 105 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 13 (2-3') (H225049-14)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEX	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.4 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 83.3 % 45.3-161

Surrogate: 1-Chlorooctadecane 91.1 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 14 (0-1') (H225049-15)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.0 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	66.9	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	33.3	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 92.4 % 45.3-161

Surrogate: 1-Chlorooctadecane 113 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 15 (0-1') (H225049-16)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEX	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.2 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	10/28/2022	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*	<50.0	50.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	1890	50.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	563	50.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 94.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 175 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 16 (0-1') (H225049-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.8 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	209	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	85.5	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 83.4 % 45.3-161

Surrogate: 1-Chlorooctadecane 115 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 17 (0-1') (H225049-18)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.8 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 94.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 103 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 18 (0-1') (H225049-19)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.1 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 94.1 % 45.3-161

Surrogate: 1-Chlorooctadecane 103 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 19 (0-1') (H225049-20)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEX	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.2 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1140	16.0	10/28/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	14100	50.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	3710	50.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 107 % 45.3-161

Surrogate: 1-Chlorooctadecane 664 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 19 (2-2.5') (H225049-21)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.2 % 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	224	16.0	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	974	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	216	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 96.8 % 45.3-161

Surrogate: 1-Chlorooctadecane 129 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 20 (0-1') (H225049-22)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEX	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.2 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 105 % 45.3-161

Surrogate: 1-Chlorooctadecane 115 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 21 (0-1') (H225049-23)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 86.9 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 95.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 105 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 22 (0-1') (H225049-24)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.8 % 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	10/28/2022	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	10/31/2022	ND	188	94.1	200	0.525	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	183	91.3	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 98.3 % 45.3-161

Surrogate: 1-Chlorooctadecane 109 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 23 (0-1') (H225049-25)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 86.6 % 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	1630	16.0	10/28/2022	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	10/31/2022	ND	195	97.5	200	12.0	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	184	91.9	200	7.08	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 88.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 107 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 24 (0-1') (H225049-26)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEX	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.1 % 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	272	16.0	10/28/2022	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	10/31/2022	ND	195	97.5	200	12.0	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	184	91.9	200	7.08	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 82.7 % 45.3-161

Surrogate: 1-Chlorooctadecane 99.3 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 24 (2-3') (H225049-27)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEX	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.1 % 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	10/28/2022	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	10/31/2022	ND	195	97.5	200	12.0	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	184	91.9	200	7.08	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 93.2 % 45.3-161

Surrogate: 1-Chlorooctadecane 111 % 46.3-178

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:	10/26/2022	Sampling Date:	10/26/2022
Reported:	11/02/2022	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NM		

Sample ID: AH - 22 - 25 (0-1') (H225049-28)

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	11/01/2022	ND	1.96	98.2	2.00	8.21		
Toluene*	<0.050	0.050	11/01/2022	ND	2.07	104	2.00	8.12		
Ethylbenzene*	<0.050	0.050	11/01/2022	ND	2.02	101	2.00	7.99		
Total Xylenes*	<0.150	0.150	11/01/2022	ND	6.09	102	6.00	8.48		
Total BTEx	<0.300	0.300	11/01/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.3 % 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	10/28/2022	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	10/31/2022	ND	195	97.5	200	12.0	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	184	91.9	200	7.08	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					

Surrogate: 1-Chlorooctane 87.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 105 % 46.3-178

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

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.
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", is written over a horizontal line.

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

[illegible]



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

213

Company Name: <u>ConocoPhillips</u>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>Christina Lull</u>		Company: <u>Tetra Tech</u>					
Address:		Attn: <u>Christina Lull</u>					
City:		Address: <u>650001</u>					
State:		City:					
Zip:		State:					
Phone #:		Fax #:					
Project #: <u>200-MD-02846</u>		Project Owner:					
Project Name: <u>Lycke Buis State Can #114</u>		City:					
Project Location: <u>Lee County, NM</u>		State:					
Project Name: <u>Lycke Buis State Can #114</u>		Phone #:					
Sample Name: <u>Lycke Buis State Can #114</u>		Fax #:					
FOR LAB USE ONLY		PRESERV.		SAMPLING			
Lab I.D.		MATRIX		DATE		TIME	
Sample I.D.		GROUNDWATER		DATE		TIME	
H25049		WASTEWATER		10/26/22		10/26/22	
11		SOIL				TPH	
12		OIL				BTEX	
13		SLUDGE				Chlorides	
14		OTHER :					
15		ACID/BASE:					
16		ICE / COOL					
17		OTHER :					
18							
19							
20							

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: <u>Cole B</u>		Date: <u>10/26/22</u>		Received By: <u>Christina Lull</u>		Date: <u>10/26/22</u>		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Phone #:	
Relinquished By: <u>Cole B</u>		Time: <u>1411</u>		Received By: <u>Christina Lull</u>		Time: <u>1411</u>		All Results are emailed. Please provide Email address:			
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition		CHECKED BY: (Initials)		Turnaround Time:		Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		4.6		Thermometer ID #113		Bacteria (only) Sample Condition	
				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>		4.6		Correction Factor -0.5°C		Cool Intact <input type="checkbox"/> Observed Temp. °C	
				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>						Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
				Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>						Corrected Temp. °C	

REMARKS: Christina Lull et al. technician
Temp 13.6°C

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

APPENDIX D
Regulatory Correspondence
&
Delineation Workplan
(BBC International Incorporated, 2018)

Carroll, Ryan

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Wednesday, March 22, 2023 8:10 AM
To: Llull, Christian
Cc: Poole, Nicholas
Subject: RE: [EXTERNAL] Extension Request - Application ID 1161746 (nOY1815234060)

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

Christian,

Your extension request for **nOY1815234060** 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 | Brittany.Hall@emnrd.nm.gov
<http://www.emnrd.nm.gov/ocd/>

From: Llull, Christian <Christian.Llull@tetrattech.com>
Sent: Tuesday, March 21, 2023 8:27 PM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Poole, Nicholas <NICHOLAS.POOLE@tetrattech.com>
Subject: [EXTERNAL] Extension Request - Application ID 1161746 (nOY1815234060)

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, remedial action and associated reporting for the Lychee BWS State Com #001H Valve Release site (nOY1815234060).

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.

This release site requires additional evaluation to confirm historical impacts in the approved Work Plan. 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 and/or remediation. ConocoPhillips plans to conduct the additional assessment in the coming months however, and once the sampling data is collected, tabulated, and evaluated, a revised work plan/closure report will be submitted to the OCD.

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

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

Tetra Tech | *Leading with Science*® | OGA

8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | 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](#)



Chavira, Lisbeth

From: OCDOnline@state.nm.us
Sent: Monday, November 28, 2022 3:31 PM
To: Beauvais, Charles R
Subject: [EXTERNAL]The Oil Conservation Division (OCD) has approved the application, Application ID: 161746

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 approved the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nOY1815234060, with the following conditions:

- **Remediation plan approved with the condition that the remediation meets 19.15.29.12 and 19.15.29.13 NMAC.**
- **Lined facility area deferral request is denied. Delineation, both vertically and horizontally, in this area is incomplete. Delineation vertically and horizontally must be completed to the most stringent standards of Table I in 19.15.29.12 NMAC.**
- **1RP-5077 closed. Refer to incident #nOY1815234060 in all future communications.**
- **Submit a complete closure and deferral report through the OCD Permitting website by 3/3/2023.**

The signed IM-BNF can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

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

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating, LLC (OGRID #229137)	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-683-7443
Facility Name: Lychee BWS State Com #001H	Facility Type: Tank Battery
Surface Owner: State	Mineral Owner: State
API No. 30-025-42445	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	22	21S	34E	200	South	1,980	East	Lea

Latitude 32.45775001 Longitude -103.4556329 NAD83

NATURE OF RELEASE

Type of Release Oil & Produced Water	Volume of Release 20 bbl. – Oil 200 bbl. – Produced Water	Volume Recovered 15 bbl. – Oil 105 bbl. – Produced Water
Source of Release Valve Erosion	Date and Hour of Occurrence May 26, 2018 6:30am	Date and Hour of Discovery May 26, 2018 6:30am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu – NMOCD Ryan Mann – SLO	
By Whom? Dakota Neel	Date and Hour May 26, 2018 10:58pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 9:24 am, Jun 01, 2018

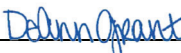

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by the water dump valve eroding allowing fluid to form a hole in the liner. The dump valve is being replaced and the oil dump is being inspected for damage.

Describe Area Affected and Cleanup Action Taken.*

The release was in the lined facility, on location and in the pasture. 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 plan 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 best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: DeAnn Grant		Approved by Environmental Specialist: 	
Title: HSE Administrative Assistant	Approval Date: 6/1/2018	Expiration Date:	
E-mail Address: agrant@concho.com	Conditions of Approval: See attached directive.	Attached <input checked="" type="checkbox"/>	
Date: May 29, 2018	Phone: (432) 253-4513		

* Attach Additional Sheets If Necessary

nOY1815234060

pOY1815234776

1RP-5077

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/26/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5077_ 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 division-approved corrective action 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 7/1/2018__. 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

From: Dakota Neel
To: [Ryan Mann](#); [Yu, Olivia, EMNRD](#)
Cc: [Sheldon Hitchcock](#); [Rebecca Haskell](#); [Robert McNeill](#); [DeAnn Grant](#); [Billings, Bradford, EMNRD](#)
Subject: (Notification) LYCHEE BWS STATE COM #001H (30-025-42445) 5-26-18
Date: Saturday, May 26, 2018 10:57:58 PM

Ms. Yu/Mr. Mann,

COG Operating LLC is reporting a release from the LYCHEE BWS STATE COM #001H (30-025-42445).

Release location: Unit O Section 22, Township 21S, Range 34E

The release occurred on May 26th, 2018.

Released: Approximately >25 barrels of produced water.

This release occurred within a lined facility and the area is being evaluated and a C-141 will be submitted. If you have any questions please don't hesitate to contact me.

Thanks,

Dakota Neel
Concho Resources
HSE Coordinator
432-215-2783

NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Further, any contract terms proposed or purportedly accepted in this email are not binding and are subject to management's final approval as memorialized in a separate written instrument, excluding electronic correspondence, executed by an authorized representative of COG Operating LLC or its affiliates.



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805
E-MAIL: cbrunson@bbcinternational.com

DELINEATION WORKPLAN

COG – LYCHEE BWS STATE COM #001H (Leak Date: 5/26/18) RP # 1RP-5077

This delineation workplan and remediation proposal addresses the release associated with RP # 1RP-5077.

The following information includes:

1. Appropriate completed and signed C-141 pages.
2. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
3. GPS information for sample points and sample methodology.
4. Depth to groundwater information (i.e., pdf of OSE search results, USGS search results, and/or copy of Chevron groundwater trend map).
5. Watercourse/features map within 1000 feet.
6. BLM Cave Karst map.
7. FEMA National Flood map.
8. Laboratory analysis results summary table and original laboratory analysis reports.
9. Potentially other pertinent information as necessary for site specific purposes.

Based on the information included in this package and the NMOCD rules, the following remediation is proposed:

COG will excavate the spill area as depicted on the following site diagram. The leak area near SP1 – SP5 (PINK shade on diagram) will be excavated to a depth of 1.5 feet. The leak area near SP6 – SP8 (BLUE shade on diagram) will be excavated to a depth of 2.5 feet. The YELLOW shaded area inside the lined facility is requested to be deferred until the decommissioning of the facility. SP1 – SP3 were sampled through the liner. Further delineation is not possible due to the production equipment and piping preventing access unless the facility is decommissioned. When the release occurred the pressure from the ruptured line punctured the liner causing produced water to remain under the liner and then allowed fluids to escape outside of the lined facility onto the pad and into the pasture.

Sidewall and bottom confirmation samples will be collected at no greater than 50 ft. intervals for the excavated areas. Estimated volume of material to be removed is 80 cubic yards. The remediation will be completed within 90 days of plan approval.

The entire site will then be backfilled with clean soil and revegetated (if warranted) to the standards of the appropriate regulatory agency or private surface owner. All excavated materials will be disposed of at an NMOCD-approved disposal facility.

Form C-141

State of New Mexico
Oil Conservation Division

Page 3

Incident ID	
District RP	1RP-5077
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?	100-125 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" 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.

Form C-141

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	1RP-5077
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: Rebecca HaskellTitle: Senior HSE CoordinatorSignature: Rebecca HaskellDate: 2/21/19email: rhaskell@concho.comTelephone: (432) 683-7443**OCD Only**

Received by: _____

Date: _____

Form C-141

State of New Mexico
Oil Conservation Division

Page 5

Incident ID	
District RP	1RP-5077
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: Rebecca HaskellTitle: Senior HSE CoordinatorSignature: Rebecca HaskellDate: 2/21/19email: rhaskell@concho.comTelephone: (432) 683-7443**OCD Only**

Received by: _____ Date: _____

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

Signature: _____

Date: _____

WORLD-WIDE ENVIRONMENTAL SPECIALISTS



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805

New Mexico State Land Office

Revegetation and Noxious Weed Management Plan

COG – Lychee BWS State Com #001H

Revegetation Plan

Disturbed areas associated with the remediation efforts will be reseeded. If after one growing season, the vegetation has not taken hold, seeding may need to be repeated until revegetation is successful, as determined by the State Land Office. The seed will be spread by either using a hand-held broadcaster or tractor-mounted broadcaster and the area will be raked or dragged to cover the seed. If the seed will be broadcast, the pounds per acre will be double over the amount used by drill planting.

The seed mixture will be the appropriate mixture for the specific site and planted in the required amounts of pounds pure live seed (PLS) per acre. Commercially sold seed will be either certified or registered and will not contain primary or secondary noxious weeds.

Grasses:

Sand bluestem	Elida, VNS, So.	4.0	F
Sideoats grama	Vaughn, El Reno	4.0	F
Little bluestem	Cimarron, Pastura	3.0	F
Plains bristlegrass	VNS, Southern	1.0	D
Sand dropseed	VNS, Southern	2.0	S
Blue grama	Lovington	1.0	D

Forbs:

Firewheel (Gaillardia)	VNS, Southern	1.0	D
Annual Sunflower	VNS, Southern	0.5	D
Prairie Conflower	VNS, Southern	0.5	D

Total PLS/acre 17

Noxious Weed Management Plan

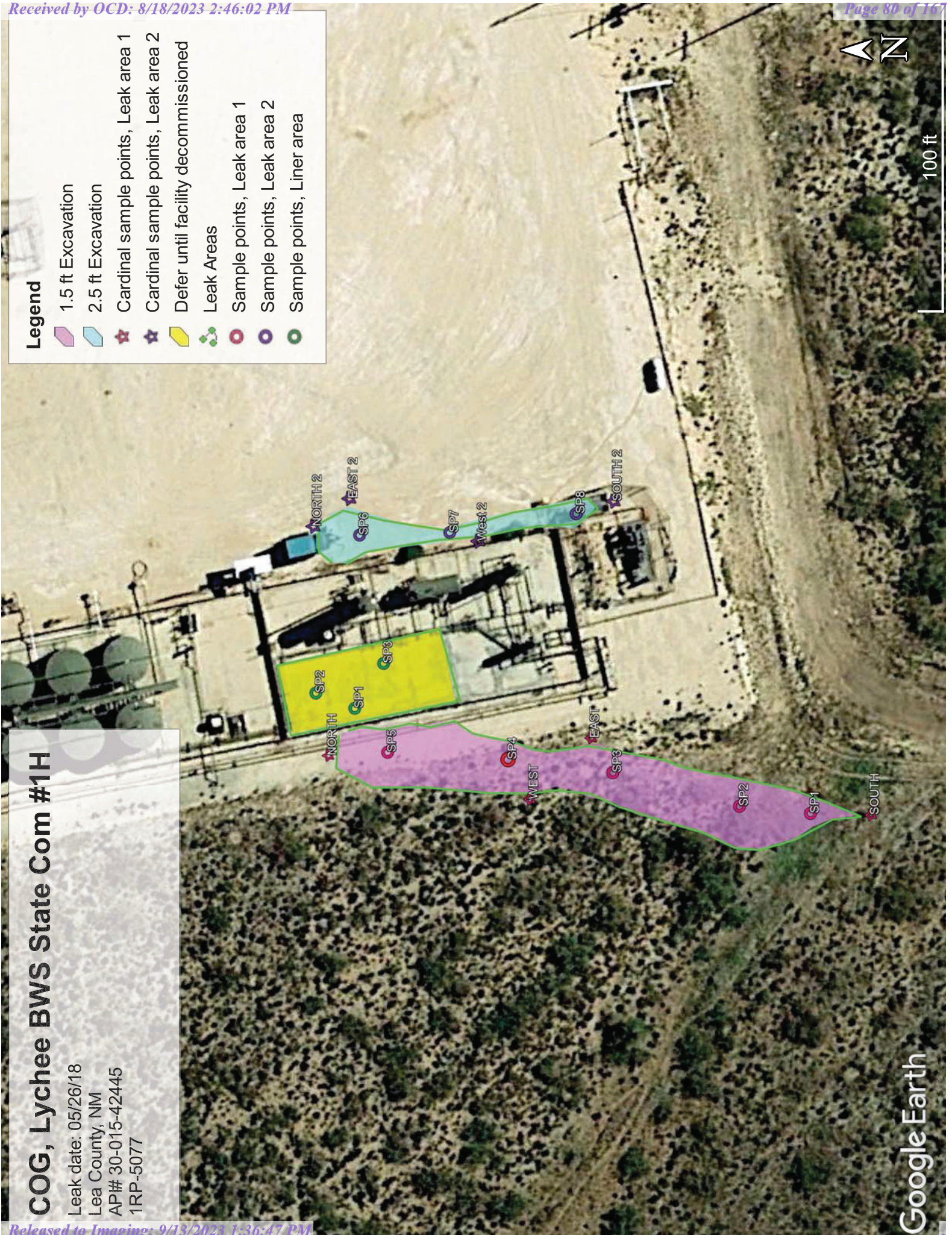
The site will be visited to assess the establishment of vegetative growth. Personnel performing the site visit will also look for the presence of noxious weeds at the site as indicated on the New Mexico Noxious Weeds List specified on the United States Department of Agriculture website. If a noxious weed is observed at the site, the NMSLO will be contacted to determine the most effective manner to eradicate it.

COG, Lychee BWS State Com #11H

Leak date: 05/26/18
Lea County, NM
AP# 30-015-42445
1RP-5077

Legend

- 1.5 ft Excavation
- 2.5 ft Excavation
- Cardinal sample points, Leak area 1
- Cardinal sample points, Leak area 2
- Defer until facility decommissioned
- Leak Areas
- Sample points, Leak area 1
- Sample points, Leak area 2
- Sample points, Liner area



COG, Lychee BWS State Com #1H

Sample points, Leak area 1

SP1, N 32.45703 W-103.45624

SP2, N 32.45709 W-103.45623

SP3, N 32.45720 W-103.45620

SP4, N 32.45730 W-103.45619

SP5, N 32.45740 W-103.45618

NORTH, N 32.45746 W-103.45618

SOUTH, N 32.45697 W-103.45624

EAST, N 32.45722 W-103.45616

WEST, N 32.45728 W-103.45623

Sample points, Leak area 2

SP6, N 32.45743 W-103.45595

SP7, N 32.45735 W-103.45595

SP8, N 32.45723 W-103.45593

NORTH 2, N 32.45747 W-103.45594

SOUTH 2, N 32.45720 W-103.45591

EAST 2, N 32.45744 W-103.45591

WEST 2, N 32.45732 W-103.45595


Sample points, Liner area

SP1, N 32.45743 W-103.45613

SP2, N 32.45747 W-103.45612

SP3, N 32.45741 W-103.45609

This is a topographic map of the 21S34E area. The map features a grid of section numbers (e.g., 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845,

 USGS Water Resources	Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? USGS Home Contact USGS Water-level accuracy	? USGS
National Water Information System: Web Interface						Data Category: Groundwater	Geographic Area: New Mexico	<input type="button" value="GO"/>

Click to hide News Bulletins

- [Please see news on new formats](#)
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322738103263701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 322738103263701 21S.34E.23.31000

Lea County, New Mexico

Latitude 32°27'45.6", Longitude 103°26'49.4" NAD83

Land-surface elevation 3,715 feet above NAVD88

The depth of the well is 5,390 feet below land surface.

This well is completed in the Capitan Limestone (313CPTN) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurment
1967-02-01		D	1030.70				2		U	
1977-01-12		D	1166.27				2		R	USGS
1978-01-01		D	1157.64				2		R	USGS
2012-11-27	13:50 MST	m	804.26				2		T	USGS
2013-06-24	12:30 MDT	m	798.30				2		T	USGS
2013-09-09	11:40 MDT	m	795.63				2		T	USGS
2013-12-02	11:50 MST	m	794.47				2		T	USGS
2014-03-17	11:15 MDT	m	793.54				2		T	USGS
2014-06-30	11:45 MDT	m	788.44				2		T	USGS
2014-09-29	12:00 MDT	m	789.06				2		T	USGS
2014-12-01	11:05 MST	m	787.57				2		T	USGS
2015-03-26	11:20 MDT	m	785.16				2		T	USGS
2015-05-18	11:45 MDT	m	783.57				2		T	USGS
2015-09-28	11:30 MDT	m	777.91				2		T	USGS
2015-12-01	11:25 MST	m	776.12				2		T	USGS
2016-03-21	12:15 MDT	m	774.03				2		T	USGS
2016-06-26	12:10 MDT	m	775.92				2		T	USGS
2016-09-21	10:50 MST	m	774.99				2		T	USGS

Date	Time	?	Water level, feet	Explanation	Water level, feet	Referenced vertical datum	?	?
Section		Water-level date-time accuracy	Water level, feet	Description	Water level, feet		Water-level accuracy	S
Water-level date-time accuracy		D		Date is accurate to the Day				
Water-level date-time accuracy		m		Date is accurate to the Minute				
Water-level accuracy		2		Water level accuracy to nearest hundredth of a foot				
Status				The reported water-level measurement represents a static level				
Method of measurement		R		Reported, method not known.				
Method of measurement		T		Electric-tape measurement.				
Method of measurement		U		Unknown method.				
Measuring agency				Not determined				
Measuring agency		USGS		U.S. Geological Survey				
Source of measurement		S		Measured by personnel of reporting agency.				
Source of measurement		U		Source is unknown.				
Water-level approval status		A		Approved for publication -- Processing and review completed.				
Water-level approval status		P		Provisional data subject to revision.				

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

Accessibility Plug-Ins FOIA Privacy Policies and Notices

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2019-02-06 16:42:28 EST

1.65 0.6 nadww01

Lyceeh BWS State Com #1H, Topo Map with Water Features



2/6/2019 2:49:09 PM

1:9,028



BLM CAVE KARST MAP

COG, Lychee BWS State Com #11H

Leak date: 05/26/18
Lea County, NM
API# 30-025-42445
2RP-5077

Legend

- High
- Low potential

PI

30



1000 ft

National Flood Hazard Layer FIRMette



Received by OCD: 8/18/2023 2:46:02 PM

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

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth
Zone AE, AO, AH, VE, A, X

Regulatory Floodway

SPECIAL FLOOD HAZARD AREAS

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone B

Future Conditions 1% Annual Chance Flood Hazard
Zone X

Area with Reduced Flood Risk due to Levee. See Notes.
Zone X

Area with Flood Risk due to Levee
Zone D

OTHER AREAS OF FLOOD HAZARD

NO SCREEN
Zone X

Area of Minimal Flood Hazard
Zone X

Effective LOMRs
Zone D

Area of Undetermined Flood Hazard
Zone D

OTHER AREAS

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation
20.2
17.5

Coastal Transect
3

Base Flood Elevation Line (BFE)
www.fis.gov

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

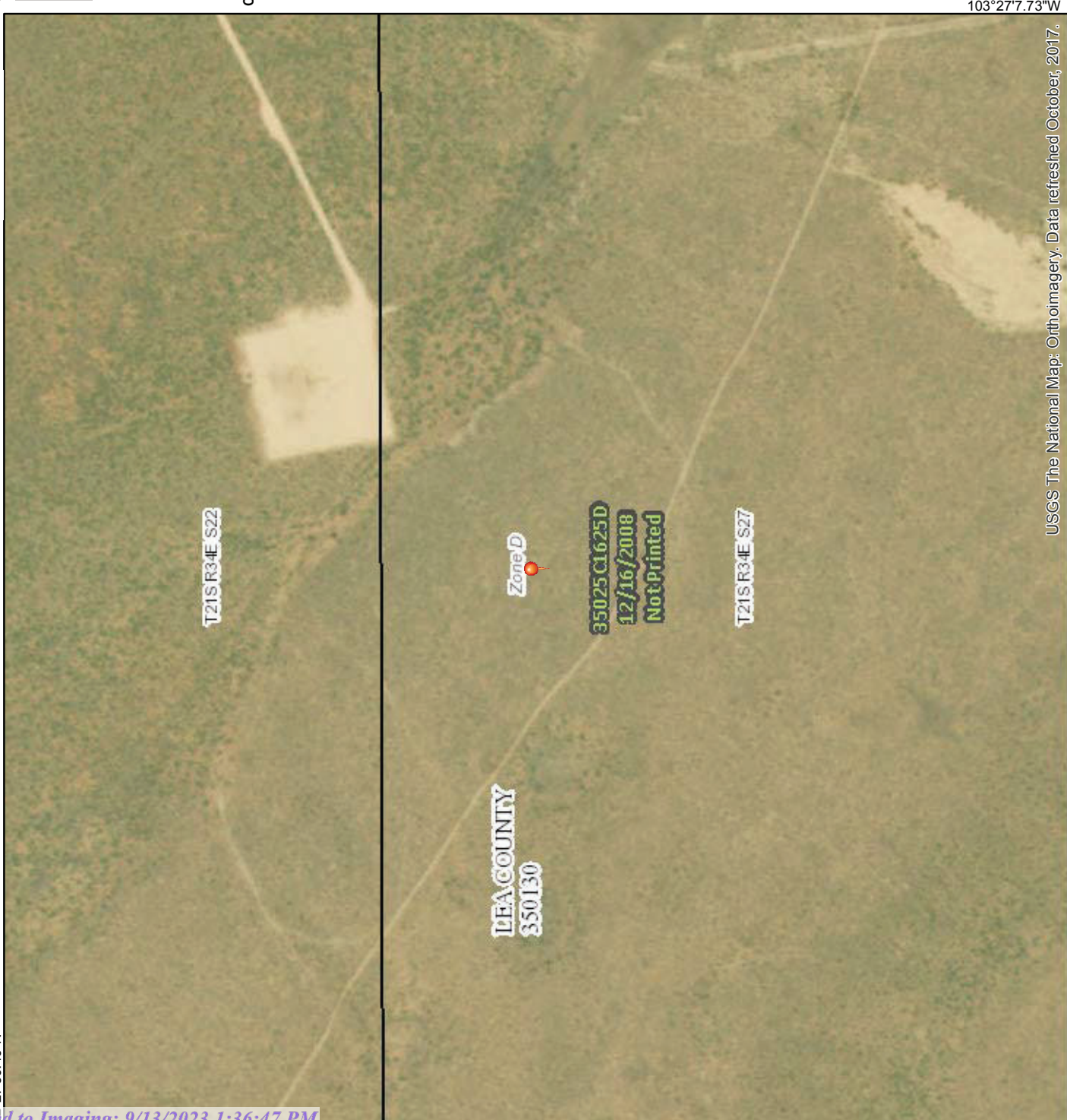
MAP PANELS

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/6/2019 at 5:00:29 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



USGS The National Map: Orthoimagery. Data refreshed October, 2017.

Feet 1:6,000

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

103°27'7.73\"/>

Laboratory Analytical Results Summary
Lychee BWS State Com #001H (5/26/18)

Analyte	Method	Sample ID	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'
		Date	7/6/18	7/6/18	7/6/18	7/6/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.100	<0.050	<0.050	n/a
Toluene	BTEX 8021B		0.998	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		1.32	0.175	<0.050	n/a
Total Xylenes	BTEX 8021B		1.34	0.35	<0.150	n/a
Total BTEX	BTEX 8021B		6.66	0.526	<0.300	n/a
Chloride	SM4500C1-B		2200	96	32	176
GRO	TPH 8015M		187	36.9	<10.0	n/a
DRO	TPH 8015M		35000	1470	<10.0	n/a
EXT DRO	TPH 8015M		7650	238	<10.0	n/a

Analyte	Method	Sample ID	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'
		Date	7/6/18	7/6/18	7/6/18	7/6/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.100	<0.050	<0.050	n/a
Toluene	BTEX 8021B		0.773	0.083	<0.050	n/a
Ethylbenzene	BTEX 8021B		0.992	0.362	<0.050	n/a
Total Xylenes	BTEX 8021B		3.73	0.769	<0.150	n/a
Total BTEX	BTEX 8021B		5.49	1.21	<0.300	n/a
Chloride	SM4500C1-B		3200	128	32	160
GRO	TPH 8015M		148	96.2	<10.0	n/a
DRO	TPH 8015M		41100	3210	30.4	n/a
EXT DRO	TPH 8015M		8990	503	<10.0	n/a

Analyte	Method	Sample ID	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'
		Date	7/6/18	7/6/18	7/6/18	7/6/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		0.378	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		0.654	0.246	<0.050	n/a
Total Xylenes	BTEX 8021B		2.49	0.62	<0.150	n/a
Total BTEX	BTEX 8021B		3.52	0.866	<0.300	n/a
Chloride	SM4500C1-B		1920	112	16	176
GRO	TPH 8015M		108	36.3	<10.0	n/a
DRO	TPH 8015M		34200	2330	20.1	n/a
EXT DRO	TPH 8015M		8510	387	<10.0	n/a

Analyte	Method	Sample ID	SP4 @ SURFACE	SP4 @ 1'	SP4 @ 2'	SP4 @ 3'
		Date	7/6/18	7/6/18	7/6/18	7/6/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.100	<0.050	<0.050	n/a
Toluene	BTEX 8021B		0.646	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		0.926	0.254	<0.050	n/a
Total Xylenes	BTEX 8021B		3.55	0.564	<0.150	n/a
Total BTEX	BTEX 8021B		5.12	0.818	<0.300	n/a
Chloride	SM4500C1-B		2200	96	32	160
GRO	TPH 8015M		141	61.6	<10.0	n/a
DRO	TPH 8015M		42000	2400	29.3	n/a
EXT DRO	TPH 8015M		9440	389	<10.0	n/a

Analyte	Method	Sample ID	SP5 @ SURFACE	SP5 @ 1'	SP5 @ 2'	SP5 @ 3'
		Date	7/6/18	7/6/18	7/6/18	7/6/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		0.407	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		0.643	0.305	<0.050	n/a
Total Xylenes	BTEX 8021B		2.68	0.647	<0.150	n/a
Total BTEX	BTEX 8021B		3.73	0.953	<0.300	n/a
Chloride	SM4500C1-B		1460	96	16	160
GRO	TPH 8015M		129	55.4	<10.0	n/a
DRO	TPH 8015M		43700	2460	37.8	n/a
EXT DRO	TPH 8015M		9720	390	11.7	n/a

Analyte	Method	Sample ID	SP6 @ SURFACE	SP6 @ 1'	SP6 @ 2'	SP6 @ 3'
		Date	7/9/18	7/9/18	7/9/18	7/9/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.100	<0.200	<0.050	n/a
Toluene	BTEX 8021B		0.988	0.443	0.061	n/a
Ethylbenzene	BTEX 8021B		2.12	2.08	0.38	n/a
Total Xylenes	BTEX 8021B		8.56	4.8	1.43	n/a
Total BTEX	BTEX 8021B		11.7	7.33	1.87	n/a
Chloride	SM4500C1-B		7600	2200	1230	80
GRO	TPH 8015M		202	377	64.5	n/a
DRO	TPH 8015M		17500	4770	1260	n/a
EXT DRO	TPH 8015M		3510	691	188	n/a

Analyte	Method	Sample ID	SP7 @ SURFACE	SP7 @ 1'	SP7 @ 2'	SP7 @ 3'
		Date	7/9/18	7/9/18	7/9/18	7/9/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.100	<0.200	<0.050	n/a
Toluene	BTEX 8021B		1.23	0.638	<0.050	n/a
Ethylbenzene	BTEX 8021B		1.67	3.64	0.226	n/a
Total Xylenes	BTEX 8021B		7.29	12.6	0.853	n/a
Total BTEX	BTEX 8021B		10.2	16.9	1.08	n/a
Chloride	SM4500C1-B		13300	2200	1250	96
GRO	TPH 8015M		150	433	47.4	n/a
DRO	TPH 8015M		18000	4470	1430	n/a
EXT DRO	TPH 8015M		3580	653	238	n/a

Analyte	Method	Sample ID	SP8 @ SURFACE	SP8 @ 1'	SP8 @ 2'	SP8 @ 3'
		Date	7/9/18	7/9/18	7/9/18	7/9/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		0.998	0.526	0.066	n/a
Ethylbenzene	BTEX 8021B		1.29	3.21	0.325	n/a
Total Xylenes	BTEX 8021B		6.12	10.5	0.716	n/a
Total BTEX	BTEX 8021B		8.41	14.2	1.11	n/a
Chloride	SM4500C1-B		15000	2360	1300	96
GRO	TPH 8015M		133	488	60.8	n/a
DRO	TPH 8015M		17900	5220	1490	n/a
EXT DRO	TPH 8015M		3560	740	229	n/a

Laboratory Analytical Results Summary
Lychee BWS State Com #001H (5/26/18)

CARDINAL Analyte	Method	Sample ID Date	NORTH 7/9/18 mg/kg	EAST 7/9/18 mg/kg	WEST 7/9/18 mg/kg	SOUTH 7/9/18 mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
Chloride	SM4500C1-B		160	128	128	176
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

CARDINAL Analyte	Method	Sample ID Date	NORTH 2 7/9/18 mg/kg	EAST 2 7/9/18 mg/kg	WEST 2 7/9/18 mg/kg	SOUTH 2 7/9/18 mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300
Chloride	SM4500C1-B		80	80	96	112
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

LINER SAMPLING	Sample ID Date	SP1 @ SURFACE 12/5/18 mg/kg	SP1 @ 1' 12/5/18 mg/kg	SP1 @ 2' 12/5/18 mg/kg
Benzene	BTEX 8021B		0.237	<0.050
Toluene	BTEX 8021B		5.36	0.115
Ethylbenzene	BTEX 8021B		<0.050	<0.050
Total Xylenes	BTEX 8021B		16.6	0.666
Total BTEX	BTEX 8021B		22.2	0.78
Chloride	SM4500C1-B		1040	3000
GRO	TPH 8015M		462	22.4
DRO	TPH 8015M		3540	379
EXT DRO	TPH 8015M		619	92.7

LINER SAMPLING	Sample ID Date	SP2 @ SURFACE 12/5/18 mg/kg	SP2 @ 1' 12/5/18 mg/kg	SP2 @ 2' 12/5/18 mg/kg
Benzene	BTEX 8021B		<0.500	2.91
Toluene	BTEX 8021B		15.7	60.8
Ethylbenzene	BTEX 8021B		12.8	45.7
Total Xylenes	BTEX 8021B		59.2	121
Total BTEX	BTEX 8021B		87.7	230
Chloride	SM4500C1-B		3200	3600
GRO	TPH 8015M		977	1380
DRO	TPH 8015M		6010	5730
EXT DRO	TPH 8015M		957	866

LINER SAMPLING	Sample ID Date	SP3 @ SURFACE 12/5/18 mg/kg	SP3 @ 1' 12/5/18 mg/kg	SP3 @ 2' 12/5/18 mg/kg
Benzene	BTEX 8021B		3.04	0.672
Toluene	BTEX 8021B		28.2	23.7
Ethylbenzene	BTEX 8021B		12.2	21.3
Total Xylenes	BTEX 8021B		57.4	88.3
Total BTEX	BTEX 8021B		101	134
Chloride	SM4500C1-B		5040	3480
GRO	TPH 8015M		1670	1240
DRO	TPH 8015M		11800	5510
EXT DRO	TPH 8015M		2020	820

LINER SAMPLING	Sample ID Date	SP3 @ SURFACE 12/5/18 mg/kg	SP3 @ 1' 12/5/18 mg/kg	SP3 @ 2' 12/5/18 mg/kg
Benzene	BTEX 8021B		3.04	0.672
Toluene	BTEX 8021B		28.2	23.7
Ethylbenzene	BTEX 8021B		12.2	21.3
Total Xylenes	BTEX 8021B		57.4	88.3
Total BTEX	BTEX 8021B		101	134
Chloride	SM4500C1-B		5040	3480
GRO	TPH 8015M		1670	1240
DRO	TPH 8015M		11800	5510
EXT DRO	TPH 8015M		2020	820



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

July 20, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: LYCHEE BWS STATE COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 07/13/18 13:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 1 @ SURFACE (H801916-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/17/2018	ND	1.89	94.4	2.00	0.871	
Toluene*	0.998	0.100	07/17/2018	ND	1.83	91.7	2.00	0.206	
Ethylbenzene*	1.32	0.100	07/17/2018	ND	1.84	92.2	2.00	1.52	
Total Xylenes*	4.34	0.300	07/17/2018	ND	5.72	95.3	6.00	1.24	
Total BTX	6.66	0.600	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 130 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	07/17/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	187	100	07/16/2018	ND	200	100	200	4.52		
DRO >C10-C28*	35000	100	07/16/2018	ND	174	86.8	200	19.0		
EXT DRO >C28-C36	7650	100	07/16/2018	ND						

Surrogate: 1-Chlorooctane 122 % 41-142

Surrogate: 1-Chlorooctadecane 2100 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 1 @ 1' (H801916-02)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2018	ND	1.89	94.4	2.00	0.871	
Toluene*	<0.050	0.050	07/17/2018	ND	1.83	91.7	2.00	0.206	
Ethylbenzene*	0.175	0.050	07/17/2018	ND	1.84	92.2	2.00	1.52	
Total Xylenes*	0.350	0.150	07/17/2018	ND	5.72	95.3	6.00	1.24	
Total BTEX	0.526	0.300	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/17/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	36.9	10.0	07/16/2018	ND	200	100	200	4.52		
DRO >C10-C28*	1470	10.0	07/16/2018	ND	174	86.8	200	19.0		
EXT DRO >C28-C36	238	10.0	07/16/2018	ND						

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 155 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 1 @ 2' (H801916-03)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	1.89	94.4	2.00	0.871		
Toluene*	<0.050	0.050	07/17/2018	ND	1.83	91.7	2.00	0.206		
Ethylbenzene*	<0.050	0.050	07/17/2018	ND	1.84	92.2	2.00	1.52		
Total Xylenes*	<0.150	0.150	07/17/2018	ND	5.72	95.3	6.00	1.24		
Total BTEx	<0.300	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 69.8-142

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	07/17/2018	ND	400	100	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	07/16/2018	ND	200	100	200	4.52	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	174	86.8	200	19.0	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 97.8 % 41-142

Surrogate: 1-Chlorooctadecane 90.4 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 1 @ 3' (H801916-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/17/2018	ND	400	100	400	3.92		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 2 @ SURFACE (H801916-05)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/17/2018	ND	1.89	94.4	2.00	0.871	
Toluene*	0.773	0.100	07/17/2018	ND	1.83	91.7	2.00	0.206	
Ethylbenzene*	0.992	0.100	07/17/2018	ND	1.84	92.2	2.00	1.52	
Total Xylenes*	3.73	0.300	07/17/2018	ND	5.72	95.3	6.00	1.24	
Total BTEx	5.49	0.600	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3200	16.0	07/17/2018	ND	400	100	400	3.92		

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	148	100	07/16/2018	ND	200	100	200	4.52	
DRO >C10-C28*	41100	100	07/16/2018	ND	174	86.8	200	19.0	
EXT DRO >C28-C36	8990	100	07/16/2018	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 2330 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 2 @ 1' (H801916-06)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2018	ND	1.89	94.4	2.00	0.871	
Toluene*	0.083	0.050	07/17/2018	ND	1.83	91.7	2.00	0.206	
Ethylbenzene*	0.362	0.050	07/17/2018	ND	1.84	92.2	2.00	1.52	
Total Xylenes*	0.769	0.150	07/17/2018	ND	5.72	95.3	6.00	1.24	
Total BTX	1.21	0.300	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 148 % 69.8-142

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	07/17/2018	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	96.2	10.0	07/16/2018	ND	200	100	200	4.52	
DRO >C10-C28*	3210	10.0	07/16/2018	ND	174	86.8	200	19.0	
EXT DRO >C28-C36	503	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 225 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 2 @ 2' (H801916-07)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	1.89	94.4	2.00	0.871		
Toluene*	<0.050	0.050	07/17/2018	ND	1.83	91.7	2.00	0.206		
Ethylbenzene*	<0.050	0.050	07/17/2018	ND	1.84	92.2	2.00	1.52		
Total Xylenes*	<0.150	0.150	07/17/2018	ND	5.72	95.3	6.00	1.24		
Total BTEX	<0.300	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.8-142

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	07/17/2018	ND	400	100	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	07/16/2018	ND	200	100	200	4.52	
DRO >C10-C28*	30.4	10.0	07/16/2018	ND	174	86.8	200	19.0	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 94.8 % 41-142

Surrogate: 1-Chlorooctadecane 92.1 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 2 @ 3' (H801916-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/17/2018	ND	400	100	400	3.92		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 3 @ SURFACE (H801916-09)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43		
Toluene*	0.378	0.050	07/17/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	0.654	0.050	07/17/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	2.49	0.150	07/17/2018	ND	6.55	109	6.00	2.02		
Total BTEx	3.52	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 130 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1920	16.0	07/17/2018	ND	400	100	400	3.92	
TPH 8015M	mg/kg		Analyzed By: MS						S-06

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	108	100	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	34200	100	07/17/2018	ND	211	105	200	8.92	QM-07, QR-03
EXT DRO >C28-C36	8510	100	07/17/2018	ND					

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 2200 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 3 @ 1' (H801916-10)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/17/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	0.246	0.050	07/17/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	0.620	0.150	07/17/2018	ND	6.55	109	6.00	2.02		
Total BTEX	0.866	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 137 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/17/2018	ND	400	100	400	3.92		

TPH 8015M	mg/kg		Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	36.3	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	2330	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	387	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 94.0 % 41-142

Surrogate: 1-Chlorooctadecane 191 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 3 @ 2' (H801916-11)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/17/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	<0.050	0.050	07/17/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	<0.150	0.150	07/17/2018	ND	6.55	109	6.00	2.02		
Total BTEX	<0.300	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 69.8-142

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	07/17/2018	ND	400	100	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	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	20.1	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	<10.0	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 96.6 % 41-142

Surrogate: 1-Chlorooctadecane 92.4 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 3 @ 3' (H801916-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/17/2018	ND	448	112	400	7.41		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 4 @ SURFACE (H801916-13)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/17/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.646	0.100	07/17/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	0.926	0.100	07/17/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	3.55	0.300	07/17/2018	ND	6.55	109	6.00	2.02	
Total BTEx	5.12	0.600	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2200	16.0	07/17/2018	ND	448	112	400	7.41		

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	141	100	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	42000	100	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	9440	100	07/17/2018	ND					

Surrogate: 1-Chlorooctane 113 % 41-142

Surrogate: 1-Chlorooctadecane 2660 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 4 @ 1' (H801916-14)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/17/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	0.254	0.050	07/17/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	0.564	0.150	07/17/2018	ND	6.55	109	6.00	2.02		
Total BTX	0.818	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 140 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/17/2018	ND	448	112	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	61.6	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	2400	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	389	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 196 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 4 @ 2' (H801916-15)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/17/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	<0.050	0.050	07/17/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	<0.150	0.150	07/17/2018	ND	6.55	109	6.00	2.02		
Total BTEX	<0.300	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 69.8-142

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	07/17/2018	ND	448	112	400	7.41		

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	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	29.3	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	<10.0	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 100 % 41-142

Surrogate: 1-Chlorooctadecane 96.2 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 4 @ 3' (H801916-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/17/2018	ND	448	112	400	7.41		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 5 @ SURFACE (H801916-17)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.407	0.050	07/17/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	0.643	0.050	07/17/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	2.68	0.150	07/17/2018	ND	6.55	109	6.00	2.02	
Total BTX	3.73	0.300	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 136 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1460	16.0	07/17/2018	ND	448	112	400	7.41		

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	129	100	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	43700	100	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	9720	100	07/17/2018	ND					

Surrogate: 1-Chlorooctane 113 % 41-142

Surrogate: 1-Chlorooctadecane 2600 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 5 @ 1' (H801916-18)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43	
Toluene*	<0.050	0.050	07/17/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	0.305	0.050	07/17/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	0.647	0.150	07/17/2018	ND	6.55	109	6.00	2.02	
Total BTEX	0.953	0.300	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 149 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	55.4	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	2460	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	390	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 196 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 5 @ 2' (H801916-19)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/17/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	<0.050	0.050	07/17/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	<0.150	0.150	07/17/2018	ND	6.55	109	6.00	2.02		
Total BTEX	<0.300	0.300	07/17/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 69.8-142

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	07/17/2018	ND	448	112	400	7.41		

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	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	37.8	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	11.7	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 94.5 % 41-142

Surrogate: 1-Chlorooctadecane 91.8 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/06/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 5 @ 3' (H801916-20)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/17/2018	ND	448	112	400	7.41		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 6 @ SURFACE (H801916-21)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/17/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.988	0.100	07/17/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	2.12	0.100	07/17/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	8.56	0.300	07/17/2018	ND	6.55	109	6.00	2.02	
Total BTX	11.7	0.600	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 129 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7600	16.0	07/17/2018	ND	448	112	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	202	50.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	17500	50.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	3510	50.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 121 % 41-142

Surrogate: 1-Chlorooctadecane 1040 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 6 @ 1' (H801916-22)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/17/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.443	0.200	07/17/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	2.08	0.200	07/17/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	4.80	0.600	07/17/2018	ND	6.55	109	6.00	2.02	
Total BTEX	7.33	1.20	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 151 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	377	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	4770	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	691	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 134 % 41-142

Surrogate: 1-Chlorooctadecane 288 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 6 @ 2' (H801916-23)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.061	0.050	07/17/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	0.380	0.050	07/17/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	1.43	0.150	07/17/2018	ND	6.55	109	6.00	2.02	
Total BTX	1.87	0.300	07/17/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 155 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	64.5	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	1260	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	188	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 146 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 6 @ 3' (H801916-24)

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	07/17/2018	ND	448	112	400	7.41		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 7 @ SURFACE (H801916-25)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/18/2018	ND	2.25	112	2.00	2.43	
Toluene*	1.23	0.100	07/18/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	1.67	0.100	07/18/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	7.29	0.300	07/18/2018	ND	6.55	109	6.00	2.02	
Total BTX	10.2	0.600	07/18/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 137 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13300	16.0	07/17/2018	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
				S-06					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	150	50.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	18000	50.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	3580	50.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 114 % 41-142

Surrogate: 1-Chlorooctadecane 1080 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 7 @ 1' (H801916-26)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/18/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.638	0.200	07/18/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	3.64	0.200	07/18/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	12.6	0.600	07/18/2018	ND	6.55	109	6.00	2.02	
Total BTX	16.9	1.20	07/18/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 152 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	433	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	4470	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	653	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 133 % 41-142

Surrogate: 1-Chlorooctadecane 271 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 7 @ 2' (H801916-27)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2018	ND	2.25	112	2.00	2.43	
Toluene*	<0.050	0.050	07/18/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	0.226	0.050	07/18/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	0.853	0.150	07/18/2018	ND	6.55	109	6.00	2.02	
Total BTX	1.08	0.300	07/18/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 143 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	47.4	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	1430	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	238	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 106 % 41-142

Surrogate: 1-Chlorooctadecane 160 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 7 @ 3' (H801916-28)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/17/2018	ND	448	112	400	7.41		

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 8 @ SURFACE (H801916-29)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.998	0.050	07/18/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	1.29	0.050	07/18/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	6.12	0.150	07/18/2018	ND	6.55	109	6.00	2.02	
Total BTEX	8.41	0.300	07/18/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 150 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15000	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	133	50.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	17900	50.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	3560	50.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 117 % 41-142

Surrogate: 1-Chlorooctadecane 1100 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 8 @ 1' (H801916-30)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.526	0.050	07/18/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	3.21	0.050	07/18/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	10.5	0.150	07/18/2018	ND	6.55	109	6.00	2.02	
Total BTX	14.2	0.300	07/18/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 218 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	488	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	5220	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	740	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 144 % 41-142

Surrogate: 1-Chlorooctadecane 298 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 8 @ 2' (H801916-31)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2018	ND	2.25	112	2.00	2.43	
Toluene*	0.066	0.050	07/18/2018	ND	2.18	109	2.00	3.05	
Ethylbenzene*	0.325	0.050	07/18/2018	ND	2.13	106	2.00	2.18	
Total Xylenes*	0.716	0.150	07/18/2018	ND	6.55	109	6.00	2.02	
Total BTX	1.11	0.300	07/18/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 150 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	07/17/2018	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	60.8	10.0	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	1490	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	229	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 161 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SP 8 @ 3' (H801916-32)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/17/2018	ND	400	100	400	3.92	

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: NORTH (H801916-33)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/18/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.55	109	6.00	2.02		
Total BTEx	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/17/2018	ND	400	100	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	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	<10.0	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	<10.0	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 93.5 % 41-142

Surrogate: 1-Chlorooctadecane 87.2 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: EAST (H801916-34)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.25	112	2.00	2.43		
Toluene*	<0.050	0.050	07/18/2018	ND	2.18	109	2.00	3.05		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.13	106	2.00	2.18		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.55	109	6.00	2.02		
Total BTEx	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 125 % 69.8-142

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	07/17/2018	ND	400	100	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	07/17/2018	ND	206	103	200	2.89	
DRO >C10-C28*	<10.0	10.0	07/17/2018	ND	211	105	200	8.92	
EXT DRO >C28-C36	<10.0	10.0	07/17/2018	ND					

Surrogate: 1-Chlorooctane 88.8 % 41-142

Surrogate: 1-Chlorooctadecane 82.9 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: WEST (H801916-35)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.37	118	2.00	0.370		
Toluene*	<0.050	0.050	07/18/2018	ND	2.31	115	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.27	114	2.00	0.695		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.93	116	6.00	0.00183		
Total BTEx	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 126 % 69.8-142

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	07/17/2018	ND	400	100	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	07/16/2018	ND	177	88.7	200	2.34	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	183	91.3	200	1.37	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 82.6 % 41-142

Surrogate: 1-Chlorooctadecane 89.3 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SOUTH (H801916-36)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.37	118	2.00	0.370		
Toluene*	<0.050	0.050	07/18/2018	ND	2.31	115	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.27	114	2.00	0.695		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.93	116	6.00	0.00183		
Total BTX	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 69.8-142

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	07/17/2018	ND	400	100	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	07/16/2018	ND	177	88.7	200	2.34	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	183	91.3	200	1.37	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 75.1 % 41-142

Surrogate: 1-Chlorooctadecane 80.0 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: NORTH 2 (H801916-37)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.37	118	2.00	0.370		
Toluene*	<0.050	0.050	07/18/2018	ND	2.31	115	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.27	114	2.00	0.695		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.93	116	6.00	0.00183		
Total BTEx	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 69.8-142

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	07/17/2018	ND	400	100	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	07/16/2018	ND	177	88.7	200	2.34	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	183	91.3	200	1.37	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 79.8 % 41-142

Surrogate: 1-Chlorooctadecane 85.3 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: EAST 2 (H801916-38)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.37	118	2.00	0.370		
Toluene*	<0.050	0.050	07/18/2018	ND	2.31	115	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.27	114	2.00	0.695		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.93	116	6.00	0.00183		
Total BTX	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 123 % 69.8-142

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	07/17/2018	ND	400	100	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	07/16/2018	ND	177	88.7	200	2.34	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	183	91.3	200	1.37	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 87.1 % 41-142

Surrogate: 1-Chlorooctadecane 92.4 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: WEST 2 (H801916-39)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.37	118	2.00	0.370		
Toluene*	<0.050	0.050	07/18/2018	ND	2.31	115	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.27	114	2.00	0.695		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.93	116	6.00	0.00183		
Total BTEX	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/17/2018	ND	400	100	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	07/16/2018	ND	177	88.7	200	2.34	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	183	91.3	200	1.37	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 76.5 % 41-142

Surrogate: 1-Chlorooctadecane 81.7 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	07/13/2018	Sampling Date:	07/09/2018
Reported:	07/20/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG		

Sample ID: SOUTH 2 (H801916-40)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/18/2018	ND	2.37	118	2.00	0.370		
Toluene*	<0.050	0.050	07/18/2018	ND	2.31	115	2.00	1.11		
Ethylbenzene*	<0.050	0.050	07/18/2018	ND	2.27	114	2.00	0.695		
Total Xylenes*	<0.150	0.150	07/18/2018	ND	6.93	116	6.00	0.00183		
Total BTEX	<0.300	0.300	07/18/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/17/2018	ND	400	100	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	07/16/2018	ND	177	88.7	200	2.34	
DRO >C10-C28*	<10.0	10.0	07/16/2018	ND	183	91.3	200	1.37	
EXT DRO >C28-C36	<10.0	10.0	07/16/2018	ND					

Surrogate: 1-Chlorooctane 82.8 % 41-142

Surrogate: 1-Chlorooctadecane 87.2 % 37.6-147

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

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-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", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

Company Name: BBC International, Inc.

Project Manager: Cliff Brunson

Address: P.O. Box 805

City: Hobbs State: NM Zip: 88241

Phone #: 575-397-6388 Fax #: 575-397-0397

Project #: Project Owner:

Project Name:

Project Location:

Sampler Name:

FOR LAB USE ONLY

BILL TO

P.O. #:

Company:

Attn:

Address:

City:

State: Zip:

Phone #:

Fax #:

ANALYSIS REQUEST

Project Name: Project Location: Sampler Name:

FOR LAB USE ONLY

Matrix

GROUNDWATER

WASTEWATER

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

CONTAINERS

(G)RAB OR (C)OMP.

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME



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

December 11, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: LYCHEE BWS STATE COM #1H

Enclosed are the results of analyses for samples received by the laboratory on 12/06/18 11:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 1 @ SURFACE (H803591-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.237	0.050	12/07/2018	ND	2.01	100	2.00	3.72	
Toluene*	5.36	0.050	12/07/2018	ND	1.98	99.0	2.00	4.63	
Ethylbenzene*	<0.050	0.050	12/07/2018	ND	1.93	96.6	2.00	5.93	
Total Xylenes*	16.6	0.150	12/07/2018	ND	5.68	94.7	6.00	5.83	
Total BTX	22.2	0.300	12/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	12/11/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	462	10.0	12/07/2018	ND	197	98.4	200	2.38		
DRO >C10-C28*	3540	10.0	12/07/2018	ND	206	103	200	4.30		
EXT DRO >C28-C36	619	10.0	12/07/2018	ND						

Surrogate: 1-Chlorooctane 127 % 41-142

Surrogate: 1-Chlorooctadecane 198 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 1 @ 1 (H803591-02)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/07/2018	ND	2.01	100	2.00	3.72		
Toluene*	0.115	0.050	12/07/2018	ND	1.98	99.0	2.00	4.63		
Ethylbenzene*	<0.050	0.050	12/07/2018	ND	1.93	96.6	2.00	5.93		
Total Xylenes*	0.666	0.150	12/07/2018	ND	5.68	94.7	6.00	5.83		
Total BTEx	0.780	0.300	12/07/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3000	16.0	12/11/2018	ND	416	104	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*	22.4	10.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	379	10.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	92.7	10.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 111 % 41-142

Surrogate: 1-Chlorooctadecane 131 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 1 @ 2 (H803591-03)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/07/2018	ND	2.01	100	2.00	3.72		
Toluene*	0.176	0.050	12/07/2018	ND	1.98	99.0	2.00	4.63		
Ethylbenzene*	<0.050	0.050	12/07/2018	ND	1.93	96.6	2.00	5.93		
Total Xylenes*	0.958	0.150	12/07/2018	ND	5.68	94.7	6.00	5.83		
Total BTEX	1.13	0.300	12/07/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	912	16.0	12/11/2018	ND	416	104	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*	31.1	10.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	814	10.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	166	10.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 140 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 2 @ SURFACE (H803591-04)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	12/07/2018	ND	2.01	100	2.00	3.72	
Toluene*	15.7	0.500	12/07/2018	ND	1.98	99.0	2.00	4.63	
Ethylbenzene*	12.8	0.500	12/07/2018	ND	1.93	96.6	2.00	5.93	
Total Xylenes*	59.2	1.50	12/07/2018	ND	5.68	94.7	6.00	5.83	
Total BTX	87.7	3.00	12/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 134 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	12/11/2018	ND	400	100	400	0.00	QM-07

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	977	10.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	6010	10.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	957	10.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 163 % 41-142

Surrogate: 1-Chlorooctadecane 271 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 2 @ 1 (H803591-05)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.91	0.500	12/07/2018	ND	2.01	100	2.00	3.72	
Toluene*	60.8	0.500	12/07/2018	ND	1.98	99.0	2.00	4.63	
Ethylbenzene*	45.7	0.500	12/07/2018	ND	1.93	96.6	2.00	5.93	
Total Xylenes*	121	1.50	12/07/2018	ND	5.68	94.7	6.00	5.83	
Total BTEX	230	3.00	12/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3600	16.0	12/11/2018	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1380	10.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	5730	10.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	866	10.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 171 % 41-142

Surrogate: 1-Chlorooctadecane 257 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 2 @ 2 (H803591-06)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/07/2018	ND	2.01	100	2.00	3.72	
Toluene*	1.12	0.050	12/07/2018	ND	1.98	99.0	2.00	4.63	
Ethylbenzene*	1.66	0.050	12/07/2018	ND	1.93	96.6	2.00	5.93	
Total Xylenes*	6.57	0.150	12/07/2018	ND	5.68	94.7	6.00	5.83	
Total BTX	9.36	0.300	12/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 154 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	12/11/2018	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	153	10.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	1780	10.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	331	10.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 119 % 41-142

Surrogate: 1-Chlorooctadecane 165 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 3 @ SURFACE (H803591-07)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.04	0.500	12/07/2018	ND	2.01	100	2.00	3.72	
Toluene*	28.2	0.500	12/07/2018	ND	1.98	99.0	2.00	4.63	
Ethylbenzene*	12.2	0.500	12/07/2018	ND	1.93	96.6	2.00	5.93	
Total Xylenes*	57.4	1.50	12/07/2018	ND	5.68	94.7	6.00	5.83	
Total BTEX	101	3.00	12/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 140 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5040	16.0	12/11/2018	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1670	50.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	11800	50.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	2020	50.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 195 % 41-142

Surrogate: 1-Chlorooctadecane 413 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 3 @ 1 (H803591-08)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.672	0.500	12/07/2018	ND	2.01	100	2.00	3.72	
Toluene*	23.7	0.500	12/07/2018	ND	1.98	99.0	2.00	4.63	
Ethylbenzene*	21.3	0.500	12/07/2018	ND	1.93	96.6	2.00	5.93	
Total Xylenes*	88.3	1.50	12/07/2018	ND	5.68	94.7	6.00	5.83	
Total BTEx	134	3.00	12/07/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3480	16.0	12/11/2018	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1240	10.0	12/07/2018	ND	197	98.4	200	2.38	
DRO >C10-C28*	5510	10.0	12/07/2018	ND	206	103	200	4.30	
EXT DRO >C28-C36	820	10.0	12/07/2018	ND					

Surrogate: 1-Chlorooctane 164 % 41-142

Surrogate: 1-Chlorooctadecane 245 % 37.6-147

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:

BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	12/06/2018	Sampling Date:	12/05/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #1H	Sampling Condition:	Cool & Intact
Project Number:	5-26-18	Sample Received By:	Tamara Oldaker
Project Location:	COG-176		

Sample ID: SP 3 @ 2 (H803591-09)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.122	0.050	12/08/2018	ND	1.95	97.3	2.00	1.76	
Toluene*	5.53	0.050	12/08/2018	ND	1.96	98.1	2.00	1.95	
Ethylbenzene*	7.64	0.050	12/08/2018	ND	1.90	95.1	2.00	2.12	
Total Xylenes*	28.2	0.150	12/08/2018	ND	5.71	95.1	6.00	1.84	
Total BTEX	41.5	0.300	12/08/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	12/11/2018	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	562	10.0	12/07/2018	ND	197	98.4	200	2.38		
DRO >C10-C28*	3790	10.0	12/07/2018	ND	206	103	200	4.30		
EXT DRO >C28-C36	605	10.0	12/07/2018	ND						

Surrogate: 1-Chlorooctane 148 % 41-142

Surrogate: 1-Chlorooctadecane 217 % 37.6-147

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

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-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", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

Page 12 of 12

Released to Imaging: 9/13/2023 1:36:47 PM

CALLING OF CUSTOMER AID: ANALYSIS REQUIRED

BILL TO						ANALYSIS REQUEST							
Company Name: BBO International, Inc.						P.O. #:							
Project Manager: Cliff Brunson						Company:							
Address: P.O. Box 805						Attn:							
City: Hobbs						State: NM Zip: 88241							
Phone #: 575-397-6388						Fax #: 575-397-0397							
Project #:						Project Owner: COC							
Project Name: Lychee BWS State Com #1H						State: Zip:							
Project Location: 176						Phone #:							
Sampler Name: V/O						Fax #:							
FOR LAB USE ONLY		MATRIX		PRESERV	SAMPLING								
	Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:
1	H803591	Sp1e-SUR	C-1	1	X		X				X	X	
2		1	C-1	1	X		X				X	X	
3		2	C-1	1	X		X				X	X	
4		sp2e SUR	C-1	1	X		X				X	X	
5		2	C-1	1	X		X				X	X	
6		sp3e SUR	C-1	1	X		X				X	X	
7		1	C-1	1	X		X				X	X	
8		2	C-1	1	X		X				X	X	

TPH Extended
BTEX
C/-

DATE TIME
12-5

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy, for any claim arising whether caused 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.

Reinquired By: _____ Date: 12-6-10
Time: 11:05

Received By: _____ Date: _____
Time: _____

Reinquired By: _____ Date: _____
Time: _____

Delivered By: (Circle One)

Checked By: _____
(Initials)

Sampler - UPS - Bus - Other: _____

Phone Result: ☐ Yes ☒ No Add'l Phone #: _____
Fax Result: ☐ Yes ☒ No Add'l Fax #: _____

REMARKS:

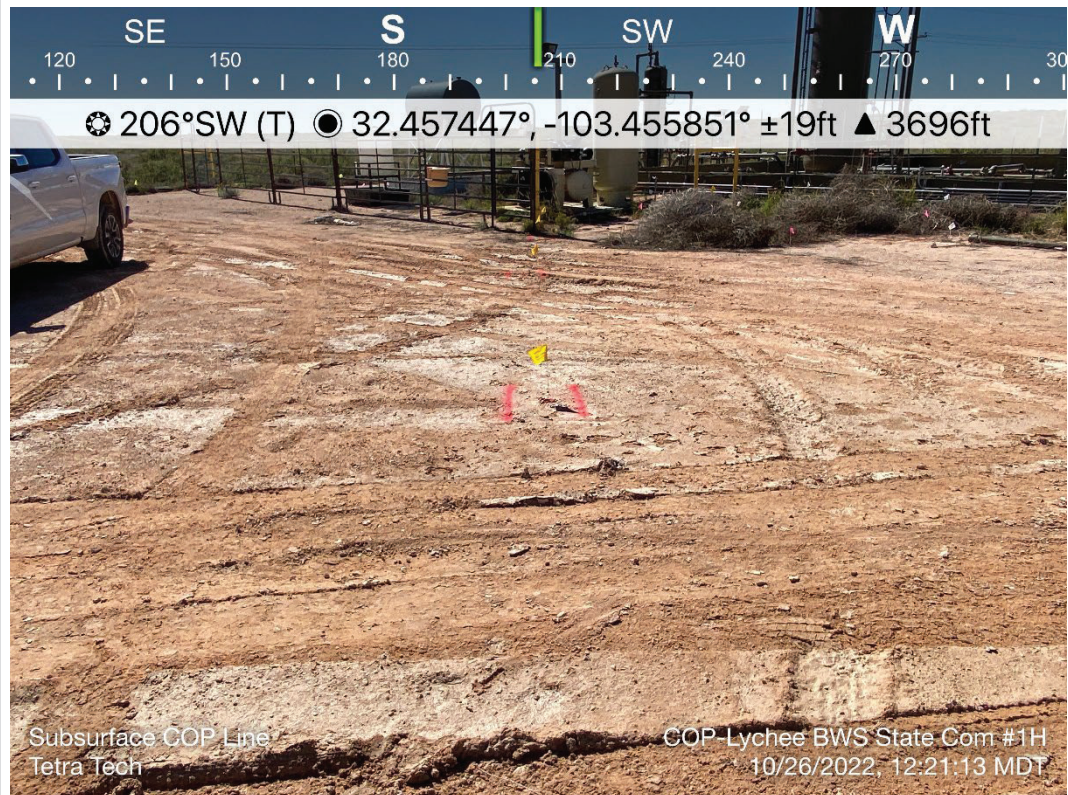
-O.I.C #97

APPENDIX E

Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	Site Signage. Lychee BWS State Com #001 Valve Release Site.	1
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



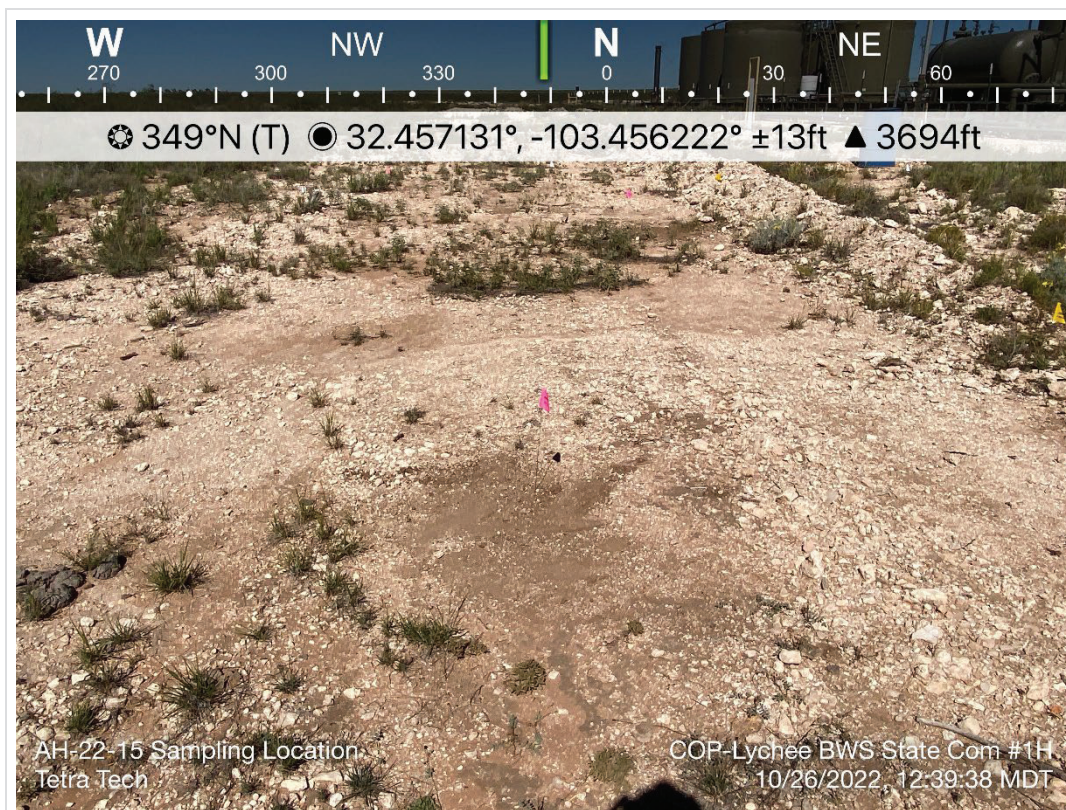
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south southwest. View of lease pad, production equipment and subsurface line.	2
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of production equipment and subsurface line.	3
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of approximate release. Vegetation present.	4
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



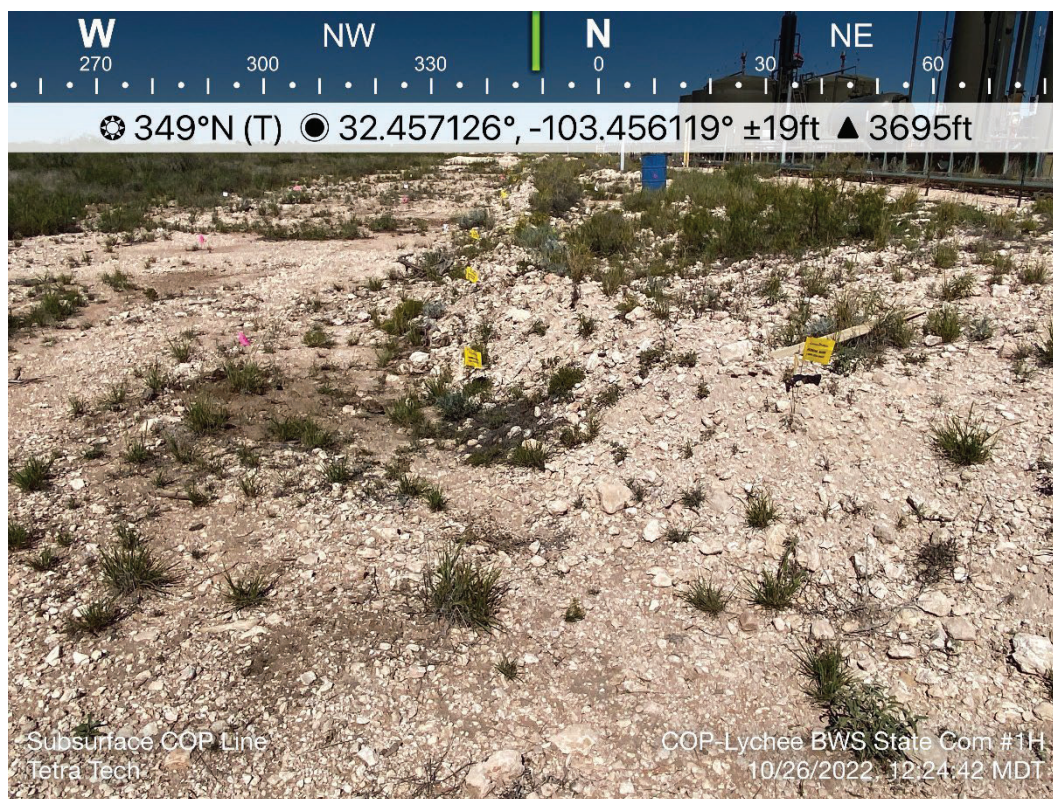
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of approximate release extent.	5
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



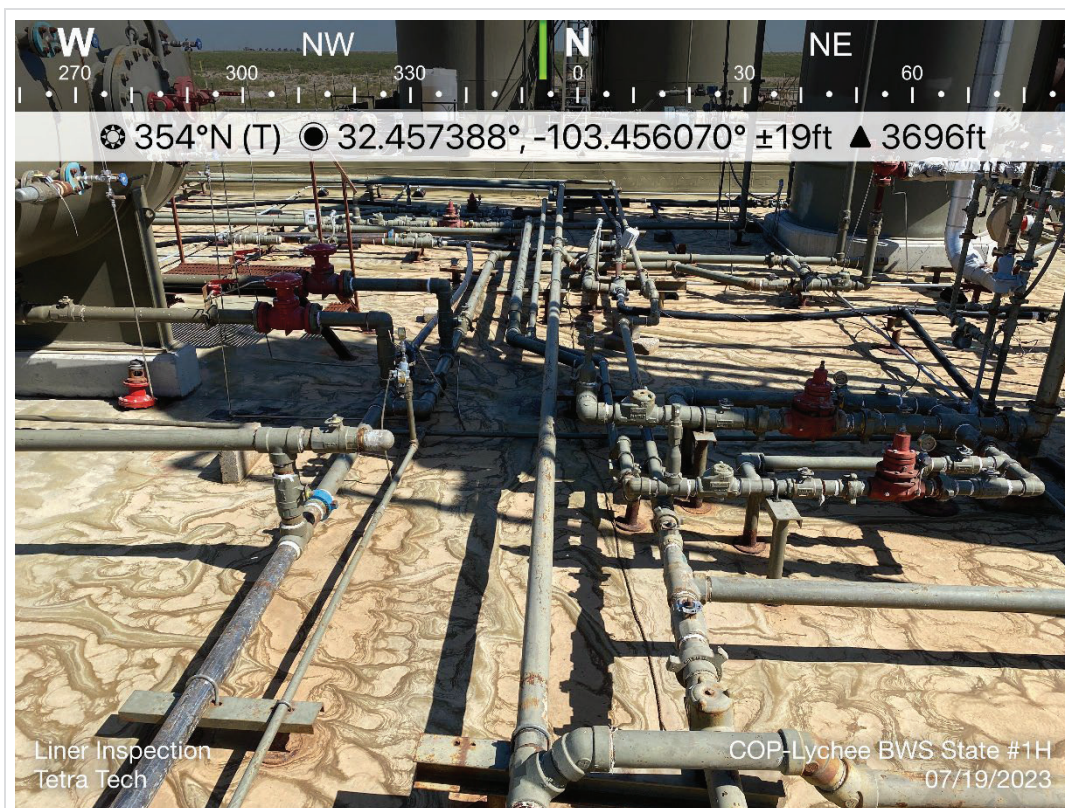
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. Approximate release extent. View of production equipment.	6
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. Approximate release area. View of surface lines.	7
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of approximate release extent.	8
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022



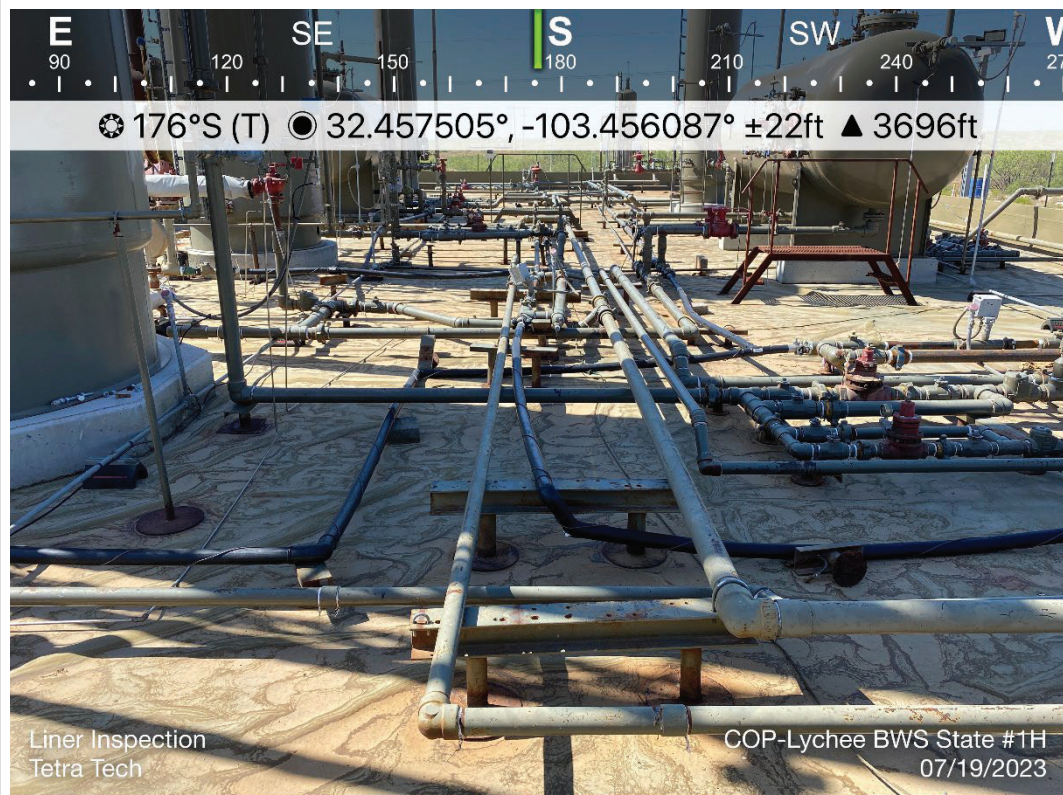
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of approximate release extent inside facility. View of multiple steel lines. Liner integrity intact.	9
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View northwest. View of approximate release extent inside facility. View of production equipment. Liner integrity intact.	10
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View east. View of approximate release extent inside facility. View of multiple steel lines. Liner integrity intact.	11
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of approximate release extent inside facility. View of multiple steel lines. Liner integrity intact.	12
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023

APPENDIX F

NMSLO Seed Mixture Details

Custom Soil Resource Report
Soil Map



Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BF	Berino-Cacique fine sandy loams association	0.3	100.0%
Totals for Area of Interest		0.3	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Custom Soil Resource Report

Lea County, New Mexico

BF—Berino-Cacique fine sandy loams association**Map Unit Setting**

National map unit symbol: dmpf
Elevation: 3,000 to 3,900 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 50 percent
Cacique and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino**Setting**

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock over calcareous sandy alluvium derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sandy loam
Btk - 8 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: B
Ecological site: R042XC004NM - Sandy
Hydric soil rating: No

Custom Soil Resource Report

Description of Cacique**Setting**

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sandy loam

Bt - 8 to 28 inches: sandy clay loam

Bkm - 28 to 38 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 20 to 40 inches to petrocalcic

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7c

Hydrologic Soil Group: C

Ecological site: R042XC004NM - Sandy

Hydric soil rating: No

Minor Components**Kermit**

Percent of map unit: 4 percent

Ecological site: R042XC005NM - Deep Sand

Hydric soil rating: No

Pyote

Percent of map unit: 3 percent

Ecological site: R042XC003NM - Loamy Sand

Hydric soil rating: No

Wink

Percent of map unit: 3 percent

Ecological site: R042XC003NM - Loamy Sand

Hydric soil rating: No

Custom Soil Resource Report

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

SLO Seed Mix

SM Series

1 REVEGETATION PLANS

The following Revegetation Plans were developed for revegetation of sites in southeastern New Mexico. To determine which revegetation plan is appropriate follow procedures in the section titled Determining the Revegetation Plan.

Revegetation Plans contain seed mixtures, as well as seed bed preparation and planting requirements. The detailed instructions for seedbed preparation and planting can be found in the section Revegetation Techniques.

Table 3 - Revegetation Plans, Codes, and Soil Textures for Southeastern New Mexico

REVEGETATION PLANS	CODE	SOIL TEXTURES
Clay	C	Clay, Silty Clay, Stony Silty Clay, Clay Loam, Silty Clay Loam (including saline and sodic Clay soils)
Loam	L	Silty Loam, Cobbly Silt Loam, Stony Silt Loam, Silt, Loam, Sandy, Clay Loam
Sandy Loam	SL	Very Fine Sandy Loam, Fine Sandy Loam, Cobbly Fine Sandy Loam, Sandy Loam, Cobbly Sandy Loam, Gravelly Fine Sandy Loam, Very Gravelly Fine Sand Loam, Stony Fine Sandy Loam, Stony Sandy Loam
Shallow	SH	Rocky Loam, Cobbly Loam
Course	CS	Gravelly Loam, very Gravelly Loam, Gravelly Sandy Loam, Very Gravelly Sandy Loam, Stony Loam, Stony Sandy Loam
Sandy	S	Loamy Fine Sand, Loam Sand, Very Gravelly Loamy Fine Sand
Blow Sand	BS	Fine Sand, Sand, Coarse Sand
Mountain Meadow	MM	Clay, Loam
Mountain Upland	MU	Clay Loam, Loam



NMSLO Seed Mix**Loamy (L)****LOAMY (L) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarron, Pastura	1.5	F
Forbs:			
Firewheel (<i>Gaillardia</i>)	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
Total PLS/acre		18.0	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at <http://plants.usda.gov>.



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 254395

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 254395
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan and sampling plan approved.	9/13/2023
bhall	Deferral denied. Per the BBC workplan "When the release occurred the pressure from the ruptured line punctured the liner causing produced water to remain under the liner and then allowed fluids to escape outside of the lined facility onto the pad and into the pasture." Per 19.15.29.11 A.(5)(b) NMAC the entire release will need to be delineated horizontally and vertically.	9/13/2023
bhall	Per 19.15.29.12 C.(2) NMAC a deferral may be granted as long the contamination is fully delineated.	9/13/2023
bhall	A variance of any requirement of 19.15.29 NMAC can be requested. A variance request will need to include a statement that explains the need of the variance and a detailed demonstration that the variance will provide equal or better protection of freshwater, public health, and the environment.	9/13/2023
bhall	Submit a complete report through the OCD Permitting website by 12/13/2023.	9/13/2023