E N S O L U M

July 6, 2023

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

Re: Closure Request Chiso 14 State #4 Sight Glass Break Incident Number nAPP2221360832 Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of BTA Oil Producers, LLC (BTA), has prepared this *Closure Request* to document assessment and soil sampling activities performed at the Chiso 14 State #4 Sight Glass Break (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water within a lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, BTA is submitting this *Closure Request*, describing Site assessment and delineation activities that have occurred and requesting no further action and closure for Incident Number nAPP2221360832.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 14, Township 22 South, Range 34 East, in Lea County, New Mexico (32.38531°, -103.43576°) and is associated with oil and gas exploration and production operations on private land owned by Merchant Livestock Company.

On July 19, 2022, a sight glass broke and resulted in the release of approximately 14 barrels (bbls) of produced water into the lined containment. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 13.5 bbls of produced water were recovered. BTA reported the release to the New Mexico Oil Conservation Division (NMOCD) and submitted a *Release Notification Form C-141* (Form C-141) on August 1, 2022. The release was assigned Incident Number nAPP2221360832.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized for applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well CP-01682, located approximately 527 feet south of the Site. The groundwater well has a reported depth to groundwater of 42 feet bgs and a total depth of 294 feet bgs. Ground surface elevation at the groundwater well location is 3,474 feet above mean sea level (amsl), which is approximately 1-foot lower in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1 and the associated well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a riverine, located approximately 2,773 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES

A 48-hour advance notice of the liner inspection was provided via email on May 24, 2023, to the NMOCD. A liner integrity inspection was conducted by Ensolum personnel on May 30, 2023. Upon inspection, no rips, tears, holes, or damage was observed. The liner was determined to be sufficient and all released fluids have been removed. Four discrete delineation soil samples, SS01 through SS04, were collected at a depth of 0.25 feet bgs to confirm the lateral release extent did not extend outside the containment.

Delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach[®] chloride QuanTab[®] test strips. The delineation soil sample locations are depicted on Figure 2. Photographic documentation was conducted at the Site. A photographic log is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analyses of the following constituents of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples, SS01 through SS04, indicated all COC concentrations were compliant with most stringent Table I Closure Criteria and successfully defined the lateral extent of the release. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix C.

ENSOLUM

BTA Oil Producers, LLC Closure Request Chiso 14 State #4 Sight Glass Break

CLOSURE REQUEST

Site assessment and delineation activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the historical July 19, 2022, produced water release within the lined containment. A liner integrity inspection was conducted by Ensolum personnel on May 30, 2023. Upon inspection, no rips, tears, holes, or damage was observed, and the liner was determined to be sufficient. Laboratory analytical results for the delineation soil samples, collected around the lined containment, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. The release was contained laterally by the lined containment and the liner was performing as designed.

Based on initial response efforts, the liner operating as designed, and soil sample laboratory analytical results confirming the absence of impacted soil outside containment, BTA respectfully requests closure for Incident Number nAPP2221360832. Notifications submitted to the NMOCD are included in Appendix D and the final Form C-141 is included in Appendix E.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely, Ensolum, LLC

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Hadlie Green Project Geologist

Daniel R. Moir, PG Senior Managing Geologist

ENSOLUM

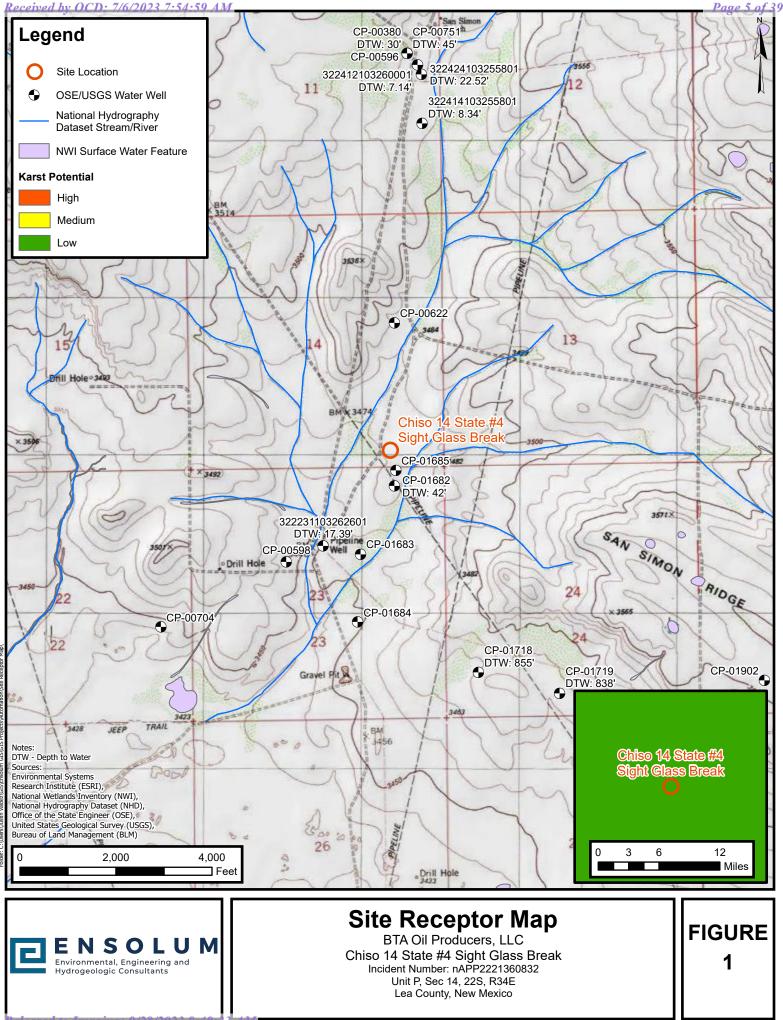
cc: Kelton Beaird, BTA Nathan Sirgo, BTA Merchant Livestock Company

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Table 1
 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix D NMOCD Notifications
- Appendix E Final C-141



FIGURES



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TABLES

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ENSOLUM

				Chiso 14 S BTA	TABLE 1 LE ANALYTIC State #4 Sight Oil Producers County, New M	Glass Break s, LLC				
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (l	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
				Deliı	neation Soil Sa	mples	I			
SS01	05/24/2023	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
SS02	05/24/2023	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SS03	05/24/2023	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SS04	05/24/2023	0.25	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0

Notes:

bgs: below ground surface mg/kg: milligrams per kilogram NMOCD: New Mexico Oil Conservation Division NMAC: NewMexico Administrative Code BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon

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APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

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	OSE POD NO					WELL TAG ID NO.			OSE FILE NO(S) .			
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<u> </u>					· · · · · · · · · · · ·								
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	09/10/19 09/13/19 294 294 42												
	STATIC WATER LEVEL IN COMPLETED WELL (FT)												
7	COMPLETED WELL IS: CARTESIAN CORY HOLE SHALLOW (UNCONFINED) 31												
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	0	6	6	Soil	Y VN	Londb (gpm)				
	6	9	3	Soil & Sand	Y √N					
	9	16	7	Caliche	Y √N					
	16	20	4	Clay & Sand	Y ✓N					
	20	42	22	Red Clay	Y √N					
_	42	56	14	Brown Sandrock	✓ Y N	5.00				
4. HYDROGEOLOGIC LOG OF WELL	56	63	7	Red Clay	Y VN					
OFV	63	68	5	White & Green Clay	Y √N					
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õ	122	128	6	Brown Shale	Y √N					
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Ē	187	225	38	Red Clay & Red Shale	Y √N					
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	242	274	32	Blue Sandrock & Shale	✓ Y N	1.00				
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Lea County, New Mexico Latitude 32°22'47.6", Longitude 103°26'25.3" NAD83 Land-surface elevation 3,452 feet above NAVD88

The depth of the well is 60 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats							
Table of data							
Tab-separated data							
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Date Time	Ø Water-level date-time accuracy	Parameter \$	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical \$ datum	Ø Status ≎	Ø Method of ≎ measurement	Ø Measuring ≎ agency	Ø Source of measurement ≎	Water-level approval status	•
1968-06-10	D	62610		3425.15	NGVD29	1	Z				А
1968-06-10	D	62611		3426.75	NAVD88	1	Z				А
1968-06-10	D	72019	25.25			1	Z				А
1971-09-08	D	62610		3423.42	NGVD29	P	Z				Α
1971-09-08	D	62611		3425.02	NAVD88	P	Z				А
1971-09-08	D	72019	26.98			P	Z				А
1976-12-16	D	62610		3426.10	NGVD29	1	Z				А
1976-12-16	D	62611		3427.70	NAVD88	1	Z				A
1976-12-16	D	72019	24.30			1	Z				А
1981-03-18	D	62610		3427.03	NGVD29	1	Z				A
1981-03-18	D	62611		3428.63	NAVD88	1	Z				А
1981-03-18	D	72019	23.37			1	Z				А
1986-04-10	D	62610		3427.57	NGVD29	1	Z				А
1986-04-10	D	62611		3429.17	NAVD88	1	Z				Α
1986-04-10	D	72019	22.83			1	Z				А
1991-05-03	D	62610		3427.87	NGVD29	1	Z				А
1991-05-03	D	62611		3429.47	NAVD88	1	Z				А
1991-05-03	D	72019	22.53			1	Z				A
1996-02-21	D	62610		3428.27	NGVD29	1	S				А
1996-02-21	D	62611		3429.87	NAVD88	1	S				A
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Page 12 of 39



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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	FROM	то	(feet)	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	BEARING? (YES / NO)	WATER- BEARING ZONES (gpm)
	0	6	6	Soil	Y √N	
	6	9	3	Soil & Sand	Y √N	
	9	16	7	Caliche	Y √N	
	16	20	4	Clay & Sand	Y √N	
	20	42	22	Red Clay	Y VN	
Ţ	42	56	14	Brown Sandrock	✓Y N	5.00
4. HYDROGEOLOGIC LOG OF WELL	56	63	7	Red Clay	Y 🖌 N	
OF	63	68	5	White & Green Clay	Y √N	
00	68	92	24	Brown Sandrock	✓Y N	9.00
ЯСI	92	122	30	Red Clay	Y √N	
DOJ	122	128	6	Brown Shale	Y √N	
3EO	128	165	37	Red Clay with Stringers of Brown Sandrock	Y √N	
ROC	165	187	22	Brown Shale	Y √N	
(IXI)	187	225	38	Red Clay & Red Shale	Y √N	
4	225	242	17	Brown Shale	Y √N	
	242	274	32	Blue Sandrock & Shale	✓Y N	1.00
	274	294	20	Red Shale	Y VN	
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6. SI		rr			1/////19	
		SIGNAT	URE OF DRILLE	R / PRINT SIGNEE NAME	DATE	
FO	OSE DITER			W/D 20 W/ETT	RECORD & LOG (Ve	
	$\frac{1}{2} \cos \left(\frac{1}{2} - \frac{1}{2} \right)$	- 1687	2_	POD NO. TRN NO. 6	32-044	SIGIE 00/50/2017)
—	CATION	212	Su 23	7225 R 34E WELL TAG ID NO.	062A	PAGE 2 OF 2

Released to Imaging: 9/28/2023 8:48:33 AM

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

NOI	OSE POD NC CP-1718-F	POD1 ML	P West		WELL TAG ID NO.			OSE FILE NO(·			
OCAT	WELL OWN		Company/Glenn's	Water Well S	ervice, Inc.			PHONE (OPTI 575-398-242		,	20	
WELL I	WELL OWN PO Box 69		ADDRESS	<u> </u>				CITY Tatum		STATE NM	ංක (88) ල	ZIP 5
GENERAL AND WELL LOCATION	WELL LOCATIO		DE	GREES 32	MINUTES 22	seconds 21.06	N		REQUIRED: ONE TEN	TH OF A SI		
ENER	(FROM GI		NGITUDE	-103	25 48.00 W * DATUM				QUIRED: WGS 84		vas grados national national	
1. G	1		4 Section 24, Town					•	. ,	IERE AVAI		
	LICENSE NO WD		NAME OF LICENSED		Corky Glenn				NAME OF WELL DR Glenn's V		MPANY I Service, Inc	».
e de la General La com	DRILLING STARTED DRILLING ENDED DEPTH OF COMPLETED WELL (FT) E 05/09/19 05/13/19 1,172 E							LE DEPTH (FT) ,172	DEPTH WATER FIR	st encou 855'	NTERED (FT)	
N	COMPLETED WELL IS: ARTESIAN DRY HOLE SHALLOW (UNCONFI						D)		STATIC WATER LE	vel in con 403'	MPLETED WE	LL (FT)
ATIC	DRILLING FLUID: AIR MUD ADDITIVES - SPECIFY											
ORM	DRILLING M	IETHOD:	F ROTARY	HAMMER	CABLE TOO	n 🗖 c	THE	R - SPECIFY:				
CASING INFORMATION	FROM TO DIAN		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		_{id} C	ONN T	SING IECTION YPE ing diameter)	CASING INSIDE DIAM. (inches)	THIC	IG WALL CKNESS Iches)	SLOT SIZE (inches)
& C	0	40	20"	ASTM A53	Sch 40 Steel 16" C		· · ·	None	15.5		.25	
UZ	0	800	14.75"	API Steel Gra	de J-55/K-55 10.75	"OD T	hread	l & Collar	10.05		.35	
2. DRILLING &	752	1,172	9.875"		ng 8 5/8" / 8.625" Ol Bottom 378 Perfora		Pla	in End	8.125		.25	1/8"
								· · · · · · · · · · · · · · · · · · ·				
					· · · · · · · · · · · · · · · · · · ·							
	DEPTH	(feet bgl)	BORE HOLE		Γ ANNULAR SEAI				AMOUNT	<u> </u>	METHO	
RIAI	FROM 0	TO 40'	DIAM. (inches)	GRAV	EL PACK SIZE-RA		NTE.	KVAL	(cubic feet)		PLACEM	
AATE	0	800'	14.75"	Float	and Shoe Cemented		28 B	arrels	2 yards 345 Sacks Pump	ed	Top Po Circula	
ANNULAR MATERIAL					· · · · · · · · · · · · · · · · · · ·			, .		· 		
3. ANNI		,										
			***					·				

FOR OSE INT	RECORD & LOG (Ve	rsion 06/30/17)			
FILE NO.	CP-INIR	POD NO.	TRN NO.	6282	$ \psi\rangle$
LOCATION	225.34E. 24.3.3.2	EXPL_	WELL TAG ID NO.	NA	PAGE 1 OF 2

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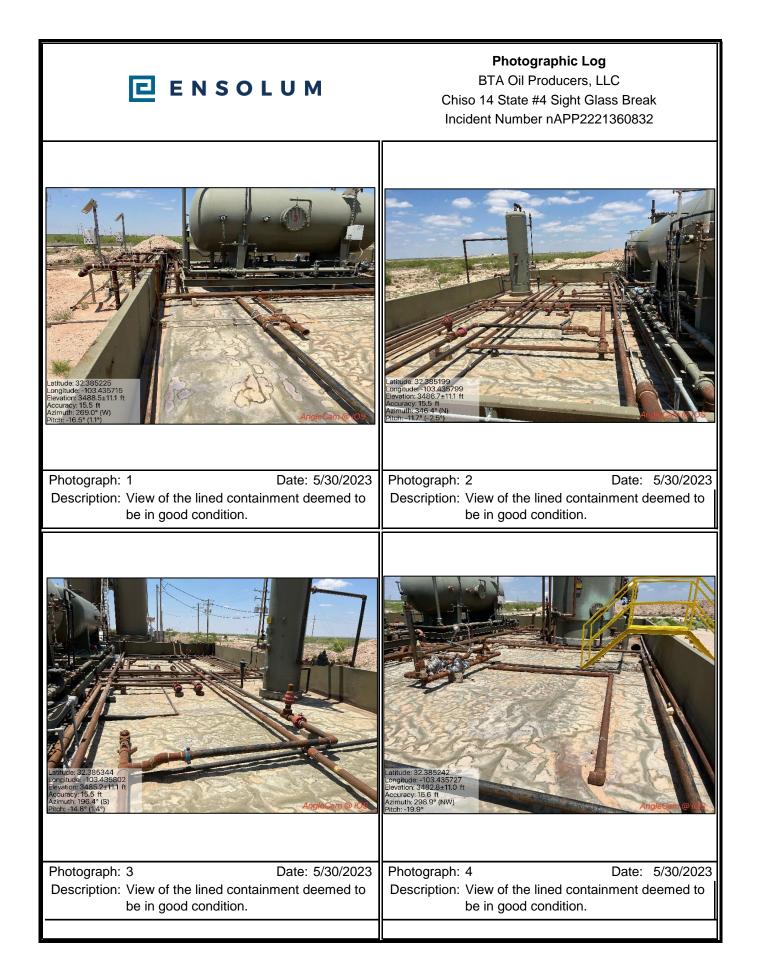
	· · · · ·		······································			
	DEPTH (1 FROM	feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	0	5	5	Sand	Y V N	
	5	25	20	Caliche	Y √N	
	25	125	100	Sand & Red Clay	Y ✓ N	
	125	550	425	Red Clay & Shale	Y √N	
	550	800	250	Red Shale & Clay	Y ✓ N	
Ţ	800	855	55	Sandrock & Shale	✓Y N	
WEI	855	918	63	Sandrock & Shale	✓Y N	
OF	918	950	32	Sandrock& Blue & Red Shale	✓ Y N	
4. HYDROGEOLOGIC LOG OF WELL	950	1,139	189	Sand	✓Y N	120.00
IC I	1,139	1,172	33	Red Shale	Y VN	
DOJ			· · · · · · ·		Y N	
EO]					Y N	
ROC		·			Y N	
QXH	· · · · ·	· <u>····</u>			Y N	
4.1					Y N	
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	METHOD U	SED TO ES	TIMATE YIELD	OF WATER-BEARING STRATA:	TOTAL ESTIMATED	
	PUMI		IR LIFT	BAILER OTHER - SPECIFY:	WELL YIELD (gpm):	120.00
Ň	WELL TES	T TEST I	RESULTS - ATTA I TIME, END TIN	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCI IE, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVE	LUDING DISCHARGE N R THE TESTING PERIC	METHOD,
NOISI	MISCELLAT				• • • • • • • • • • • • • • • • • • •	
ERV	MISCELLA	NEOUS INF	ORMATION:	o 800' drilled with mud.		· }
ans				b 800 drifted with fitted. b' to 1,172' drilled with air and foam.		
SIG						
TEST; RIG SUPERVI						E
	PRINT NAM	(E(S) OF DE	ALL RIG SUPER	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONS	TRUCTION OTHER TH	IAN LICENSEE:
Ś						
	THEIMDE	RSIGNED P	ERERY CERTIE	IES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELI	EF THE FOREGOING I	S & TRUE AND
RE	CORRECT F	RECORD OF	THE ABOVE D	ESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RI		
VTU	AND THE P.	ERMIT HOI	LDER WITHIN 3	DAYS AFTER COMPLETION OF WELL DRILLING:		
SIGNATURE		1.	h. DI	Corky Glenn	Monly	a
6. S		[]]	mg pp	<u></u>	Y# [[4	
· · ·	·	SIGNA	RE OF DRILLE	R / PRINT SIGNEE NAME	/ DATE	
FOF	OSE INTERI	NAL USE	_	WR-20 WFI	L RECORD & LOG (Ver	rsion 06/30/2017)
	eno. C	$\mathcal{P} - l'$	118	POD NO. / TRN NO.	(02224	7
LOC	CATION C	225.	3HE. 2	4.3.3.2 EXPL WELL TAGID NO.	NIA	PAGE 2 OF 2



APPENDIX B

Photographic Log

Released to Imaging: 9/28/2023 8:48:33 AM





APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



June 02, 2023

HADLIE GREEN ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND, TX 79705

RE: CHISO 14 #4 SIGHT GLASS BREAK

Enclosed are the results of analyses for samples received by the laboratory on 05/26/23 12:05.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



ENSOLUM, LLC HADLIE GREEN 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received:	05/26/2023	Sampling Date:	05/24/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	CHISO 14 #4 SIGHT GLASS BREAK	Sampling Condition:	Cool & Intact
Project Number:	03C2012060	Sample Received By:	Tamara Oldaker
Project Location:	BTA 32.38531,-103.43576		

Sample ID: SS 01 0.25' (H232707-01)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2023	ND	2.01	101	2.00	0.179	
Toluene*	<0.050	0.050	05/27/2023	ND	2.06	103	2.00	0.733	
Ethylbenzene*	<0.050	0.050	05/27/2023	ND	2.03	101	2.00	0.0765	
Total Xylenes*	<0.150	0.150	05/27/2023	ND	6.30	105	6.00	1.20	
Total BTEX	<0.300	0.300	05/27/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/30/2023	ND	416	104	400	7.41	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/30/2023	ND	199	99.5	200	3.39	
DRO >C10-C28*	<10.0	10.0	05/30/2023	ND	181	90.6	200	22.0	
EXT DRO >C28-C36	<10.0	10.0	05/30/2023	ND					
Surrogate: 1-Chlorooctane	104 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	112 9	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM, LLC HADLIE GREEN 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received:	05/26/2023	Sampling Date:	05/24/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	CHISO 14 #4 SIGHT GLASS BREAK	Sampling Condition:	Cool & Intact
Project Number:	03C2012060	Sample Received By:	Tamara Oldaker
Project Location:	BTA 32.38531,-103.43576		

Sample ID: SS 02 0.25' (H232707-02)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2023	ND	2.01	101	2.00	0.179	
Toluene*	<0.050	0.050	05/27/2023	ND	2.06	103	2.00	0.733	
Ethylbenzene*	<0.050	0.050	05/27/2023	ND	2.03	101	2.00	0.0765	
Total Xylenes*	<0.150	0.150	05/27/2023	ND	6.30	105	6.00	1.20	
Total BTEX	<0.300	0.300	05/27/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/30/2023	ND	416	104	400	7.41	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/30/2023	ND	199	99.5	200	3.39	
DRO >C10-C28*	<10.0	10.0	05/30/2023	ND	181	90.6	200	22.0	
EXT DRO >C28-C36	<10.0	10.0	05/30/2023	ND					
Surrogate: 1-Chlorooctane	102 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM, LLC HADLIE GREEN 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received:	05/26/2023	Sampling Date:	05/24/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	CHISO 14 #4 SIGHT GLASS BREAK	Sampling Condition:	Cool & Intact
Project Number:	03C2012060	Sample Received By:	Tamara Oldaker
Project Location:	BTA 32.38531,-103.43576		

Sample ID: SS 03 0.25' (H232707-03)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2023	ND	2.01	101	2.00	0.179	
Toluene*	<0.050	0.050	05/27/2023	ND	2.06	103	2.00	0.733	
Ethylbenzene*	<0.050	0.050	05/27/2023	ND	2.03	101	2.00	0.0765	
Total Xylenes*	<0.150	0.150	05/27/2023	ND	6.30	105	6.00	1.20	
Total BTEX	<0.300	0.300	05/27/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/30/2023	ND	416	104	400	7.41	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/30/2023	ND	199	99.5	200	3.39	
DRO >C10-C28*	<10.0	10.0	05/30/2023	ND	181	90.6	200	22.0	
EXT DRO >C28-C36	<10.0	10.0	05/30/2023	ND					
Surrogate: 1-Chlorooctane	102 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	109 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM, LLC HADLIE GREEN 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

Received:	05/26/2023	Sampling Date:	05/24/2023
Reported:	06/02/2023	Sampling Type:	Soil
Project Name:	CHISO 14 #4 SIGHT GLASS BREAK	Sampling Condition:	Cool & Intact
Project Number:	03C2012060	Sample Received By:	Tamara Oldaker
Project Location:	BTA 32.38531,-103.43576		

Sample ID: SS 04 0.25' (H232707-04)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2023	ND	2.01	101	2.00	0.179	
Toluene*	<0.050	0.050	05/27/2023	ND	2.06	103	2.00	0.733	
Ethylbenzene*	<0.050	0.050	05/27/2023	ND	2.03	101	2.00	0.0765	
Total Xylenes*	<0.150	0.150	05/27/2023	ND	6.30	105	6.00	1.20	
Total BTEX	<0.300	0.300	05/27/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/30/2023	ND	416	104	400	7.41	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/30/2023	ND	199	99.5	200	3.39	
DRO >C10-C28*	<10.0	10.0	05/30/2023	ND	181	90.6	200	22.0	
EXT DRO >C28-C36	<10.0	10.0	05/30/2023	ND					
Surrogate: 1-Chlorooctane	102 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	109 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 7/6/2023 7:54:59 AM

linallabsnm.co	nges to celey.ke	hanges. Please email cha	t accept verbal cha	+ Cardinal canno	0 K 3:2 10/07/21	FORMIU
Rush Cool Intact	Thermometer ID #	0	Cool Inflact	ve		
Standard 🗹 Bacteria (only) S	Turnaround Time:	tion CHECKED BY:	Sample Condition	Observed Temp. °C	(Circle One) 0	Delivered By: (
		()hallo	MUMUHO	Time: NC 2 2 Mar	N/W	
	REMARKS	A 1 1	n n	9	N.V.	Dolinguishod 5
-BJennings@ensolum.com dnikanorov@ensolum.com	Blennings@on		MMM	Time	\wedge	0
Yes No Add'I Phone #: Market Blasse provide Email address: horoon@oncolium.com	Verbal Result:		Received By:	11.(77		Relinquished By
	sons or otherwise.	equental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries to of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	limitation, business interruptions, regardless of whether such claim	equental damages, including without limi a of services hereunder by Cardinal, reg	service. In no event shall Cardinal be liable for incidental or consu affiliates or successors arising out of or related to the performance	service. In no event shall affiliates or successors an
ble	sunt paid by the client for the sys after completion of the applicat	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tent, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoewer shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applica	arising whether based in contrac waived unless made in writing ar	cause whatsoever shall be deemed	PLEASE NOTE: Liability and Damages. Cardinal's liability and di analyses. All claims including those for negligence and any other	PLEASE NOTE: Liability analyses, All daims inclu
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EX 1LO	M	ASE:		(feet)	Sample I.D.	Lab I.D.
RDI	SAMPLING	PRESERV. SAMP	MATRIX	MP.		FOR LAB USE ONLY
		1			Dmitry Nikanorov	Sampler Name:
2 Z	03	Phone #: 432-312-2203		3576	Project Location: 32.38531, -103.43576	Project Locatio
		State: 1 Zip: 1 JI		sight Glass Break	Project Name: Chiso 14 State #4 Sight Glass	Project Name:
		city: Midland,		Project Owner:	03C2012060	Project #: 030
	s St	Address: 104 S Pecos		Fax #:	432-557-8895	Phone #: 43
		Attn: Kevin Jones	79701	State: TX Zip:		City: Midland
		Company: BTA Oil		400	601 N. Marienfeld St. STE 4	Address: 601
		P.O. #:			-	Project Manager:
ANALYSIS REQUEST		BILL TO				Company Name:
				I, Hobbs, NM 88240 FAX (575) 393-2476	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	
				cories	abora	
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST	HAIN-OF-	~			コスし	
					200	

Page 26 of 39



APPENDIX D

NMOCD Notifications

Released to Imaging: 9/28/2023 8:48:33 AM

From:	Enviro, OCD, EMNRD
То:	Hadlie Green
Cc:	Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject:	RE: [EXTERNAL] BTA - Containment Inspection - Chiso 14 State #4 Sight Glass Break (Incident Number nAPP2221360832)
Date:	Wednesday, May 24, 2023 4:19:32 PM
Attachments:	image006.png image007.png image008.png image009.png

[**EXTERNAL EMAIL**]

Hadlie,

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

JΗ

Jocelyn Harimon • Environmental Specialist Environmental Bureau EMNRD - Oil Conservation Division 1220 South St. Francis Drive | Santa Fe, NM 87505 (505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov http:// www.emnrd.nm.gov



From: Hadlie Green <hgreen@ensolum.com>

Sent: Wednesday, May 24, 2023 10:18 AM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Cc: Tacoma Morrissey <tmorrissey@ensolum.com>; Nathan Sirgo <nsirgo@btaoil.com>; Kevin Jones (kjones@btaoil.com) <kjones@btaoil.com>; Kelton Beaird <KBeaird@btaoil.com>

Subject: [EXTERNAL] BTA - Containment Inspection - Chiso 14 State #4 Sight Glass Break (Incident Number nAPP2221360832)

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

To Whom It May Concern,

Below is an email notification for liner inspection at BTA Oil Producers, LLC (BTA) Chiso 14 State #4 Sight Glass Break (Incident Number nAPP2221360832) / Spill Date 7-19-2022. This is a notification that Ensolum is scheduled to inspect this lined containment on behalf of BTA on Tuesday, May 30, 2023. Please call with any questions or concerns.

GPS: 32.38531, -103.43576

Thank you,



Hadlie Green Project Geologist 432-557-8895 hgreen@ensolum.com Ensolum, LLC



APPENDIX E

Final C-141

.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	nAPP2221360832
District RP	
Facility ID	fAPP2129434580
Application ID	

Release Notification

Responsible Party

Responsible Party:BTA Oil Producers, LLCOGRID:260297			
Contact Name: Bob Hall	Contact Telephone: 432-682-3753		
Contact email: bhall@btaoil.com	Incident # (assigned by OCD) nAPP2221360832		
Contact mailing address: 104 S. Pecos St., Midland, TX 79701			

Location of Release Source

Latitude: 32.38531 Longitude: -103.43576

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Chiso 14 State #4 Sight Glass Break	Site Type: Tank Battery
Date Release Discovered: 7/19/2022	API# (if applicable) Nearest well:

Unit Letter	Section	Township	Range	County
Р	14	225	34E	Lea

Surface Owner: State Federal Tribal Private (*Name:*)

Nature and Volume of Release

Materi	al(s) Released (Select all that apply and attach calculations or specific	justification for the volumes provided below)
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 14 BBL	Volume Recovered (bbls) 13.5 BBL
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Sight Glass Break.

The sight glass broke and released produced water into the lined secondary containment area of the tank battery. Spill Volume Calculation is attached.

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Oil Conservation Division

Incident ID	nAPP2221360832
District RP	
Facility ID	fAPP2129434580
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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

 \square The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Bob Hall Title: Environmental Manager

Signature:	Bertall	
	- Arte -	

Date: 8/1/2022

email: bhall@btaoil.com

Telephone: 432-682-3753

OCD Only

Received by: Jocelyn Harimon

Date: 08/02/2022



Location Chiso #4 Sight Glass Break API # Spill Date 7/19/2022

Spill Dimensions

ENTER - Length of Spill ENTER - Width of Spill ENTER - Saturation Depth of Spill

ENTER -	Porosity	Factor
---------	----------	--------

35	feet
35	feet
0.75	inches



0.01 99.99 0.0001

Oil Cut - Well Test / Vessel Throughput or Contents	
Oil	
Water	
Calculated Oil Cut	

Volume Recovered in Truck / Containment ENTER - Recovered Oil ENTER - Recovered Water

0	BBL
0	BBL

Calculated Values
Release of Oil in Soil - Unrecovered
Release of Water in Soil - Unrecovered
Unrecovered Total Release

I	0	BBL
	14	BBL
I	14	BBL

calculated

Calculated Values		
Total Release of Oil		
Total Release of Water		

Total Release

calculated	_
0	BBL
14	BBL
14	BBL

Types of Soil	Porosity Factor
Gravel	0.25
Sand	0.20
Clay/silt/sand Mix	0.15
Clay	0.05
Caliche	0.03
Unknown	0.25

(Length X Width X Depth X 1 ft/12 in) X Porosity 5.615 ft³ / BBL

Х

Oil Cut (or Water Cut)

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

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

District III

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

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

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

CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	130425
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jharimon	None	8/2/2022

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Action 130425

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Oil Conservation Division

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Site Assessment/Characterization

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

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

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data

Page 3

- Data table of soil contaminant concentration data
- \boxtimes Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-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.

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Page 4			District RP		
			Facility ID	fAPP2129434580	
			Application ID		
regulations all operators are requ public health or the environmen failed to adequately investigates addition, OCD acceptance of a C and/or regulations. Printed Name:Kelton Bea Signature:	tion given above is true and complete to uired to report and/or file certain release it. The acceptance of a C-141 report by and remediate contamination that pose a C-141 report does not relieve the operate gird	e notifications and perform co the OCD does not relieve the a threat to groundwater, surfa or of responsibility for compl Title:Environmenta Date:7/6/2023	prrective actions for rele operator of liability sh- ce water, human health iance with any other fee al Manager	eases which may endanger ould their operations have or the environment. In deral, state, or local laws	
OCD Only					
Received by:		Date:			

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Incident ID	nAPP2221360832
District RP	
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Closure

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

<u>Closure Report Attachment Checklist</u> : Each of the following items must be included in the closure report.		
A scaled site and sampling diagram as described in 19.15.29.1	I NMAC	
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
Laboratory analyses of final sampling (Note: appropriate ODC	District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a	ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ions. The responsible party acknowledges they must substantially ditions that existed prior to the release or their final land use in	
OCD Only		
Received by:	Date:	
	of liability should their operations have failed to adequately investigate and vater, human health, or the environment nor does not relieve the responsible r regulations.	
Closure Approved by:	Date: 09/28/2023	
Closure Approved by: <u>Nelson Velez</u> Printed Name: <u>Nelson Velez</u>	Title: Environmental Specialist - Adv	

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

CONDITIONS

OGRID:
260297
Action Number:
236350
Action Type:
[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
nvelez	Liner inspection approved. Release resolved.	9/28/2023

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CONDITIONS

Action 236350