

November 8, 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

Harroun East Tank Battery – HR5 Kimray Incident Number nAPP2235779084 Eddy 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 Harroun East Tank Battery – HR5 Kimray (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 activities that have occurred and requesting no further action and closure for Incident Number nAPP2235779084.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 20, Township 23 South, Range 29 East, in Eddy County, New Mexico (32.28361°, -104.00293°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On December 22, 2022, internal corrosion on a dump valve on the separator resulted in the release of approximately 75 barrels (bbls) of produced water into the lined containment. A vacuum truck was dispatched to the Site to recover free-standing fluids. Fluid recovery was limited by freezing temperatures; however, approximately 65 bbls of produced water were recovered. BTA reported the release to the New Mexico Oil Conservation Division (NMOCD) immediately, and submitted a *Release Notification Form C-141* (Form C-141) on January 4, 2023. The release was assigned Incident Number nAPP2235779084.

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 C-02707, located approximately

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Parks Highway | Carlsbad, NM 88220 | ensolum.com

BTA Oil Producers, LLC Closure Request Harroun East Tank Battery – HR5 Kimray

1.06 miles southeast of the Site. The groundwater well has a reported depth to groundwater of 18 feet bgs and a total depth of 40 feet bgs. Ground surface elevation at the groundwater well location is 2,993 feet above mean sea level (amsl), which is approximately 22 feet 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 dry wash, located approximately 804 feet south 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 (medium 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 9, 2023, to the NMOCD. A liner integrity inspection was conducted by Ensolum personnel on May 11, 2023. Upon inspection, no rips, tears, holes, or damage to the liner was observed. The liner was determined to be sufficient and all released fluids have been removed. Delineation soil samples SS01 through SS04 were collected around the containment at a depth of 0.5 feet bgs, to confirm the release did not extend outside the containment.

The 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 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.



BTA Oil Producers, LLC Closure Request Harroun East Tank Battery – HR5 Kimray

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 December 22, 2022, produced water release within the lined containment. A liner integrity inspection was conducted by Ensolum personnel on May 11, 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 nAPP2235779084. 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**

Hadlie Green

Project Geologist

Aimee Cole

Senior Managing Scientist

cc: Kelton Beaird, BTA

Bureau of Land Management

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

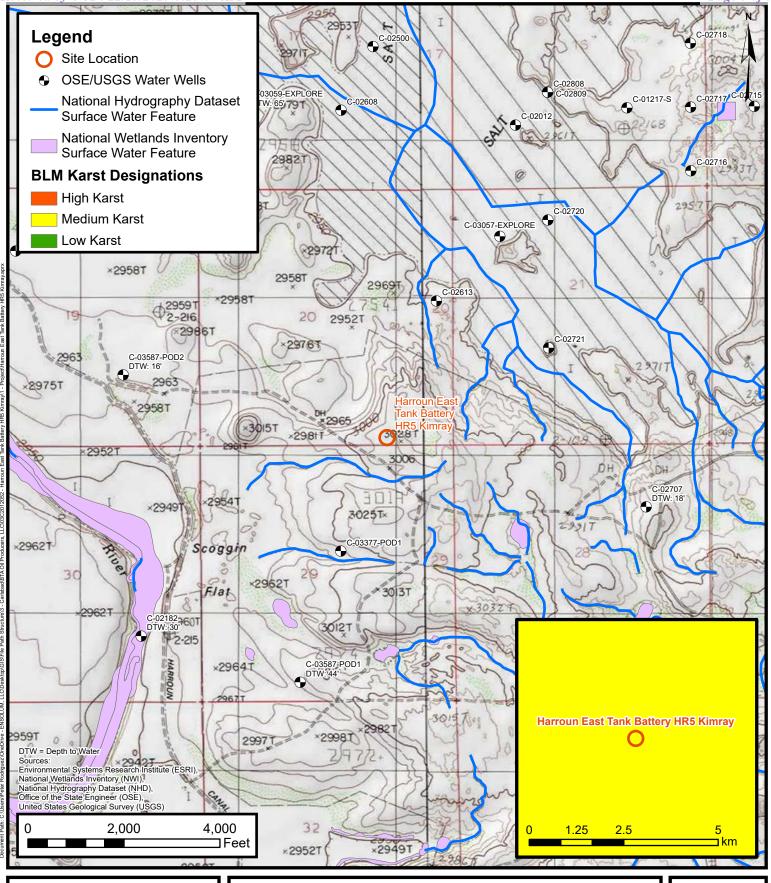
Appendix D NMOCD Notifications

Appendix E Final C-141





FIGURES



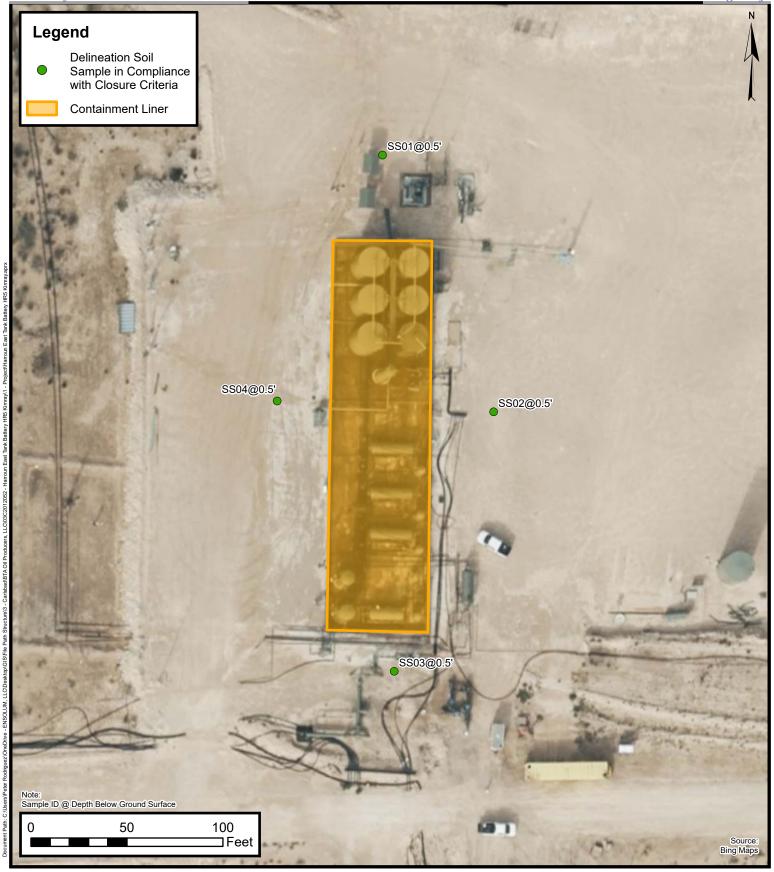


Site Receptor Map

BTA Oil Producers, LLC
Harroun East Tank Battery HR5 Kimray
Incident Number: NAPP2235779084

Unit O, Sec 20, T23S R29E Eddy County,New Mexico FIGURE

1





Delineation Soil Sample Locations

BTA Oil Producers, LLC
Harroun East Tank Battery HR5 Kimray
Incident Number: NAPP2235779084

Unit O, Sec 20, T23S R29E Eddy County,New Mexico FIGURE 2



TABLES

Received by OCD: 11/13/2023 8:25:07 AM



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Harroun East Tank Battery - HR5 Kimray BTA Oil Producers, LLC Eddy County, New Mexico

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 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600			
	Delineation Soil Samples												
SS01	10/26/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0			
SS02 10/26/2023 0.5		0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0			
SS03	10/26/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0			
SS04	10/26/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0			

Notes:

bgs: below ground surface mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NE: Not Established

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or

reclamation standard where applicable.

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon

•

Ensolum



APPENDIX A

Referenced Well Records

Received

STATE ENGINEER OFFICE WELL RECORD

Revised June 1972

H44317

Section 1. GENERAL INFORMATION

Street or	Post Office Ac	ldress <u>Bo</u>	\times 71				Owne			
Well was drilled	under Permit	No. C-27	707		and is	located	in the:			
a. <u>NE</u>	_ 1/4 1/4	i ¼	¼ of Se	ction 28	3 Tow	nship	23S Rar	nge <u>29E</u>	N.M.P.M	
b. Tract l	No	of Map No.		of	the			······································		
		of Block No d in								
		•					System			
(B) Drilling C	ontractor	<u>Favlor Wa</u>	ter Wel	ll Serv	rice		License No	WD-1348		
Orilling Began	6/9/	00 Comp	leted _6/9	9/00	Туре	tools	Rotary	Size of h	ole <u>6</u> in	
Elevation of lar	nd.surface or _			at	well isI	IK	ft. Total depth	of well4	<u>Oft</u>	
Completed well	is 🗴 si	hallow 🗀 . a:	rtesian.		Depth	to water	upon completion	of well	ft.	
		· · · · · · · · · · · · · · · · · · ·	cion 2. PRIN	CIPAL WAT	TER-BEAR	RING ST	RATA			
Depth i	To	Thickness in Feet	. 1	Description	of Water-B	earing F	ormation		ated Yield per minute)	
36	40	4	Limes	stone:b	rn,vfr	xln	,dolo	70	0	
 										
					,		•			
							40			
		1 1		n 3. RECO						
Diameter (inches)	Pounds per foot	Threads per in.	Depth Top	Bottom		ngth eet)	Type of Sho	pe Perforations From To		
2 3/8	Sch 40	Flush	+2	+2 40			Cap	3	5 40	
								35 . 2 pt 13		
		,						يان ميان ميان	14.37	
		Section	on 4. RECO	RD OF MUI	DDING AN	ID CEMI	ENTING	- 1 (j		
Depth i	n Feet To	Hole Diameter	Sack of Mu	-	Cubic Fee of Cemer		Metho	od of Placeme	ent	
·				,						
		,								
4			Section	n 5. PLUGO	GING REC	ORD			W/- 110 - 11	
							Depth in	Foot	Code Foot	
lugging Metho	d				<u>L</u>	No.	Тор	Bottom	Cubic Feet of Cement	
lugging approv						1 2				
		State Engi	neer Represe	entative		3 4				
Date Received	08-28-20	000	FOR USE	OF STATE	ENGINEE	ER ONLY	(
						•	FWL _			
File No. C-	2707			UseMo	onitor	I	ocation No	23S.29E.2	8.2	

		·	Section 6, LOG OF HOLE
	in Feet	Thickness in Feet	Color and Type of Material Encountered
From	То		
	2	2	Soil
2 .	8	6	Loose cobble+grave1
8	16	8	Caliche
16	36	20	Clay:pnk,sndy
36	40	4	Limestone:brn,vfn-micxln,very dolomitic,fractured
			
<u> </u>			
			
	<u> </u>	L	

Section 7. REMARKS AND ADDITIONAL INFORMATION

Air drilled to 40'. Sand packed from 30-40'. Grouted from 30' to surface.

The undersigned here by certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely applications are prescribed as a plugging record, only Section 1(a) Section 5 need be completed.

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION (A) Owner of well IMC Kalium Owner's Well No. ... Street or Post Office Address Box 71 City and State Carlsbad, NM 88220 Well was drilled under Permit No. C-2707 _ and is located in the: a. NE 4 4 4 4 6 Section 28 Township 23S Range 29E N.M.P.M. ____ of the ___ ___ of Map No. ___ c. Lot No. _____ of Block No. _____ of the County. Subdivision, recorded in _____ d. X= _____ feet, Y=____ feet, N.M. Coordinate System (B) Drilling Contractor Taylor Water Well Service License No. WD-1348 Address 7317 Etcheverry Rd., Carlsbad, NM 88220 Drilling Began 5/27/00 Completed 6/2/00 Type tools Rotary Size of hole 6 at well is <u>UK</u> ft. Total depth of well Elevation of land surface or _____ Completed well is shallow artesian. Depth to water upon completion of well ____ Section 2. PRINCIPAL WATER-BEARING STRATA Depth in Feet Estimated Yield Thickness Description of Water-Bearing Formation (gallons per minute) in Feet From То 36 78 42 Limestone:brn,off wht,pnk,mic 700 xln,fractured Section 3. RECORD OF CASING Perforations Depth in Feet Length Diameter Pounds Threads Type of Shoe (feet) (inches) per foot per in. Bottom From Top Section 4. RECORD OF MUDDING AND CEMENTING Depth in Feet Hole Sacks Cubic Feet Method of Placement Diameter of Mud of Cement From Section 5. PLUGGING RECORD Plugging Contractor ___ Depth in Feet Address -Cubic Feet No. of Cement Top Plugging Method . Bottom Date Well Plugged_ 1 Plugging approved by: 3 State Engineer Representative FOR USE OF STATE ENGINEER ONLY

Date Received

08-28-2000

Quad _____ FWL ____ FSL_

Use Monitor Location No. 23S.29E.28.2 C-2707 File No.___

Refeased to Imaging: 2/6/2024 11:04:01 AM

Section 6. LOG OF HOLE

			Section 6. LOG OF HOLE
	in Feet	Thickness in Feet	Color and Type of Material Encountered
From O	то 3	3	Soi1
3	86	5 >	Loosedlime+dolo gravel+cobble
8 ô	36	28	Clay:rd,sme sndy
36	46	. 10	Ls:brn,vfn-micxln,dolomitic,losing returns
46	52	6	Ls:off wht,pnk,vfm xln,vry dolomitic,losing return
52	56	4	Shale:rd,sme anhy
56	78	32	LS:1t gry,dns,vry dolomitic,sme 1t gry+ch1ky
78	142	64	Clay:rd,smth,sme wht anhy,sme gry siltstone
142	182	60	Clay:blu gry,sft,smth
182	208	26	Clay:rd,sme wht anhy,tr gry siltstone,sme rd anhy
208	213.5	5.5	Anhy:wht,gry,sme gyp
1			
			Steel of a May be provided in the control of the co

Section 7. REMARKS AND ADDITIONAL INFORMATION

Drilled with mud to 213.5!. Packer tested. Plugged well back with cement grout. Brought grout up too far and plugged water zone. Drilled new hole with air 10' from this hole.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When the form is used as a plugging record, only Section 5 need be completed.



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:		Geographic Area:		
Groundwater	~	New Mexico	~	GO

Click to hideNews Bulletins

- Explore the NEW USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
 • Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usqs

site_no list =

• 321652104021902

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 321652104021902 23S.28E.25.213131A

Eddy County, New Mexico

Latitude 32°16'52", Longitude 104°02'19" NAD27

Land-surface elevation 2,982 feet above NAVD88

The depth of the well is 80 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
Graph of data
Reselect period

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1955-01-18	3	D	62610		2940.58	NGVD29	1	Z		
1955-01-18	3	D	62611		2942.13	NAVD88	1	Z		
1955-01-18	3	D	72019	39.87			1	Z		
1956-01-11		D	62610		2945.55	NGVD29	1	Z		
1956-01-11		D	62611		2947.10	NAVD88	1	Z		
1956-01-11		D	72019	34.90			1	Z		
1957-01-09)	D	62610		2945.74	NGVD29	1	Z		
1957-01-09)	D	62611		2947.29	NAVD88	1	Z		
1957-01-09)	D	72019	34.71			1	Z		
1958-01-15	5	D	62610		2943.59	NGVD29	1	Z		
1958-01-15	5	D	62611		2945.14	NAVD88	1	Z		
1958-01-15	5	D	72019	36.86			1	Z		
1959-01-08	3	D	62610		2946.82	NGVD29	1	Z		
1959-01-08	3	D	62611		2948.37	NAVD88	1	Z		

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
		decardey			dataiii					
1959-01-08		D	72019	33.63			1	Z		
1960-01-14		D	62610	33.03	2946.32	NGVD29	1	Z		
1960-01-14		D	62611		2947.87	NAVD88	1	Z		
1960-01-14		D	72019	34.13	2317107	11/11/2000	1	Z		
1961-01-12		D	62610		2948.27	NGVD29	1	Z		
1961-01-12		D	62611		2949.82	NAVD88	1			
1961-01-12		D	72019	32.18			1	Z		
1962-01-16		D	62610		2946.32	NGVD29	1	Z		
1962-01-16		D	62611		2947.87	NAVD88	1	Z		
1962-01-16		D	72019	34.13			1	Z		
1963-01-17		D	62610		2945.71	NGVD29	1	Z		
1963-01-17		D	62611		2947.26	NAVD88	1	Z		
1963-01-17		D	72019	34.74			1	Z		
1964-01-20		D	62610		2944.51	NGVD29	1	Z		
1964-01-20		D	62611		2946.06	NAVD88	1	Z		
1964-01-20		D	72019	35.94			1	Z		
1965-01-14		D	62610		2938.25	NGVD29	1	Z		
1965-01-14		D	62611		2939.80	NAVD88	1	Z		
1965-01-14		D	72019	42.20			1	Z		
1966-01-12		D	62610		2938.98	NGVD29	1	Z		
1966-01-12		D	62611		2940.53	NAVD88	1	Z		
1966-01-12		D	72019	41.47			1	Z		
1967-01-26		D	62610		2941.30	NGVD29	1	Z		
1967-01-26		D	62611		2942.85	NAVD88	1	Z		
1967-01-26		D	72019	39.15			1	Z		
1968-01-26		D	62610		2942.03	NGVD29	1	Z		
1968-01-26		D	62611		2943.58	NAVD88	1	Z		
1968-01-26		D	72019	38.42			1	Z		
1970-01-22		D	62610		2942.90	NGVD29	1	Z		
1970-01-22		D	62611		2944.45	NAVD88	1	Z		
1970-01-22		D	72019	37.55			1	Z		
1971-01-13		D	62610		2944.09	NGVD29	1	Z		
1971-01-13		D	62611		2945.64	NAVD88	1	Z		
1971-01-13		D	72019	36.36			1			
1972-01-12		D	62610		2941.23	NGVD29	1	Z		
1972-01-12		D	62611		2942.78	NAVD88	1			
1972-01-12		D	72019	39.22			1	Z		
1973-01-12		D	62610		2942.03	NGVD29	1	Z		
1973-01-12		D	62611		2943.58	NAVD88	1	Z		
1973-01-12		D	72019	38.42			1			
1974-01-18		D	62610		2944.25	NGVD29	1	Z		
1974-01-18		D	62611	20.20	2945.80	NAVD88	1			
1974-01-18		D	72019	36.20	2042.25	NCVD20	1	Z		
1975-01-10		D	62610		2942.35	NGVD29	1	Z		
1975-01-10		D	62611 72019	20 10	2943.90	NAVD88	1	Z		
1075 01 10		D	72019	38.10			1	Z		
		_	(2010		2044.00	NCVD20	-	~		
1983-02-16		D	62610		2944.06	NGVD29	1	Z		
1975-01-10 1983-02-16 1983-02-16 1983-02-16		D D D	62610 62611 72019	36.39	2944.06 2945.61	NGVD29 NAVD88	1 1 1			

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source (measur(
1988-02-12		D	62611		2948.33	NAVD88	1	Z		
1988-02-12		D	72019	33.67			1	Z		
1993-02-02		D	62610		2946.61	NGVD29	1	S		
1993-02-02		D	62611		2948.16	NAVD88	1	S		
1993-02-02		D	72019	33.84			1	S		
1995-07-18		D	62610		2945.50	NGVD29	1	S		
1995-07-18		D	62611		2947.05	NAVD88	1	S		
1995-07-18		D	72019	34.95			1	S		
1996-01-24		D	62610		2946.60	NGVD29	1	S		
1996-01-24		D	62611		2948.15	NAVD88	1	S		
1996-01-24		D	72019	33.85			1	S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	Α	Approved for publication Processing and review completed.

Questions or Comments Automated retrievals <u>Help</u> Data Tips **Explanation of terms** Subscribe for system changes <u>News</u>

Accessibility 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: <u>New Mexico Water Data Maintainer</u> Page Last Modified: 2023-11-03 12:01:02 EDT

0.44 0.33 nadww02





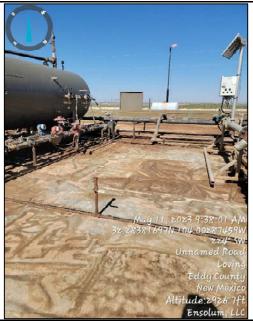
APPENDIX B

Photographic Log

ENSOLUM

Photographic Log

BTA Oil Producers, LLC
Harroun East Tank Battery - HR5 Kimray
Incident Number nAPP2235779084



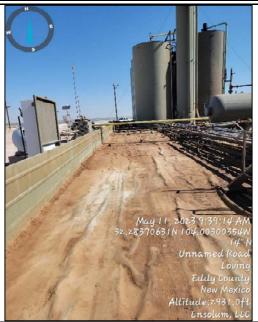
Photograph: 1 Date: 5/11/2023

Description: View of lined containment deemed to be in good condition, facing southwest.



Photograph: 2 Date: 5/11/2023

Description: View of lined containment deemed to be in good condition, facing southwest.



Photograph: 3 Date: 5/11/2023

Description: View of lined containment deemed to be in good condition, facing north.



Photograph: 4 Date: 5/11/2023

Description: View of lined containment deemed to be in good condition, facing north.



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



November 06, 2023

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: HARROUN EAST TANK BATTERY - HR5 KIMRAY

Enclosed are the results of analyses for samples received by the laboratory on 10/31/23 13:15.

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/ga/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.

Celey D. Keene

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. Keene

Lab Director/Quality Manager



Analytical Results For:

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

Received: 10/31/2023 Reported: 11/06/2023

HARROUN EAST TANK BATTERY - HR5 K

Project Number: 03C2012052

Project Location: BTA (32.28361-104.00293)

Sampling Date: 10/26/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SS 01 @ 0.5' (H235955-01)

Project Name:

DTEV 0021D

BTEX 8021B	mg/kg		Analyze	Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/03/2023	ND	2.11	105	2.00	1.45	
Toluene*	<0.050	0.050	11/03/2023	ND	1.91	95.3	2.00	2.87	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.94	97.0	2.00	4.22	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.76	95.9	6.00	3.78	
Total BTEX	<0.300	0.300	11/03/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.7	% 71.5-13	4						
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	11/06/2023	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	11/02/2023	ND	192	96.2	200	5.85	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	199	99.3	200	16.9	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					
Surrogate: 1-Chlorooctane	88.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.2	% 49.1-14	8						

Applyand By 14/

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 whistoever 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



Analytical Results For:

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

Received: 10/31/2023

Sampling Date: 10/26/2023

Reported: 11/06/2023
Project Name: HARROUN EAST TANK BATTERY - HR5 K

Sampling Type: Soil

Project Number: 03C2012052

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Project Location: BTA (32.28361-104.00293)

Sample ID: SS 02 @ 0.5' (H235955-02)

BTEX 8021B

	<u> </u>								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/03/2023	ND	2.11	105	2.00	1.45	
Toluene*	<0.050	0.050	11/03/2023	ND	1.91	95.3	2.00	2.87	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.94	97.0	2.00	4.22	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.76	95.9	6.00	3.78	
Total BTEX	<0.300	0.300	11/03/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2023	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2023	ND	192	96.2	200	5.85	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	199	99.3	200	16.9	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					
Surrogate: 1-Chlorooctane	91.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.2	% 49.1-14	8						

Analyzed By: JH/

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 whistoever 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. Keine



Analytical Results For:

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

Received: 10/31/2023 Reported: 11/06/2023

11/06/2023 Sampling Type: Soil

Sampling Date:

Project Name: HARROUN EAST TANK BATTERY - HR5 K
Project Number: 03C2012052

Project Location: BTA (32.28361-104.00293)

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

10/26/2023

Sample ID: SS 03 @ 0.5' (H235955-03)

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	11/03/2023	ND	2.11	105	2.00	1.45	
Toluene*	<0.050	0.050	11/03/2023	ND	1.91	95.3	2.00	2.87	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.94	97.0	2.00	4.22	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.76	95.9	6.00	3.78	
Total BTEX	<0.300	0.300	11/03/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2023	ND	432	108	400	3.64	
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	11/02/2023	ND	192	96.2	200	5.85	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	199	99.3	200	16.9	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					
Surrogate: 1-Chlorooctane	88.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.0	% 49.1-14	8						

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 whistoever 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. Keine



Analytical Results For:

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

Received: 10/31/2023

Sampling Date: 10/26/2023 Sampling Type: Soil

Reported: Project Name:

BTEX 8021B

11/06/2023 HARROUN EAST TANK BATTERY - HR5 K

Sampling Condition: Cool & Intact

Project Number: 03C2012052

Sample Received By:

Tamara Oldaker

Project Location: BTA (32.28361-104.00293)

Sample ID: SS 04 @ 0.5' (H235955-04)

	9/	9	7111411720	,					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/03/2023	ND	2.11	105	2.00	1.45	
Toluene*	<0.050	0.050	11/03/2023	ND	1.91	95.3	2.00	2.87	
Ethylbenzene*	<0.050	0.050	11/03/2023	ND	1.94	97.0	2.00	4.22	
Total Xylenes*	<0.150	0.150	11/03/2023	ND	5.76	95.9	6.00	3.78	
Total BTEX	<0.300	0.300	11/03/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 71.5-13	4						
Chloride, SM4500CI-B	mg/	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/06/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/02/2023	ND	192	96.2	200	5.85	
DRO >C10-C28*	<10.0	10.0	11/02/2023	ND	199	99.3	200	16.9	
EXT DRO >C28-C36	<10.0	10.0	11/02/2023	ND					
Surrogate: 1-Chlorooctane	87.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.4	% 49.1-14	8						

Analyzed By: JH/

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 whistoever 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. Keine



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

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

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Freene

Sampler - UPS - Bus - Other:

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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

Company Name:	Company Name: Ensolum, LLC								2	BILLTO						SISA IVNO	-	55		REQUEST	Ħ	~					
Broing Manager Hadio Coope	Hadlin Crops					0	50 #	١.	I.	100		1			1		1	4		7	1	1	+		7	1	1
Address: 601 N P	Address: 601 N Marienfeld Street, Suite 400	uite 400				S	ğ	any	8	Company: BTA Oil							_										
City: Midland		State: TX	Zip: 79701	797	701	At	tn:	Kelt	on	Attn: Kelton Beaird							_									_	
Phone #: 432-557-8895	7-8895	Fax #:				Ad	idre	SS:	104	Address: 104 S Pecos St	št												_				
Project #:03C2012052	2052	Project Owner:	.,			Ci	y:	City: Midland	and														_				
Project Name: Ha	Project Name: Harroun East Tank Battery-HR5 Kimray	attery-HR5 Kimray		0		Sta	State: TX	X		Zip: 79701													_				
Project Location	Project Location: 32.28361,-104.00293	93				Ph	one	*	432	Phone #: 432-312-2203													_				
Sampler Name: Peter Van Patten	eter Van Patten					Fa	Fax #:							>									_				
FOR LAB USE ONLY			Þ.	\perp	MATRIX		PR	PRESERV	RV.	SAMPLING	LING			es													
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMF	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	TPH	BTEX	Chlorid													
/	SS01	0.5	_	-				1		10-26-23	058	×	X	×									-				
7	SS02	0.5	0	_	7			1		_	900	×	×	×									_				
Cri	SS03	0.5	0	-	5			7			910	×	×	X													
4	SS04	0.5	0	-				<		<	220	×	メ	X			+						+			_	
				_																\Box							
						1	1/2	12									\vdash	_					-				
				1	Tope .	1											\top						+			\perp	
													Ц			П	Н	Ш					\vdash			Ш	
PLEASE NOTE: Liability and analyses. All claims including service. In no event shall Car affiliates or successors arising	PLEASE NOTE: Lability and Damages. Cardinal's liability and clients exclusive remedy for any daim arising whether based in contract or tor, shall be limited to the amount paid by the client to the amalyses. All claims including those for negligence and any other cause whatoever 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 subdictaries, affiliates or successors arising out of or related to the performance of services hereunded by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	client's exclusive remedy for an er cause whatsoever shall be of sequental damages, including use of services hereunder by C	teemed without I writinal, r	arising waived limitation	s accipaise inmedy for any claim arising wineriner based in contract or fort, shall be limited to the amount of an exhibitonever shall be deemed washed unless made in writing and received by Cardinal within 30 days a intral damages, including without limitation, business interruptions, loss of use, or loss of profits incourant by services hereunder by Cardinal, reparatless of whether such claim is based upon any of the above stated	or ton	wed by	Card Card Ar loss	nal wi	the amount paid thin 30 days after fits incurred by cli- above stated reas	by the client for the completion of the int, its subsidiaries ions or otherwise.	applicable s,															
Relinquished By:	F	Date: 10-3(23	Rec	eive	Received By:	The	CIM	11	6/		Verbal Result: All Results are emailed hgreen(sult: ☐ Yes ☐/No ☐Add'I Ph are emailed. Please provide Email hgreen@ensolum.com	(5)	s 🗆 No Add'l Phone #: Please provide Email address:)ensolum.com	ase prov	Add'I Phone #: ide Email addre N. COM	nail a	ne #	SS.								
Relinquished By:		Date: Time:	Rec	eive	Received By:					\	REMARKS:						1										
Delivered By: (Circle One)		Observed Temp. "C	7		Sample Condition	tion		유	ECKED	BY:	Turnaround Time:	Time:		Standard	ard		Ba	cteri	Bacteria (or	lly) S	Sami	ole C	ond	Bacteria (only) Sample Condition	ກໍ		

Tyes Tyes

Correction Factor 850C

☐ Yes ☐ Yes ☐ No ☐ No

Corrected Temp, °C



APPENDIX D

NMOCD Notifications

From: Enviro, OCD, EMNRD

To: Hadlie Green

Subject: RE: [EXTERNAL] BTA - Containment Inspection - Harroun East Tank Battery - HR5 Kimray (Incident Number

nAPP2235779084)

Date: Wednesday, May 10, 2023 9:33:20 AM

Attachments: <u>image006.png</u>

image007.png image008.png image009.png

[**EXTERNAL EMAIL**]

Hadlie,

Please be aware that notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

JH

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: Tuesday, May 9, 2023 9:58 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>

Subject: [EXTERNAL] BTA - Containment Inspection - Harroun East Tank Battery - HR5 Kimray (Incident Number nAPP2235779084)

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) Harroun East Tank Battery-HR5 Kimray (Incident Number nAPP2235779084) / Spill Date 12-22-2022. This is a notification that Ensolum is scheduled to inspect this lined containment on behalf of BTA on

Thursday, May 11, 2023. Please call with any questions or concerns.

GPS: 32.28361, -104.00293

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	nAPP2235779084
District RP	
Facility ID	fAPP2129830694
Application ID	

Release Notification

Responsible Party

Responsible Party: BTA Oil Producers, LLC	OGRID: 260297
Contact Name: Bob Hall	Contact Telephone: 432-682-3753
Contact email: bhall@btaoil.com	Incident # (assigned by OCD) nAPP2235779084
Contact mailing address: 104 S. Pecos St., Midland, TX 79701	

Location of Release Source

Latitude: 32.28361 Longitude: -104.00293

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: H	Harroun Ea	ast Tank Batter	y – HR5 Kimray	,	Site Type: Tank Battery	1
Date Release	Discovered:	12/22/2022			API# (if applicable) Nearest we	11:
Unit Letter	Section	Township	Range		County	
0	20	23S	29E	Edd	у	

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

Nature and Volume of Release

Material	l(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) 75 BBL	Volume Recovered (bbls) 65 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					
Corrosion - Dump Va	lve Failure.				
Body washed out due	e to corrosion on a Kimray Dump Valve on the	water dump outlet of the			
1	•	·			
separator. Initial fluid recovery from secondary containment was low due to sub-freezing temperatures on					
12/22 & 12/23/2022.					
(Spill calculation spreadsh	neet attached.)				

Received by OCD: 11/13/2023 8:25:07MM Form C-141 State of New Mexico

Page 2

Oil Conservation Division

Page	20	2	62	8
1 uge	20	W	$\nu \rho$	U

Incident ID	nAPP2235779084
District RP	
Facility ID	fAPP2129830694

	Application ID
Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	The release was greater than 25 BBL of fluid.
⊠ Yes □ No	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Via filing NOR docum	ent on NMOCD Permitting Portal that was assigned Incident ID # nAPP2235779084 on
12/22/2022.	
	Initial Despense

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the release has been stopped.
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 <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: Bob Hall Title: Environmental Manager
Signature: Date: 1/4/2023
email: bhall@btaoil.com Telephone: 432-682-3753
OCD Only
Received by: Jocelyn Harimon Date:01/04/2022

Page 33 of 38

Location Harroun Ranch East HR5 Kimray - Dump Valve Washout API# **Spill Date** 12/22/2022 **Spill Dimensions ENTER** - Length of Spill 85 feet **ENTER** - Width of Spill 85 feet **ENTER** - Saturation Depth of Spill 3 inches **ENTER** - Porosity Factor 0.03 decimal Oil Cut - Well Test / Vessel Throughput or Contents Oil 0.01 Water 99.99 Calculated Oil Cut 0.0001 **Volume Recovered in Truck / Containment ENTER** - Recovered Oil **BBL ENTER** - Recovered Water Calculated Values calculated Release of Oil in Soil - Unrecovered 0 **BBL** 10 **BBL** Release of Water in Soil - Unrecovered 10 *BBL* **Unrecovered Total Release Calculated Values** calculated

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

Oil Cut X (or Water Cut)

0 **BBL** 75 **BBL**

75 **BBL**

Total Release of Oil

Total Release

Total Release of Water

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

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 172082

CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
	Action Number:
Midland, TX 79701	172082
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	1/4/2023

Incident ID nAPP2235779084 District RP Facility ID fAPP2129830694 Application ID

Site Assessment/Characterization

This information must be provided to the appropriate district office no taler than 90 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</u> (ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No	
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No	
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No	
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
Cooled site was about the site was a surface fortune on bounders fortune deliveration when the site was the site with a surface for the site of the si	1	

Characterization Deposit Charletist. Each of the following items must be included in the report
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
☐ 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.

Received by OCD: 11/13/2023 8:25:07 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

D.	200	26	-01	C 2 0
Fu	ige	30	vj	30

Incident ID	nAPP2235779084
District RP	
Facility ID	fAPP2129830694
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:Kelton Beaird	Title:Environmental Manager		
Signature:	Date:11/08/2023		
email:KBeaird@btaoil.com	Telephone:432-312-2203		
OCD Only			
Received by: Shelly Wells	Date: 11/13/2023		

Page 37 of 38

Incident ID	nAPP2235779084
District RP	
Facility ID	fAPP2129830694
Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the following is	items must be incl	uded in the closure report.	
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)			
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)			
Description of remediation activities			
I hereby certify that the information given above is true and completed and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and replaced to the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the conformation with 19.15.29.13 NMAC including notification to the Compliance with 19.15.29.13 NMAC including notification with 19.15.29.13 NMAC including notification with 19.15.29.13 NMA	in release notification of a C-141 report by mediate contaminate a C-141 report docations. The responditions that exists DCD when reclamate Title:Environment1	ons and perform corrective actions for releases which the OCD does not relieve the operator of liability tion that pose a threat to groundwater, surface water, as not relieve the operator of responsibility for sible party acknowledges they must substantially ed prior to the release or their final land use in	
OCD Only			
Received by: _Shelly Wells	Date: <u></u>	/13/2023	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by: Scott Rodgers	Date: _	02/06/2024	
Closure Approved by: Scott Rodgers Printed Name: Scott Rodgers	Title: _	Environmental Specialist Adv.	

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

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 284781

CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	284781
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	None	2/6/2024