ENSOLUM

September 19, 2022

District 1 New Mexico Oil Conservation Division 1625 North French Drive Hobbs, New Mexico 88240

Re: Closure Request Maddox Federal B #1 Well Site Incident Number NAPP2211065721 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 site assessment, excavation, and soil sampling activities performed at the Maddox Federal B #1 Well Site (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a crude oil and natural gas release at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, BTA is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2211065721.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit F, Section 35, Township 22 South, Range 34 East, in Lea County, New Mexico (32.0598° N, 103.60435° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On April 20, 2022, during the plug and abandonment first circulation of the well, the blowout preventer (BOP) was not closed correctly around the tubing, resulting in the release of approximately 67 barrels (bbls) of crude oil and 3,000 cubic feet (3 MCF) of natural gas onto the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 60 bbls of crude oil was recovered. BTA reported the release immediately to the New Mexico Oil Conservation Division (NMOCD) via NOR filed on April 20, 2022 and submitted a Release Notification Form C-141 (Form C-141) on May 5, 2022. The release was assigned Incident Number NAPP2211065721.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) 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 greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to

Maddox Federal B #1 Well Site

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groundwater data is New Mexico Office of the State Engineer (NMOSE) Well C-01802, located approximately 0.6 miles northeast of the Site. The groundwater well has a reported depth to groundwater of 105 feet bgs and a total depth of 200 feet bgs. Ground surface elevation at the groundwater well location is 3,417 feet above mean sea level (amsl), which is approximately 9 feet higher in elevation than the Site. All wells used for depth to water determination are depicted on Figure 1 and the referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 1,206 feet east 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 1 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)- gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Due to the pad abandonment, a reclamation standard of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On June 16, 2022 and July 12, 2022, Ensolum personel completed Site visits to evaluate the release extent based on information provided on the Form C-141 and visual observations. Nine preliminary assessment soil samples (SS01 through SS09) were collected within and around the release extent at a depth of approximately 0.5 feet bgs to assess the lateral extent of the release. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach[®] chloride QuanTab[®] test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The preliminary 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 at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method SM4500.

Laboratory analytical results for preliminary soil samples SS05 through SS09, collected within the release extent, indicated TPH-GRO/TPH-DRO, TPH, and/or chloride concentrations exceeded the Closure Criteria. Laboratory analytical results for preliminary samples SS01 through SS04, collected outside the release extent, indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride

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concentrations were compliant with the most stringest Table 1 Closure Criteria and confirmed the lateral extent of the release. Based on visible staining in the release area and laboratory analytical results for preliminary soil samples SS05 through SS09, additional remediation activities appeared to be warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES

Between August 1 and August 29, 2022, Ensolum personnel were at the Site to oversee excavation activities. Impacted soil was excavated from the release area as indicated by visible staining and laboratory analytical results for preliminary soil samples SS05 through SS09. Excavation activities completed on pad, were performed using a track-mounted backhoe and transport vehicles. To direct excavation activities, soil was screened for VOCs and chloride. The excavation was completed to depths ranging from 4 feet bgs to 5 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS40 were collected from the floor of the excavation at depths ranging from 4 feet to 5 feet bgs. Composite soil samples SW01 through SW09 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 4 feet bgs. The soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

The excavation area measured approximately 8,019 square feet. A total of approximately 1,485 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the Northern Delaware Basin Landfill in Lea County, New Mexico.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for excavation floor samples FS01 through FS19 and FS21 through FS40 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Excavation sidewall soil samples SW01, SW04, and SW06 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for excavation floor sample FS20 and excavation sidewall samples SW02, SW03, and SW05 initially indicated TPH and/or TPH-GRO/TPH-DRO and chloride concentrations exceeded the Closure Criteria. Additional soil was removed and subsequent excavation floor sample FS20A and sidewall samples SW07 through SW09, collected from the final excavation extent, indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the April 20, 2022, crude oil and natural gas release. Laboratory analytical results for excavation soil samples, collected from the final excavation extent, indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and the applied reclamation requirement. Based on the soil sample analytical results, no further remediation appears to be required. BTA will backfill the excavation with material purchased locally and recontour the Site following reclamation of the remainder of the pad.

Maddox Federal B #1 Well Site

E N S O L U M

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. BTA believes these remedial actions are protective of human health, the environment, and groundwater. As such, BTA respectfully requests closure for Incident Number NAPP2211065721. The Form C-141 is included as 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 Staff Geologist

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Tacoma Morrissey Senior Geologist

cc: Bob Hall, BTA Oil Producers, LLC Bureau of Land Management

Appendices:

- Figure 1 Site Location Map
- Figure 2 Preliminary Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Table 1Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix D NMOCD Sample Notification
- Appendix E Final C-141



FIGURES

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Released to Imaging: 9/22/2022 11:39:16 AM





Released to Imaging: 9/22/2022 11:39:16 AM



TABLES

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	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Maddox Federal B #1 Well Site BTA Oil Producers, LLC Incident Number NAPP2211065721 Lea 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 1 C	Closure Criteria ((NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000		
Preliminary Assessment Soil Samples												
SS01	06/16/2022	0.5	<0.050	<0.300	<10.0	15.0	<10.0	15.0	15.0	96.0		
SS02	06/16/2022	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0		
SS03	06/16/2022	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0		
SS04	06/16/2022	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0		
SS05	07/12/2022	0.5	< 0.050	1.56	234	9,640	1,770	9,874	11,644	160		
SS06	07/12/2022	0.5	< 0.050	<0.300	<10.0	70.4	18.0	70.4	88.4	240		
SS07	07/12/2022	0.5	< 0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0		
SS08	07/12/2022	0.5	< 0.050	19.4	746	13,100	2,180	13,846	16,026	176		
SS09	07/12/2022	0.5	< 0.050	<0.300	<10.0	643	200	643	843	19,800		
				Excav	ation Floor Soil S	Samples						
FS01	08/01/2022	4	<0.050	<0.300	<10.0	630	106	630	736	400		
FS02	08/01/2022	4	<0.050	<0.300	<10.0	34.5	<10.0	34.5	<10.0	160		
FS03	08/02/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0		
FS04	08/02/2022	4	<0.050	<0.300	<10.0	12.1	<10.0	12.1	12.1	48.0		
FS05	08/02/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0		
FS06	08/02/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0		
FS07	08/02/2022	4	<0.050	<0.300	<10.0	15.0	<10.0	15.0	15.0	64.0		
FS08	08/02/2022	4	<0.050	<0.300	<10.0	10.3	<10.0	10.3	10.3	32.0		
FS09	08/02/2022	4	<0.050	<0.300	<10.0	45.3	19.6	45.3	64.9	48.0		
FS10	08/02/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0		
FS11	08/02/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0		
FS12	08/02/2022	4	<0.050	<0.300	<10.0	10.8	<10.0	10.8	10.8	64.0		
FS13	08/02/2022	4	<0.050	<0.300	<10.0	48.7	11.2	48.7	59.9	160		
FS14	08/02/2022	4	<0.050	<0.300	<10.0	10.5	<10.0	10.5	10.5	96.0		
FS15	08/02/2022	4	<0.050	<0.300	<10.0	27.7	<10.0	27.7	27.7	240		
FS16	08/03/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0		



	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Maddox Federal B #1 Well Site BTA Oil Producers, LLC Incident Number NAPP2211065721 Lea 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 1 C	losure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000			
FS17	08/03/2022	4	<0.050	<0.300	<10.0	49.6	19.7	49.6	69.3	80.0			
FS18	08/03/2022	4	<0.050	<0.300	<10.0	16.9	<10.0	16.9	16.9	80.0			
FS19	08/03/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0			
FS20	08/03/2022	4	<0.050	<0.300	<10.0	2,290	601	2,290	2,891	80.0			
FS20A	08/29/2022	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0			
FS21	08/03/2022	4	<0.050	<0.300	<10.0	137	46.3	137	183.3	80.0			
FS22	08/03/2022	4	<0.050	<0.300	<10.0	44.2	14.8	44.2	59.0	80.0			
FS23	08/03/2022	4	<0.050	<0.300	<10.0	51.8	13.3	51.8	65.1	112			
FS24	08/03/2022	4	<0.050	<0.300	<10.0	125	24.4	125	149.4	64.0			
FS25	08/03/2022	4	<0.050	<0.300	<10.0	234	51.0	234	285	128			
FS26	08/03/2022	4	<0.050	<0.300	<10.0	148	22.9	148	170.9	48.0			
FS27	08/03/2022	4	<0.050	<0.300	<10.0	196	32.5	196	228.5	48.0			
FS28	08/03/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0			
FS29	08/03/2022	4	<0.050	<0.300	<10.0	374	96.4	374	470.4	48.0			
FS30	08/03/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0			
FS31	08/03/2022	4	<0.050	<0.300	<10.0	153	17.9	153	170.9	80.0			
FS32	08/03/2022	4	<0.050	<0.300	<10.0	85.8	15.0	85.8	100.8	48.0			
FS33	08/03/2022	4	<0.050	<0.300	<10.0	75.2	<10.0	75.2	75.2	48.0			
FS34	08/03/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0			
FS35	08/03/2022	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0			
FS36	08/03/2022	4	<0.050	<0.300	<10.0	140	12.8	140	152.8	48.0			
FS37	08/03/2022	4	<0.050	<0.300	<10.0	278	28.9	278	306.9	48.0			
FS38	08/03/2022	4	<0.050	<0.300	<10.0	80.9	<10.0	80.9	80.9	32.0			
FS39	08/03/2022	4	<0.050	<0.300	<10.0	12.0	<10.0	12.0	12.0	16.0			
FS40	08/03/2022	4	<0.050	<0.300	<10.0	69.9	<10.0	69.9	69.9	64.0			



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Maddox Federal B #1 Well Site BTA Oil Producers, LLC Incident Number NAPP2211065721 Lea 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 1 C	Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000	
				Excavat	ion Sidewall Soil	Samples	I		I		
SW01	08/03/2022	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0	
SW02	08/03/2022	0 - 4	< 0.050	<0.300	<10.0	954	175	954	1,129	752	
SW03	08/03/2022	0 - 4	< 0.050	<0.300	<10.0	104	10.8	104	114.8	64.0	
SW04	08/03/2022	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0	
SW05	08/03/2022	0 - 4	< 0.050	<0.300	<10.0	607	127	607	734	80.0	
SW06	08/03/2022	0 - 4	<0.050	<0.300	<10.0	67.8	14.3	67.8	82.1	160	
SW07	08/29/2022	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0	
SW08	08/29/2022	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0	
SW09	08/29/2022	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0	

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or

reclamation standard where applicable.

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon Gray text represents samples that have been excavated



APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

	OSE POD NO	(WELL NO)1		WELL TAG ID NO			OSE FILE NOC	S)			
ION	CP-1802				22472							
AND WELL LOCATION	WELL OWNE LIMESTO		5) IN PROPERTIES R	ANCILLC	,			PHONE (OPTI)	ONAL)			
TT	WELL OWN	ER MAILIN	G ADDRESS					CITY		STATE	ZIP	
WEL	3300 N A S	STREET.	, BLDG 1, STE 220					MIDLAND		TX 79705		
Q	WELL		DI	GREES	MINUTES	SECON						
AL.A	LOCATIO	1.77	ATITUDE	32	21	17.4	⁴³ N		REQUIRED: ONE TEN	TH OF A SECOND		
GENERAL	(FROM GP	^(S)	DNGITUDE	103	25	59.	15 W	* DATUM REG	QUIRED: WGS 84			
1. GE			NG WELL LOCATION TO 1/4 \$35 T22\$ R34E	D STREET ADD	RESS AND COMMO	N LANDM	ARKS PLS	S (SECTION, TO	WNSHJIP, RANGE) WI	IERE AVAILABLE		
	LICENSE NO		NAME OF LICENSED	DRILLER	· ·				NAME OF WELL DR	ILLING COMPANY		
	WDI	706		BI			NAME OF WELL DRILLING COMPANY ELITE DRILLERS CORPORATION DEPTH WATER FIRST ENCOUNTERED (FT) N/A STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A					
	DRILLING STARTED DRILLING ENDED DEPTH OF COMPLETED WELL (FT) BORE HO 11/07/19 11/09/19 200 11/09/19<							LE DEPTH (FT) 200	DEPTH WATER FIR	TX 79705 H OF A SECOND ERE AVAILABLE LLING COMPANY LERS CORPORATION T ENCOUNTERED (FT) N/A EL IN COMPLETED WELL (FT)		
2	COMPLETED WELL IS: ARTESIAN / DRY HOLE SHALLOW (UNCONFINED) N/A										9.1. (FT)	
IOIT	ORILLING FLUID: AIR TMUD ADDITIVES SPECUFY:											
DRMA	DRILLING METHOD: 7 ROTARY HAMMER CABLE TOOL OTHER SPECIFY:											
INF	DEPTH		BORE HOLE	CASING	MATERIAL ANI GRADE	D/OR		ASING	CASING		SLOT	
2. DRILLING & CASING INFORMATION	FROM	ROM TO DIAM (inches)			(include each casing string, and T			NECTION TYPE ling diameter)	INSIDE DIAM. (inches)		1 1	
& C.	0	160	7 7/8		SDR17 PVC			PLINE	4.28	SDR17		
-ING	160	200	7 7/8	[SDR17 PVC		SI	PLINE	4.28	SDR17	.32	
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	DEPTH ((feet bgl)	BORE HOLE		IST ANNULAR S	EAL MA	TERIAL A	AND	AMOUNT	METUO		
IAL.	FROM	ТО	DIAM. (inches)		VEL PACK SIZE				(cubic feet)	PLOCEN	MENT -	
TERI	25	200	7 7/8			ICA SAY			40			
MA'	0	25	7 7/8		PORT	LAND I/I	1		6	POL	R	
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ANNULAR MATERIAL				+								
3. Al			·····	<u> </u>								
FOR	OSE INTER	NAL USF	<u>,</u>					WR-20	0 WELL RECORD	& LOG (Version 04-3	0 19)	

FILE NO. 0. P-1802	POD NO.	TRN NO.	<9873	
LOCATION Live 22. 34. 35. 22	2	WELL TAG ID NO.	22472	PAGE 1 OF 2

	DEPTH () FROM	feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIA INCLUDE WATER-BEARING CAVITIE (attach supplemental sheets to ful	S OR FRACTURE ZONE	S BE/	ATER ARING? (S / NO)	ESTIMATED YIELD FOR WATER- BFARING ZONES (gpm)
	0	5	5	SANDY TOPSO	II.	Y	✓ N	Lotter (Brity
	5	25	20	SANDY CALIC	IE	Y	√ N	· · · · · · · · · · · ·
	25	65	40	BROWN CLA	· · · · · · · · · · · · · · · · · · ·	Y	√ N	
	65	105	40	TAN SANDY CI.	AY	Y	√ N	
	105	185	80	BROWN SANDY CLAY WITH SOME B	ROWN SAND STRINGER	ts Y	✓ N	
T.	185	200	15	RED CLAY		Y	√ N	
4. HYDROGEOLOGIC LOG OF WELL						Y	N	
OF						Y	N	
507			_			Y	N	
1.C.I.						Y	N	
) TOT						Y	N	
GEO						Y	N	
DRO						Y	N	
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	METHOD U			OF WATER-BEARING STRATA: BAILER OTHER SPECIFY:		TOTAL EST WELL YIEI		0.00
Z	WELL TES			ACH A COPY OF DATA COLLECTED DURI ME, AND A TABLE SHOWING DISCHARGE				
RVISION			· · · · · · · · · · · · · · · · · · ·					
TEST; RIG SUPERV	MISCELLA	NEOUS IN	FORMATION:					2020 FE
;T: R								55
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GO



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS	Water	Resources

Data	category	<i>[</i> +
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Data Category

Geographic Area: United States

GO

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Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News 🔊

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

Search Results -- 1 sites found

Agency code = usgs site_no list = • 322231103262601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 322231103262601 22S.34E.23.23131

Available data for this site Groundwater: Field measurements

Lea County, New Mexico Hydrologic Unit Code 13070007 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

<u>Table of data</u>

Tab-separated data

<u>Graph of data</u>

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements. <u>Download a presentation-quality graph</u>

Questions about sites/data? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms Subscribe for system changes News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-04-29 16:06:32 EDT 0.66 0.59 nadww01





APPENDIX B

Photographic Log

Released to Imaging: 9/22/2022 11:39:16 AM





APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



June 21, 2022

TACOMA MORRISSEY ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MADDOX FED B #1 // NAPP2211065721

Enclosed are the results of analyses for samples received by the laboratory on 06/17/22 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	06/17/2022	Sampling Date:	06/16/2022
Reported:	06/21/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 01 @ .5' (H222607-01)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/20/2022	ND	1.88	94.1	2.00	0.751	
Toluene*	<0.050	0.050	06/20/2022	ND	1.89	94.6	2.00	0.552	
Ethylbenzene*	<0.050	0.050	06/20/2022	ND	1.81	90.4	2.00	1.25	
Total Xylenes*	<0.150	0.150	06/20/2022	ND	5.62	93.7	6.00	1.62	
Total BTEX	<0.300	0.300	06/20/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	96.0	16.0	06/21/2022	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	06/20/2022	ND	173	86.6	200	3.87	
DRO >C10-C28*	15.0	10.0	06/20/2022	ND	167	83.7	200	9.72	
EXT DRO >C28-C36	<10.0	10.0	06/20/2022	ND					
Surrogate: 1-Chlorooctane	85.3	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.3	% 59.5-14							

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	06/17/2022	Sampling Date:	06/16/2022
Reported:	06/21/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 02 @ .5' (H222607-02)

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	06/20/2022	ND	1.88	94.1	2.00	0.751	
Toluene*	<0.050	0.050	06/20/2022	ND	1.89	94.6	2.00	0.552	
Ethylbenzene*	<0.050	0.050	06/20/2022	ND	1.81	90.4	2.00	1.25	
Total Xylenes*	<0.150	0.150	06/20/2022	ND	5.62	93.7	6.00	1.62	
Total BTEX	<0.300	0.300	06/20/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.2	% 69.9-14	0						
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	06/21/2022	ND	416	104	400	3.92	
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	06/20/2022	ND	173	86.6	200	3.87	
DRO >C10-C28*	<10.0	10.0	06/20/2022	ND	167	83.7	200	9.72	
EXT DRO >C28-C36	<10.0	10.0	06/20/2022	ND					
Surrogate: 1-Chlorooctane	89.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	99.4	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	06/17/2022	Sampling Date:	06/16/2022
Reported:	06/21/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 03 @ .5' (H222607-03)

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	06/20/2022	ND	1.88	94.1	2.00	0.751	
Toluene*	<0.050	0.050	06/20/2022	ND	1.89	94.6	2.00	0.552	
Ethylbenzene*	<0.050	0.050	06/20/2022	ND	1.81	90.4	2.00	1.25	
Total Xylenes*	<0.150	0.150	06/20/2022	ND	5.62	93.7	6.00	1.62	
Total BTEX	<0.300	0.300	06/20/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/21/2022	ND	416	104	400	3.92	
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	06/21/2022	ND	173	86.6	200	3.87	
DRO >C10-C28*	<10.0	10.0	06/21/2022	ND	167	83.7	200	9.72	
EXT DRO >C28-C36	<10.0	10.0	06/21/2022	ND					
Surrogate: 1-Chlorooctane	85.3	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.7	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	06/17/2022	Sampling Date:	06/16/2022
Reported:	06/21/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 04 @ .5' (H222607-04)

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	06/20/2022	ND	1.88	94.1	2.00	0.751	
Toluene*	<0.050	0.050	06/20/2022	ND	1.89	94.6	2.00	0.552	
Ethylbenzene*	<0.050	0.050	06/20/2022	ND	1.81	90.4	2.00	1.25	
Total Xylenes*	<0.150	0.150	06/20/2022	ND	5.62	93.7	6.00	1.62	
Total BTEX	<0.300	0.300	06/20/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/21/2022	ND	416	104	400	3.92	
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	06/21/2022	ND	173	86.6	200	3.87	
DRO >C10-C28*	<10.0	10.0	06/21/2022	ND	167	83.7	200	9.72	
EXT DRO >C28-C36	<10.0	10.0	06/21/2022	ND					
Surrogate: 1-Chlorooctane	85.3	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.3	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Delivered By: (Circle One) Sampler - UPS - Bus - Ot	Kelhudnisned by:	10	Cumulanistica Bi	affiliates or successors arising	analyses. All claims including iervice. In no event shall Can	PLEASE NOTE: Liability and			4	11	U	2	-	Haaaloot	Lab I.D.		FOR LAB USE ONLY	Sampler Name:	Project Location:	Project Name:	Project #: 03C2	Phone #: 337-2	City: Carlsbad	Address: 3122	Project Manage	Company Name:		
Bus - Other: Corrected Temp.	Date: Time:		Late:	s or successors arising out of or related to the performance of services hereun	analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unters name or worknown, while we including which 30 and a completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions loss of uses of porties hoursed by clarding the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions loss of uses of porties hoursed by clarding the applicable service.	PLEASE NOTE: Labity and Damages. Cardinal's labitly and client's exclusive remain to any claim addition whether based is contrast or here shall be in the first in-				SS04 @ 5	SS03 @ .5'	SS02 @ .5'	C. @ 1000		Sample I.D.			Chris Brown	n: Eddy County	Maddox FED B #1 / NAPP2211065721	03C2012001 Project Owner:	337-257-8307 Fax #:	State:	Address: 3122 National Parks Hwy	Project Manager: Tacoma Morrissey	e: Ensolum		
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Bacteria (only) Sample Condition Cool Intact Observed Temp. °C																										REQUEST		



July 19, 2022

TACOMA MORRISSEY ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MADDOX FED B #1 // NAPP2211065721

Enclosed are the results of analyses for samples received by the laboratory on 07/13/22 10:52.

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 TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	07/13/2022	Sampling Date:	07/12/2022
Reported:	07/19/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001 (32.34997, - 103.44293)	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 05 @ 0.5' (H223040-01)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2022	ND	2.04	102	2.00	10.4	
Toluene*	0.126	0.050	07/18/2022	ND	2.14	107	2.00	10.9	
Ethylbenzene*	0.117	0.050	07/18/2022	ND	2.18	109	2.00	10.9	
Total Xylenes*	1.32	0.150	07/18/2022	ND	6.62	110	6.00	10.1	
Total BTEX	1.56	0.300	07/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	226 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/15/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	234	100	07/15/2022	ND	168	84.1	200	15.8	
DRO >C10-C28*	9640	100	07/15/2022	ND	177	88.4	200	14.7	
EXT DRO >C28-C36	1770	100	07/15/2022						
Surrogate: 1-Chlorooctane	176 9	% 43-149)						
Surrogate: 1-Chlorooctadecane	234 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	07/13/2022	Sampling Date:	07/12/2022
Reported:	07/19/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001 (32.34997, - 103.44293)	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 06 @ 0.5' (H223040-02)

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	07/16/2022	ND	2.04	102	2.00	10.4	
Toluene*	<0.050	0.050	07/16/2022	ND	2.14	107	2.00	10.9	
Ethylbenzene*	<0.050	0.050	07/16/2022	ND	2.18	109	2.00	10.9	
Total Xylenes*	<0.150	0.150	07/16/2022	ND	6.62	110	6.00	10.1	
Total BTEX	<0.300	0.300	07/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	118	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/15/2022	ND	416	104	400	0.00	
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	07/15/2022	ND	184	91.9	200	20.0	
DRO >C10-C28*	70.4	10.0	07/15/2022	ND	182	90.9	200	18.4	
EXT DRO >C28-C36	18.0	10.0	07/15/2022	ND					
Surrogate: 1-Chlorooctane	79.7	% 43-149							
Surrogate: 1-Chlorooctadecane	94.8	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	07/13/2022	Sampling Date:	07/12/2022
Reported:	07/19/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001 (32.34997, - 103.44293)	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 07 @ 0.5' (H223040-03)

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	07/16/2022	ND	2.04	102	2.00	10.4	
Toluene*	<0.050	0.050	07/16/2022	ND	2.14	107	2.00	10.9	
Ethylbenzene*	<0.050	0.050	07/16/2022	ND	2.18	109	2.00	10.9	
Total Xylenes*	<0.150	0.150	07/16/2022	ND	6.62	110	6.00	10.1	
Total BTEX	<0.300	0.300	07/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	119 9	69.9-14	0						
Chloride, SM4500Cl-B	mg,	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/15/2022	ND	416	104	400	0.00	
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	07/15/2022	ND	184	91.9	200	20.0	
DRO >C10-C28*	<10.0	10.0	07/15/2022	ND	182	90.9	200	18.4	
EXT DRO >C28-C36	<10.0	10.0	07/15/2022	ND					
Surrogate: 1-Chlorooctane	80.0	% 43-149)						
Surrogate: 1-Chlorooctadecane	90.2	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	07/13/2022	Sampling Date:	07/12/2022
Reported:	07/19/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001 (32.34997, - 103.44293)	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 08 @ 0.5' (H223040-04)

BTEX 8021B	mg	/kg	Analyze	d By: JH					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/18/2022	ND	2.04	102	2.00	10.4	
Toluene*	0.169	0.050	07/18/2022	ND	2.14	107	2.00	10.9	
Ethylbenzene*	2.66	0.050	07/18/2022	ND	2.18	109	2.00	10.9	
Total Xylenes*	16.6	0.150	07/18/2022	ND	6.62	110	6.00	10.1	
Total BTEX	19.4	0.300	07/18/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	423	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/15/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	746	100	07/15/2022	ND	184	91.9	200	20.0	
DRO >C10-C28*	13100	100	07/15/2022	ND	182	90.9	200	18.4	
EXT DRO >C28-C36	2180	100	07/15/2022	ND					
Surrogate: 1-Chlorooctane	248	% 43-149)						
Surrogate: 1-Chlorooctadecane	254	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	07/13/2022	Sampling Date:	07/12/2022
Reported:	07/19/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001 (32.34997, - 103.44293)	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA - EDDY CO NM		

Sample ID: SS 09 @ 0.5' (H223040-05)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/16/2022	ND	2.04	102	2.00	10.4	
Toluene*	<0.050	0.050	07/16/2022	ND	2.14	107	2.00	10.9	
Ethylbenzene*	<0.050	0.050	07/16/2022	ND	2.18	109	2.00	10.9	
Total Xylenes*	<0.150	0.150	07/16/2022	ND	6.62	110	6.00	10.1	
Total BTEX	<0.300	0.300	07/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19800	16.0	07/15/2022	ND	432	108	400	0.00	QM-07
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	07/15/2022	ND	184	91.9	200	20.0	
DRO >C10-C28*	643	10.0	07/15/2022	ND	182	90.9	200	18.4	
EXT DRO >C28-C36	200	10.0	07/15/2022	ND					
Surrogate: 1-Chlorooctane	76.8	% 43-149)						
Surrogate: 1-Chlorooctadecane	117 9	% 42.5-16	1						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
The RPD for the BS/BSD was outside of historical limits.
The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
Analyte NOT DETECTED at or above the reporting limit
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

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Ilt: <u>Yes</u> <u>No</u> <u>Add'l P</u> re emailed. Please provide Ema Time: Standard <u>I</u>	Address: 510% NATION Sity: CALLS, BAD Phone #: 33.7.357.8 Project Name: Ma.d.d.ox Project Location: 3.2.349 Protud USE ONLY FOR LAB USE ONLY FOR LAB USE ONLY SSO 2.3 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5	AL PREX ITTURINAY State: NTM 307 Fax #: 1 Project Owne Fdd B #1 IQ7, -103.44893 hore S 0.5 ' 0.5 ' 0.5 '	C S S S G)RAB OR (C)OMP. C T T T T T T T T	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	GROUNDWATER		OIL					2117-01-01-01-01-01-01-01-01-01-01-01-01-01-	PO1 TIME 955 1000 1005 1015 1015	X X X X X BTEX (FPA \$021)	XXXXX TPH (EPA8015)	XXXXX Chloride (EPA-300) 4500			
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August 05, 2022

TACOMA MORRISSEY ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MADDOX FED B #1 WELL SITE

Enclosed are the results of analyses for samples received by the laboratory on 08/01/22 16:45.

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.

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 TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/01/2022	Sampling Date:	08/01/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: STP - 1 (H223397-01)

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	08/05/2022	ND	1.96	98.2	2.00	3.44	
Toluene*	<0.050	0.050	08/05/2022	ND	2.06	103	2.00	1.01	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.02	101	2.00	2.00	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.34	106	6.00	2.70	
Total BTEX	<0.300	0.300	08/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/04/2022	ND	432	108	400	0.00	
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	08/04/2022	ND	206	103	200	2.74	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	193	96.7	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	71.8	% 43-149)						
Surrogate: 1-Chlorooctadecane	84.7	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/01/2022	Sampling Date:	08/01/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: STP - 2 (H223397-02)

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	08/05/2022	ND	1.96	98.2	2.00	3.44	
Toluene*	<0.050	0.050	08/05/2022	ND	2.06	103	2.00	1.01	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.02	101	2.00	2.00	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.34	106	6.00	2.70	
Total BTEX	<0.300	0.300	08/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	08/04/2022	ND	432	108	400	3.64	QR-03
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	08/04/2022	ND	206	103	200	2.74	
DRO >C10-C28*	32.5	10.0	08/04/2022	ND	193	96.7	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	81.2	% 43-149	,						
Surrogate: 1-Chlorooctadecane	100	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/01/2022	Sampling Date:	08/01/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 01 (H223397-03)

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	08/05/2022	ND	1.96	98.2	2.00	3.44	
Toluene*	<0.050	0.050	08/05/2022	ND	2.06	103	2.00	1.01	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.02	101	2.00	2.00	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.34	106	6.00	2.70	
Total BTEX	<0.300	0.300	08/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	08/04/2022	ND	432	108	400	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	08/04/2022	ND	206	103	200	2.74	
DRO >C10-C28*	630	10.0	08/04/2022	ND	193	96.7	200	1.93	
EXT DRO >C28-C36	106	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	77.0	% 43-149)						
Surrogate: 1-Chlorooctadecane	111 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/01/2022	Sampling Date:	08/01/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 02 (H223397-04)

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	08/05/2022	ND	1.96	98.2	2.00	3.44	
Toluene*	<0.050	0.050	08/05/2022	ND	2.06	103	2.00	1.01	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.02	101	2.00	2.00	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.34	106	6.00	2.70	
Total BTEX	<0.300	0.300	08/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/04/2022	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	08/04/2022	ND	206	103	200	2.74	
DRO >C10-C28*	34.5	10.0	08/04/2022	ND	193	96.7	200	1.93	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	74.1	% 43-149)						
Surrogate: 1-Chlorooctadecane	93.3	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 7 of 7



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	Turnaround Time: Standard Rush	Sample Condition CHECKED BY:	Time: Observed Temp. °C C Sample	Delivered By: (Circle One) Obs
	All Results are emailed. Fierson provide and REMARKS:	ara Malasty	Time; 45 Received By:	Relinquished By:
Add'l Phone #:	Verbai Result: Ves No	erruptors, ros or use, or norm of the above stated re- such claim is based upon any of the above stated re-	ental damages, including without limitation, business interruptoris, ross or u services hereunder by Cardinal, regardless of whether such claim is based	analyses. All claims incruoining involution involution into consequential damages, including although initiation, business interruptions, loss or use, in over users, in our or provide the above stated reasons or otherwise service. In no event shall Cardinal Cardinal Cardinal in the state of the service of the service of the above stated reasons or otherwise animates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise animates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise animates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise animates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of services hereunder by Cardinal and the service hereunder by Cardinal and the service of the service of the services of the services of the service of the service of the services of the services of the service of the services of
	unt paid by the client for the applicable set for completion of the applicable set for client, its subsidiantes.	eofy for any claim arising whether based in contract or bot's shall be limited to the amount paid by the claim of the app shall be deemed waived unless made in writing and reached by Catalhai within 30 days after completion of the app	ity and client's exclusive remedy for any claim arising whether based any other cause whatsoever shall be deerned waived unless made it	PLEASE NOTE: Liability and Damages. Cardinal's liability and client
			NEE - 341/22	
	IZCL X TPH IZCL X TPH X X X STEX X X X Chlor	OIL SLUDGE OTHER : ACID/BASE: X ICE / COOL OTHER : X ICE / COOL OTHER : X ICE / COOL OTHER : X ICE / COOL	GROUNDWA WASTEWATI	Lab I.D. Sample I.D. 223397 StP-1 2 STP-2 3 FS01 4 FS02
Sann	8015 M 802 802	PRESERV.	RS TER	FOR LAB USE ONLY
R A	M	P.O. #: Company: BTP Attn: ISOIO V Address: IOV Address: IOV City: M.J.V State: TX Zip Phone #: U32 Fax #:	t 410 Ty Zip: 74701 Ty Zip: 74701 towner: well ste	Company Name: Ensplorm, LC Project Manager: Tucoma Morr: Sec Address: 601 N Marchild St. SNF City: Mdland St. State: Phone #: (33?) 25? - 630? Fax #: Project #: 03C2012001 Project Project Name: Maddox Fed 6 #1 N Project Location: Les Comby Sampler Name: Sampler Man Multi
ANALYSIS REQUEST	A	BILL TO	FAX (575) 393-2476	(575) 393-2326
CUSTODY AND ANALT SIS REASES.	CHAIN-OF-CUSTODY A		arland Hobbs, NM 88240	Laboratories

42 of 125 D,



August 05, 2022

TACOMA MORRISSEY ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MADDOX FED B #1 WELL SITE

Enclosed are the results of analyses for samples received by the laboratory on 08/02/22 16:55.

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.

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 TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 03 4' (H223438-01)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/04/2022	ND	416	104	400	3.77	
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	08/03/2022	ND	215	107	200	2.57	
DRO >C10-C28*	<10.0	10.0	08/03/2022	ND	203	101	200	5.25	
EXT DRO >C28-C36	<10.0	10.0	08/03/2022	ND					
Surrogate: 1-Chlorooctane	101 9	6 43-149)						
Surrogate: 1-Chlorooctadecane	108 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 04 4' (H223438-02)

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	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/04/2022	ND	416	104	400	3.77	
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	08/04/2022	ND	215	107	200	2.57	
DRO >C10-C28*	12.1	10.0	08/04/2022	ND	203	101	200	5.25	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	99.6	% 43-149							
Surrogate: 1-Chlorooctadecane	107 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 05 4' (H223438-03)

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	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.2	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/04/2022	ND	416	104	400	3.77	
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	08/04/2022	ND	215	107	200	2.57	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	203	101	200	5.25	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	100 9	% 43-149)						
Surrogate: 1-Chlorooctadecane	107 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 06 4' (H223438-04)

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	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/05/2022	ND	202	101	200	0.414	
DRO >C10-C28*	<10.0	10.0	08/05/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/05/2022	ND					
Surrogate: 1-Chlorooctane	94.8	% 43-149	1						
Surrogate: 1-Chlorooctadecane	107 9	42.5-16	1						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 07 4' (H223438-05)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/05/2022	ND	202	101	200	0.414	
DRO >C10-C28*	15.0	10.0	08/05/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/05/2022	ND					
Surrogate: 1-Chlorooctane	105 9	% 43-149)						
Surrogate: 1-Chlorooctadecane	123 9	42.5-16	1						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 08 4' (H223438-06)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.6	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	10.3	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	91.6	% 43-149)						
Surrogate: 1-Chlorooctadecane	99.4	% 42.5-16	1						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 09 4' (H223438-07)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.0	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	45.3	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	19.6	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	106 9	% 43-149							
Surrogate: 1-Chlorooctadecane	116 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 10 4' (H223438-08)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.5	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	100 9	% 43-149)						
Surrogate: 1-Chlorooctadecane	107 9	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 11 4' (H223438-09)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	<10.0	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	93.2	% 43-149)						
Surrogate: 1-Chlorooctadecane	101 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 12 4' (H223438-10)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	10.8	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	98.7	% 43-149	1						
Surrogate: 1-Chlorooctadecane	107 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 13 4' (H223438-11)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/04/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/04/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/04/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/04/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.1	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	48.7	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	11.2	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	100	% 43-149)						
Surrogate: 1-Chlorooctadecane	113 9	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 14 4' (H223438-12)

BTEX 8021B	mg/	kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/05/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.6	% 69.9-14	0						
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	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	10.5	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	92.3	% 43-149	1						
Surrogate: 1-Chlorooctadecane	103 9	42.5-16	1						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/02/2022	Sampling Date:	08/02/2022
Reported:	08/05/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	0302012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS - 15 4' (H223438-13)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2022	ND	2.07	103	2.00	8.33	
Toluene*	<0.050	0.050	08/05/2022	ND	2.14	107	2.00	8.29	
Ethylbenzene*	<0.050	0.050	08/05/2022	ND	2.13	107	2.00	8.04	
Total Xylenes*	<0.150	0.150	08/05/2022	ND	6.50	108	6.00	8.25	
Total BTEX	<0.300	0.300	08/05/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.6	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	08/04/2022	ND	432	108	400	3.77	
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	08/04/2022	ND	202	101	200	0.414	
DRO >C10-C28*	27.7	10.0	08/04/2022	ND	215	107	200	5.61	
EXT DRO >C28-C36	<10.0	10.0	08/04/2022	ND					
Surrogate: 1-Chlorooctane	93.4	% 43-149)						
Surrogate: 1-Chlorooctadecane	102	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Received by	OCD:	9/20/2022	12:29:20 PM
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CARDINAL Laboratories 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 Company Name: ENSOLUM Project Manager: Talcoma Morrissoy
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PIEASE MOTE: Liability and Damages. Cardinal's liability and client's exclusive ennoy for any similar ansary wireine used in connex or or connex or con
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Delivered By: (Circle One)

Page 16 of 17

8 of 125

Released to Imaging: 9/22/2022 11:39:16 AM

Received by OCD: 9/20/2022 12:29:20 PM

BILL TO P.O. #: Company: $[B, T, A]$ o j 1 Address: 104 5 (2.05) State: TX Zip: TA 101 Phone #: 432 -312 -213 Fax #: DATE TIME PRESERV. SAMPLING 5 (1/2.2) Fax #: 0 THE DATE Fax #: 8 (1/2.2) 1.5 o.4 X 6 (1/2.2) 1.5 o.4 X 6 (1/2.2) 1.5 o.4 X 8 (1/2.2) 1.5 o.5 X <th>BILL TO BILL TO $A \cup U_{c}^{c}$ $B \cup E_{c}$ $A \cup U_{c}^{c}$ <math>A $A \cup U_{$</th>	BILL TO BILL TO $A \cup U_{c}^{c}$ $B \cup E_{c}$ $A \cup U_{c}^{c}$ $A $A \cup U_{$
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August 10, 2022

TACOMA MORRISSEY ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MADDOX FED B #1 WELL SITE

Enclosed are the results of analyses for samples received by the laboratory on 08/03/22 17:00.

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

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 TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 16 4' (H223481-01)

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	08/08/2022	ND	2.06	103	2.00	2.78	
Toluene*	<0.050	0.050	08/08/2022	ND	2.13	106	2.00	2.25	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.15	108	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.53	109	6.00	4.34	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.2	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	<10.0	10.0	08/09/2022	ND	214	107	200	3.65	QM-07
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	113	% 43-149)						
Surrogate: 1-Chlorooctadecane	128	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 17 4' (H223481-02)

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	08/08/2022	ND	2.06	103	2.00	2.78	
Toluene*	<0.050	0.050	08/08/2022	ND	2.13	106	2.00	2.25	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.15	108	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.53	109	6.00	4.34	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	49.6	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	19.7	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	80.0	% 43-149)						
Surrogate: 1-Chlorooctadecane	82.2	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 18 4' (H223481-03)

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	08/08/2022	ND	2.06	103	2.00	2.78	
Toluene*	<0.050	0.050	08/08/2022	ND	2.13	106	2.00	2.25	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.15	108	2.00	3.78	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.53	109	6.00	4.34	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	16.9	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	90.4	% 43-149)						
Surrogate: 1-Chlorooctadecane	90.3	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 19 4' (H223481-04)

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	08/08/2022	ND	1.95	97.3	2.00	1.08	QM-07
Toluene*	<0.050	0.050	08/08/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 69.9-14	0						
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	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	<10.0	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	94.5	% 43-149							
Surrogate: 1-Chlorooctadecane	91.9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 20 4' (H223481-05)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/08/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/08/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	2290	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	601	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	99.3	% 43-149)						
Surrogate: 1-Chlorooctadecane	140 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 21 4' (H223481-06)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/08/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/08/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	137	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	46.3	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	93.4	% 43-149)						
Surrogate: 1-Chlorooctadecane	102 9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 22 4' (H223481-07)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/08/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/08/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2022	ND	432	108	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	44.2	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	14.8	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	91.8	% 43-149)						
Surrogate: 1-Chlorooctadecane	93.2	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 23 4' (H223481-08)

BTEX 8021B	mg/	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/08/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/08/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	51.8	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	13.3	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	89.2	% 43-149)						
Surrogate: 1-Chlorooctadecane	92.9	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 24 4' (H223481-09)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/08/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/08/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/08/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/08/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/08/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	125	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	24.4	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	114 9	% 43-149)						
Surrogate: 1-Chlorooctadecane	121 9	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 25 4' (H223481-10)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/09/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/09/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	210	105	200	1.16	
DRO >C10-C28*	234	10.0	08/09/2022	ND	214	107	200	3.65	
EXT DRO >C28-C36	51.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	88.3	% 43-149)						
Surrogate: 1-Chlorooctadecane	97.5	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 26 4' (H223481-11)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/09/2022	ND	1.95	97.3	2.00	1.08	
Toluene*	<0.050	0.050	08/09/2022	ND	2.06	103	2.00	0.0598	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.00	100	2.00	0.254	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.25	104	6.00	0.596	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 \$	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	148	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	22.9	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	84.4	% 43-149)						
Surrogate: 1-Chlorooctadecane	<i>99.3</i>	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 27 4' (H223481-12)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	196	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	32.5	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	83.6	% 43-149)						
Surrogate: 1-Chlorooctadecane	99.2	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager


ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 28 4' (H223481-13)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	<10.0	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	77.4	% 43-149)						
Surrogate: 1-Chlorooctadecane	90.7	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 29 4' (H223481-14)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.2	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	374	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	96.4	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	76.8	% 43-149)						
Surrogate: 1-Chlorooctadecane	94.1	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 30 4' (H223481-15)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	<10.0	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	82.1	% 43-149	1						
Surrogate: 1-Chlorooctadecane	97.4	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 31 4' (H223481-16)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	153	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	17.9	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	89.1	% 43-149)						
Surrogate: 1-Chlorooctadecane	108 9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 32 4' (H223481-17)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.0	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	85.8	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	15.0	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	90.8	% 43-149)						
Surrogate: 1-Chlorooctadecane	107 9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 33 4' (H223481-18)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	75.2	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	86.7	% 43-149)						
Surrogate: 1-Chlorooctadecane	108	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 34 4' (H223481-19)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.7	% 69.9-14	0						
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	08/08/2022	ND	416	104	400	3.77	
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	08/08/2022	ND	212	106	200	0.889	
DRO >C10-C28*	<10.0	10.0	08/08/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/08/2022	ND					
Surrogate: 1-Chlorooctane	82.6	% 43-149							
Surrogate: 1-Chlorooctadecane	94.9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 35 4' (H223481-20)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.3	% 69.9-14	0						
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	08/08/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	<10.0	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	81.0	% 43-149)						
Surrogate: 1-Chlorooctadecane	93.1	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 36 (H223481-21)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	140	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	12.8	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	73.6	% 43-149)						
Surrogate: 1-Chlorooctadecane	103 9	% 42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 37 (H223481-22)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/08/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	278	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	28.9	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	83.3	% 43-149)						
Surrogate: 1-Chlorooctadecane	107 9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 38 (H223481-23)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.1	% 69.9-14	0						
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	08/09/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	80.9	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	78.9	% 43-149	1						
Surrogate: 1-Chlorooctadecane	103 9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 39 (H223481-24)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.6	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/09/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	12.0	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	77.9	% 43-149							
Surrogate: 1-Chlorooctadecane	94.1	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: FS 40 (H223481-25)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.5	% 69.9-14	0						
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	08/09/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	69.9	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	85.1	% 43-149							
Surrogate: 1-Chlorooctadecane	107	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: SW 01 (H223481-26)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.1	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/09/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	<10.0	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	83.1	% 43-149	1						
Surrogate: 1-Chlorooctadecane	101 9	42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: SW 02 (H223481-27)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	08/09/2022	ND	416	104	400	3.77	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	954	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	175	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	79.7	% 43-149)						
Surrogate: 1-Chlorooctadecane	122 9	% 42.5-16	1						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: SW 03 (H223481-28)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.5	% 69.9-14	0						
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	08/09/2022	ND	432	108	400	0.00	
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	08/09/2022	ND	212	106	200	0.889	
DRO >C10-C28*	104	10.0	08/09/2022	ND	203	102	200	5.97	
EXT DRO >C28-C36	10.8	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	81.1	% 43-149)						
Surrogate: 1-Chlorooctadecane	96.7	% 42.5-16	1						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: SW 04 (H223481-29)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.0	% 69.9-14	0						
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	08/09/2022	ND	432	108	400	0.00	
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	08/09/2022	ND	191	95.7	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/09/2022	ND	201	101	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	96.1	% 43-149)						
Surrogate: 1-Chlorooctadecane	107 9	42.5-16	1						

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: SW 05 (H223481-30)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/09/2022	ND	432	108	400	0.00	
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	08/09/2022	ND	191	95.7	200	1.17	
DRO >C10-C28*	607	10.0	08/09/2022	ND	201	101	200	4.28	
EXT DRO >C28-C36	127	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	95.3	% 43-149)						
Surrogate: 1-Chlorooctadecane	136 9	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM TACOMA MORRISSEY 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/03/2022	Sampling Date:	08/03/2022
Reported:	08/10/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 WELL SITE	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Tamara Oldaker
Project Location:	BTA - LEA COUNTY		

Sample ID: SW 06 (H223481-31)

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	08/09/2022	ND	2.00	100	2.00	5.48	
Toluene*	<0.050	0.050	08/09/2022	ND	2.08	104	2.00	6.69	
Ethylbenzene*	<0.050	0.050	08/09/2022	ND	2.11	105	2.00	6.94	
Total Xylenes*	<0.150	0.150	08/09/2022	ND	6.38	106	6.00	6.93	
Total BTEX	<0.300	0.300	08/09/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/09/2022	ND	432	108	400	0.00	
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	08/09/2022	ND	220	110	200	8.77	
DRO >C10-C28*	67.8	10.0	08/09/2022	ND	226	113	200	5.17	
EXT DRO >C28-C36	14.3	10.0	08/09/2022	ND					
Surrogate: 1-Chlorooctane	84.1	% 43-149)						
Surrogate: 1-Chlorooctadecane	86.1	% 42.5-16	1						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

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ID FS_95 H C 1 X PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or for analyses. All claims including those for negligence and any other cause whatsoever shall be demend walved unless made in writing and rece service. In no event shall Cardinal is liable for incidental or consequential damages, including without limitation, business interruptions, loss or antiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is be affiliate or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is be affiliate or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is be affiliated by: Date: Received By: Relinquished By: Date: Date: Received By:	rs. 95 41 C 1 ges. 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tor tort, shall be limited to the amount paid to received by Cardinal within 30 days after loss of use, or loss of profis incurred by of hoss of use, or loss of profis incurred by of hoss of use, or loss of profis incurred by of hoss of use, or loss of profis incurred by of hoss of use, or loss of profis incurred by of hoss of use, or loss of profis incurred by of hose of use, or loss of hose of hose of hose of hose of hose of use, or loss of hose of	tor tot, shall be limited to the amount by cli tor tot, shall be limited to the amount page the ind received by Cardinal within 30 days after loss of use, or loss of profits incurred by cli has ad upon any of the above stated rea- is based upon any of the above stated rea-	tor fort, shall be limited to the amount paid to rotor, shall be limited to the amount paid to rost shall be limited to the amount paid to rost of profits incurred by cl has a due, or loss of profits incurred by cl has based upon any of the above stated real has based upon any of the above stated real has based upon above stated real has been based upon above based upon above stated real has been based upon above babove based upon above based upon above	N 8(7)/2 X 8/3/2 X 8/3/2 X 8/3/2 X 8/3/2 Immed to the amount paid of received by Cardinal within 30 days after loss of use, or loss of profits incurred by cill hoss of use, or loss of the loss of use of the loss of the los	t or to	x 51 //cc 1 X 6/3/b2 0 X 8/3/b2 0 Y 8/3/b2 0 Y <t< td=""><td>22/6/8 22/6/8 22/6/8</td><td>22/6/8 22/6/8</td><td>221519</td><td>7710 19</td><td></td><td>22/2/22</td><td>8/3/22</td><td>22/219</td><td></td><td>201618</td><td>0160 ZZ/K/3 X</td><td></td><td>DGE IER : D/BASI / COO IER :</td><td></td><td>IX PRESERV. SAMPLING</td><td>Fax #:</td><td>Phone #: (432) 312 - 2203</td><td>1</td><td>city: M:dbnd</td><td>Address: 104 5 Yacos St</td><td>Hall</td><td>Company: BT/A O; </td><td>P.O. #</td><td>BILL TO</td><td></td><td>CHAIN</td><td></td></t<>	22/6/8 22/6/8 22/6/8	22/6/8 22/6/8	221519	7710 19		22/2/22	8/3/22	22/219		201618	0160 ZZ/K/3 X		DGE IER : D/BASI / COO IER :		IX PRESERV. SAMPLING	Fax #:	Phone #: (432) 312 - 2203	1	city: M:dbnd	Address: 104 5 Yacos St	Hall	Company: BT/A O;	P.O. #	BILL TO		CHAIN	
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aboratories 101 East Marland, Hobbs, NM 88240 (575) 303-2476

City: **Company Name:** Project #: Project Manager: Sampler Name: Project Location: Project Name: Maddak Phone #: Address: Relinquished By: Relinquished By: analyses. All claims including those for negligence and any othe service. In no event shall Cardinal be liable for incidental or cons Sherred LEASE NOTE: Liability Sampler - UPS - Bus - Other: FOR LAB USE ONLY Delivered By: (Circle One) Lab I.D 30 F ien S 1 BEAC Dà Midend 601 (337) 63020 200 2012 ν (575) 393-2326 FAX (575) 393-2476 of or related to the performance Jaeoma Ensolum, Marcanfeld pa ts2 2 Man negligence and any other cause whatsoever shall be dee Sample I.D. 2529 FS 30 SJ S FS 33 FS 32 2 2 al s liability and red 8307 35 cunte 26 27 LLC Morrissey Observed Temp. °C Corrected Temp. °C /, 3 \$ N Fax #: Time: 780 Project Owner: Date: 8/3/22 State: Date: Time: ntal damages, including without limitation, business #1 well S: te Wite ٢ 2 5 E 17 L 44 4 X sunder by C 400 Zip: (G)RAB OR (C)OMP C 5 0 C 00 9 Received By: Received/By: 5 **# CONTAINERS** 7990 GROUNDWATER Cool Intact Sample Condition WASTEWATER Mata made in writing and received by Cardinal MATRIX SOIL OIL SLUDGE tract or tort, shall P.O. #: loss of use, or loss of profits incurred by client, its subsidiaries Fax #: Attn: State: 1X City: Phone #: Company: OTHER Address: 104 5 ACID/BASE PRESERV Midland COOL CHECKED BY: Bob (Initials) BILL OTHER (432)312-2203 BTA Zip: within 30 days 813122 22/2/8 8/3/22 8/3/22 \$13122 8/3/22 2215/8 213/22 2215/3 8/3/22 DATE 70 SAMPLING 20202 ta Peecos 0 after paid by the client 0940 0935 0958 All Results are emailed. Please provide Email address: 8945 Thermometer ID #113 Correction Factor -0.6°C Turnaround Time: 1200 1015 1000 REMARKS 1005 1010 /erbal Result: 1017 TIME S tion of the ap aun 101 8015 PH X x メ 30 M X \sim licable B Yes X X × X 802 x BT EX Standard Rush 4500 h 101 I No ANALYSIS NHE Add'l Phone #: Bacteria (only) Sample Condition Cool Intact Observed Temp. Yes Yes Nc No Corrected Temp. 8 32 REQUEST Corrected Temp. °C ĉ

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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 94 of 125

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 36 of 37

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	Add'I Phone #:			easons or otherwise	e, or loss of profits incurred by cli upon any of the above stated rea	service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of points incurred by crient, is successive and the successive statistical or consequential damages, including without limitation, business interruptions, loss of use, or loss of points incurred by crient, is successive and the successive statistical or consequential damages, including without limitation, business interruptions, loss of use, or loss of use, or loss of points incurred by crient, is successive and the su	ng without limitatio Cardinal, regardle	sequental damages, including ce of services hereunder by Ca	Cardinal be liable for incidental or conse sing out of or related to the performance	service. In no event shall Car affiliates or successors arising
			e applicable	to the amount paid by the client for the within 30 days after completion of the a	all be limited to the amount pai by Cardinal within 30 days afte	PLASE NOTE: Lability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or bort, shall be limited to the amount pad by the client's the application of the applic	e deemed waived	client's exclusive remedy for any cla or cause whatsoever shall be deem	Damages. Cardinal's liability and clier those for negligence and any other c	PLEASE NOTE: Liability and analyses. All claims including
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	/	-			-	701	Zip: 29	State: Tx	×	city: Midland
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Received by OCD: 9/20/2022 12:29:20 PM

Factor -0.6°C	S. Please email changes to celey.ku	+ Cardinal cannot acci	Sampler - UPS - Bus - Other:
Standard M Bacteria (onity) S Rush Cool Intact	CHECKED BY: Turnaround Time: (Initials) Thermometer ID #1	Observed Temp. °C	Delivered By: (Circle One)
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5:	REMARKS:	Date: Received By:	Relinquished By:
emailed. Please prov	All Results are	\ Dat	Relinquished By:
	ise, or loss of profits incurred by client, its subsidiar d upon any of the above stated reasons or otherwise	s, including w under by Car	analyses. All claims including those for neg service. In no event shall Cardinal be liable affiliates or successors arising out of or relat
the le applicable	shall be limited to the amount paid by the client for the ad by Cardinal within 30 days after completion of the a	Cardinal's lability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the	PLEASE NOTE: Liability and Damages. Ca
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	+ //Jan/	TOC U + 1 West SIC	Project Name: Maddox
		PARH I LIAN Sta	0
	Wid)	City:	06 20
	Address: 104 S Peros St		(229) # et
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	1	He 400	Address: 601 N K
	#	Morrissely P.O.	5
ANALYSIS REQUEST	BILL TO	Ensolum, LLC	Company Name:
		101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	101 East (575) 3
		oratories	Lab
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST	CHAIN-	RDINAL	CAF





September 02, 2022

HADLIE GREEN ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: MADDOX FED B #1 // NAPP2211065721

Enclosed are the results of analyses for samples received by the laboratory on 08/30/22 13:36.

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 HADLIE GREEN 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/30/2022	Sampling Date:	08/29/2022
Reported:	09/02/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA-EDDY CO. 32.34997,-103.44293		

Sample ID: FS 20 A @ 5' (H223976-01)

BTEX 8021B	mg,	/kg	Analyze	ed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2022	ND	2.15	108	2.00	3.87	
Toluene*	<0.050	0.050	09/01/2022	ND	2.09	104	2.00	3.57	
Ethylbenzene*	<0.050	0.050	09/01/2022	ND	2.04	102	2.00	3.02	
Total Xylenes*	<0.150	0.150	09/01/2022	ND	6.30	105	6.00	2.41	
Total BTEX	<0.300	0.300	09/01/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	10						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/31/2022	ND	400	100	400	3.92	
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	08/31/2022	ND	201	101	200	0.945	
DRO >C10-C28*	<10.0	10.0	08/31/2022	ND	217	108	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	08/31/2022	ND					
Surrogate: 1-Chlorooctane	92.1	% 45.3-16	51						
Surrogate: 1-Chlorooctadecane	95.9	% 46.3-17	28						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM HADLIE GREEN 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/30/2022	Sampling Date:	08/29/2022
Reported:	09/02/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA-EDDY CO. 32.34997,-103.44293		

Sample ID: SW07 @ 0-4' (H223976-02)

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	09/01/2022	ND	2.15	108	2.00	3.87	
Toluene*	<0.050	0.050	09/01/2022	ND	2.09	104	2.00	3.57	
Ethylbenzene*	<0.050	0.050	09/01/2022	ND	2.04	102	2.00	3.02	
Total Xylenes*	<0.150	0.150	09/01/2022	ND	6.30	105	6.00	2.41	
Total BTEX	<0.300	0.300	09/01/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/31/2022	ND	400	100	400	3.92	
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	09/01/2022	ND	211	106	200	2.06	
DRO >C10-C28*	<10.0	10.0	09/01/2022	ND	213	107	200	0.500	
EXT DRO >C28-C36	<10.0	10.0	09/01/2022	ND					
Surrogate: 1-Chlorooctane	86.0	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	90.1	% 46.3-17	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM HADLIE GREEN 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/30/2022	Sampling Date:	08/29/2022
Reported:	09/02/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA-EDDY CO. 32.34997,-103.44293		

Sample ID: SW08 @ 0-4' (H223976-03)

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	09/01/2022	ND	2.15	108	2.00	3.87	
Toluene*	<0.050	0.050	09/01/2022	ND	2.09	104	2.00	3.57	
Ethylbenzene*	<0.050	0.050	09/01/2022	ND	2.04	102	2.00	3.02	
Total Xylenes*	<0.150	0.150	09/01/2022	ND	6.30	105	6.00	2.41	
Total BTEX	<0.300	0.300	09/01/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/31/2022	ND	400	100	400	3.92	
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	09/01/2022	ND	211	106	200	2.06	
DRO >C10-C28*	<10.0	10.0	09/01/2022	ND	213	107	200	0.500	
EXT DRO >C28-C36	<10.0	10.0	09/01/2022	ND					
Surrogate: 1-Chlorooctane	87.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	87.9	% 46.3-17	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM HADLIE GREEN 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:

Received:	08/30/2022	Sampling Date:	08/29/2022
Reported:	09/02/2022	Sampling Type:	Soil
Project Name:	MADDOX FED B #1 // NAPP2211065721	Sampling Condition:	Cool & Intact
Project Number:	03C2012001	Sample Received By:	Shalyn Rodriguez
Project Location:	BTA-EDDY CO. 32.34997,-103.44293		

Sample ID: SW09 @ 0-4' (H223976-04)

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	09/01/2022	ND	2.15	108	2.00	3.87	
Toluene*	<0.050	0.050	09/01/2022	ND	2.09	104	2.00	3.57	
Ethylbenzene*	<0.050	0.050	09/01/2022	ND	2.04	102	2.00	3.02	
Total Xylenes*	<0.150	0.150	09/01/2022	ND	6.30	105	6.00	2.41	
Total BTEX	<0.300	0.300	09/01/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/31/2022	ND	400	100	400	3.92	
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	09/01/2022	ND	211	106	200	2.06	
DRO >C10-C28*	<10.0	10.0	09/01/2022	ND	213	107	200	0.500	
EXT DRO >C28-C36	<10.0	10.0	09/01/2022	ND					
Surrogate: 1-Chlorooctane	86.9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	86.5	% 46.3-17	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

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

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 9/20/2022 12:29:20 PM

Delivered By: (Circle One) Observed Temp. *C Sample Condition Sampler - UPS - Bus - Other: Corrected Temp. *C Cool Intact FURM-000 K 3.2 10007/21 Corrected Temp. *C No No No FURM-000 K 3.2 10007/21 † Cardinal cannot accept verbal chang	Ished By: Durant Contract of Solution Ished By: Time: Date:	ased ide in ide inte		SW09 @ 0-41 C 1		I FSZOA @ 5' CII X	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	FOR LAB USE ONLY MATRIX	redith Rober	on: 32.349	me: Maddox Fed I	0302012001	-# 433.557.0005 Ext	Address: JILL NATIONAL PARKS FTIGMWAY	Hadlie Green	Company Name: ENSOIWAN ILLC	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	Laboratories
d Temp. 'C Sample Condition CHECKED BY: Turnaround Time: Standard Bacteria (only) Sample Condition d Temp. 'C Cool Intact (Initials) Thermometer ID #113 Cool Intact Observed Temp. 'C d Temp. 'C Ho No Correction Factor "0.5"C" No No No Corrected Temp. 'C Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com No No Corrected Temp. 'C No	Verbal Result: Ves No Add'l Phone #: All Results are emailed. Please provide Email address: thmorrisScyCensolum.com hgreenSolum.com ReMARKS:	In contract or tort, shall be limited to the amount paid by the client for the writing and received by Cardinal within 30 days after completion of the applicable implicient, loss of use, or loss of profits incurred by client, its subdatives. such claim is based own any of the above stated reasons or otherwise.		cc/bc/8	X Qizina /2/0 1 1		SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : DATE : DATE IME BTEX TPH Chlorides	X PRESERV. SAMPLING	Fax #:	Phone #: 432.312. 2203	State: TX Zip: 79701	1 1	. INA (Attn: Dob Hall	Qth	BILL TO ANALYSIS REQUEST		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 7 of 7



APPENDIX D

NMOCD Notifications

Released to Imaging: 9/22/2022 11:39:16 AM

BOB HALL (ENVIRONMENTAL MANAGER FOR BTA OIL PRODUCERS, LLC) SIGN OUT HELP

Searches	Operator Data	Submissions	Administration
Searches	Operator Data	Submissions	Administration

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Release (NOR) Application

Submission Information	on		
Submission ID:	100395	Districts:	Hobbs
Operator:	[260297] BTA OIL PRODUCERS, LLC	Counties:	Lea
Description:	BTA OIL PRODUCERS, LLC [260297] Maddox Fed B #1 Well Site nAPP2211065721 {Discovery: 04/20/2022, Active, , Federal}		
Status:	APPROVED		
Status Date:	04/20/2022		
References (2):	30-025-27941, nAPP2211065721		

Forms

This application type does not have attachments.

Questions

Location of Release Source

Please answer all of the questions in this group.

Site Name	Maddox Fed B #1 Well Site
Date Release Discovered	04/20/2022
Surface Owner	Federal

Incident Details

Please answer all of the questions in this group.

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

 Crude Oil Released (bbls) Details
 Cause: Blow Out | Well | Crude Oil | Released: 67 BBL | Recovered: 60 BBL | Lost: 7 BBL]

 Produced Water Released (bbls) Details
 Not answered.

 Is the concentration of dissolved chloride in the produced water >10,000 mg/l
 Not answered.

Released to Imaging: 9/22/2022 11:39:16 AM

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Addition Addition Image: The problem of the problem o		BOB HALL (ENVIRONMENT	AL MANAGER FOR BTA	OIL PRODUCERS, LLC)	SIGN OUT	HELP
Schedule could be used with the source of the set o		Searches	Operator Data	Submissions	Administrat	ion
 a ha a gas only submission (i.e., only significant Mid values repared) b has a gas only submission (i.e., only significant Mid values repared) b has a major release a definite by (19.52.97, (i)) MMC b use on transition of the OCD, by when many the one of the OCD, by when many the OCD is one of the OCD, by when the OCD, by when the one of the OCD, by when the one of the OCD, by when the OCD is one of the OCD, by when the one of the OCD, by when the OCD is one of the OCD. The one of the manes have the one of the OCD is one of the OCD is one of the OCD. The one of the OCD is one of the OCD. I able of the OCD is one of the OCD is one of the OCD is one of the OCD	Other, Specify, Unknown, and/or Fire, or any negative lost amounts)			о I	ad and the caliche.	After sq
We this a range release as defined by 18.28.27,00,0000 Yes, major release. Piez, we may this exacutible considered a submission for a rotification of a major • 0. submission of a rotification of a major ''Yes, we manufacter rotice given to the OCD, by whom Kes, Major release. ''Yes, we manufacter rotice given to the OCD, by whom Kes, Major release. ''Yes, we manufacter rotice given to the OCD, by whom Kes, Major release. ''Yes, we manufacter rotice given to the OCD, by whom mass (thron, manufacter). Kes, Major release. ''Yes, we manufacter rotice given to the OCD. We major release. Kes, Major release. ''Yes, we manufacter rotice given to the OCD. We major release has the the the OCD. We major release. ''Yes, we major release has the OCD. We major release. Yes, Major release. ''Yes control for releases has the ope of the rotice rotice release release and the release has the ope of the rotice rotice rotice release. Tes in the operation of the sub-rotice rotice ro	Nature and Volume of Release (continued)					
Assume the work the considered a submitteend for a matter in the submitteend of a matter in the submittee data in the submittee data in the submitteend of a submitteend of a matter in the submitteend of a matter i	Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied vo	olumes this does not ap	pear to be a "gas only"	report.	
release Exc. Hall If VES, see inmediate notice given to the COC. by whom Exc. Hall VES, see inmediate notice given to the COC. by what means givin to mean the cock mean the co	Was this a major release as defined by 19.15.29.7(A) NMAC	Yes, major release.				
If YES, was immediate notion given to the OCD, when UK20/222 If YES, was immediate notion given to the OCD, when UK20/222 If YES, was immediate notion given to the OCD, when immediate notion given to the OCD, when immediate notion given to the OCD when immediate notion given to the OCD when immediate notion given to the OCD. When immediate notion given to the OCD when it the OCD whe		Unauthorized release of	of a volume, excluding ga	ses, of 25 barrels or more		
If YES, was immediate notice given to the OCD, by what means (throne, email, etc.) By fing the present NOR on Permitting Webale We expense metation of the 11 ST WMAC (000000000000000000000000000000000000	If YES, was immediate notice given to the OCD, by whom	Bob Hall				
P1 F32, was intradictation notion given to the OCD. by what means (phone, email, eds.) P3 fings the present NDR on Parmitting Vetebale We be readeresentation of the 13.327 MARC (005920221), versing and/or faming of natural gas (i.e., gas only) are to be adversed on the C-128 form Targe	If YES, was immediate notice given to the OCD, to whom	NMOCD via Permitting Websit	e			
where he helphonesentation of the 13.527 MARC (66252037), ventrag and/or flarge of values/g as (is, gen out)) are to be automated on the C-128 form: The acurs of the release has been stopped To be concerned to protect human health and the environment To be packs, or other containment devices All feel liquids area has been secured to protect human health and the environment To be packs, or other containment devices All feel liquids area has been secured to protect human health and the environment To be packs, or other containment devices All feel liquids area has been secured to protect human health and the environment To be packs, or other containment devices All feel liquids area has been secured to protect human health and the environment To be packs, or other containment devices All feel liquids area has been secured where a live of been removed and managed To be packs, or other containment devices All feel liquids area has been secured where a live of outprinted area (see 13.15.28 (1/4)/6(0) NMAC), alwase prepare are attach an instrume of actions to a lobore of C-474 adverses Actorowhedgen that I am authorized to submit notification of a releases on behalf of my operator. Actorowhedgen that area submitting this application, I will be creating a new incident file (sessigned to my operator) to frack the notification(s) and corrective actor(s) for a releases notification corrective actor), pursuant to NMAC 19.15.28. Actorowhedge that creating a new incident file will require my operator to file subsequent submission(s) of form 'C-141, Application for administrative approval of a release notification corrective action", pursuant to NMAC 19.15.28. Actorowhedge the fact that his posten action and premotors for the best of my knowledge and understand that pursuant to COD rules and regulations and perform corrective actions for releases not releases on telease of file my three approximation. Actor Bactor Has excellence of a C-141 report does not releases on telease or file lisolity should their operations have fi	If YES, was immediate notice given to the OCD, when	04/20/2022				
The source of the release has been stopped in the source of the release has been secured to protect human health and the environment. True pade, or other contained via the use of berms or dikes, absorbent in True pade, or other contained with the use of berms or dikes, absorbent in True pade, or other contained with the use of berms or dikes, absorbent in True pade, or other contained with the use of berms or dikes, absorbent in True pade, or other contained with the use of berms or dikes, absorbent in True pade, or other contained with the use of berms or dikes, absorbent in True pade, or other contained with the use of berms or dikes, absorbent in True pade, or other contained with the atom to be on undertaken, explain with the distrust distruction has begun, please prepare and attach a information needed for cleave evaluation in the follow-op C+141 been successfully completed of if the release occurred within a lined containeent area (see 15.15.28.11/4/(5)e) MMAC), please prepare and attach al information needed for cleave evaluation in the follow-op C+141 been successfully completed of if the release occurred within a lined containeent area (see 15.15.28.11/4/(5)e) MMAC), please prepare and attach al information needed for cleave evaluation in the follow-op C+141 been successfully completed of if the release occurred within a lined containeent area (see 15.15.28.11/4/(5)e) MMAC), please prepare and attach al information (see and for cleave evaluation in the follow-op C+141 been successfully completed of if the release occurred within a lined containeent area (see 15.15.28.11/4/(5)e) MMAC), please prepare and attach an environment. The follow of the f			-			
In the source of the release has been sequed to protect human health and the environment. The impacted area has been secured to protect human health and the environment. The source of the release has been secured to protect human health and the environment. The source of the release has been secured to protect human health and the environment. The source of the release has been secured to protect human health and the environment. The source of the release has been secured to protect human health and the environment. The source of the release has been removed and managed in the actions described of a bow have not been undertaken, explain why in the release of the release o	Initial Response					
The impacted area has been secured by protect human health and the environment. The Released materials have been contained via the use of borns or dikes, absorbent in The pads, or other containment devices All ree liquids and recoverable materials have been removed and managed in The appropriately in the actions described above have not been undertaken, explain withy interfaces or of a schess. If mandation has begin, please prepare and altech a narrative of actions to take in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech a matrixe of actions to take in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech all information mediate for coburse evaluation in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech all information mediate for coburse evaluation in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech all information mediate for coburse evaluation in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech all information mediate for coburse evaluation in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech all information mediate for coburse evaluation in the follow-up C-141 been successfully completed or the release occurred within a lined containment area (see T3 15.22 ft(h)(5)(s) MMAC), passe prepare and altech all information mediate for a coburse occurred with a coburse prepare and altech all information releases on the follow-up C-141 approximation mediat	The responsible party must undertake the following actions immediately unless they could create a safety	hazard that would result in injury.				
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regulations. Comments			ould their operations have	e failed to adequately inve	estigate and remed	liate
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No comments found for this submission.	Comments					
	No comments found for this submission.					
Conditions						

	BOB HAL	L (ENVIRONMENTAI	MANAGER FOR BTA OI	PRODUCERS, LLC)	SIGN OUT	HELP
		Searches	Operator Data	Submissions	Administra	tion
No reasons found for this submission.						
Fees						
No fees found for this submission.						

Go Back

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EMNRD Home OCD Main Page OCD Rules Help

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District III

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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

Page1108eof 125 QUESTIONS

Action 100395

QUESTIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	100395
	Action Type:
	[NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source		
Please answer all of the questions in this group.		
Site Name	Maddox Fed B #1 Well Site	
Date Release Discovered	04/20/2022	
Surface Owner	Federal	

Incident Details

Please answer all of the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	Νο
Has this release endangered or does it have a reasonable probability of endangering public health	Νο
Has this release substantially damaged or will it substantially damage property or the environment	Νο
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	Νο

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.		
Crude Oil Released (bbls) Details	Cause: Blow Out Well Crude Oil Released: 67 BBL Recovered: 60 BBL Lost: 7 BBL]	
Produced Water Released (bbls) Details	Not answered.	
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	Not answered.	
Condensate Released (bbls) Details	Not answered.	
Natural Gas Vented (Mcf) Details	Cause: Blow Out Well Natural Gas Vented Released: 5 Mcf Recovered: 0 Mcf Lost: 5 Mcf]	
Natural Gas Flared (Mcf) Details	Not answered.	
Other Released Details	Not answered.	
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	During P&A first circulation of well, the crew failed to close BOP correctly around the tubing. Fluid flowed out of the well from around the BOP opening and into the cellar and onto the surrounding concrete pad and the caliche. After squeegeeing oil for recovery, impacted caliche was scraped and stockpiled for disposal.	
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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

QUESTIONS (continued)

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	100395
	Action Type:
	[NOTIFY] Notification Of Release (NOR)

QUESTIONS

Nature and Volume of Release (continued)		
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.	
Was this a major release as defined by 19.15.29.7(A) NMAC	Yes, major release.	
Reasons why this would be considered a submission for a notification of a major release	 Unauthorized release of a volume, excluding gases, of 25 barrels or more 	
If YES, was immediate notice given to the OCD, by whom	Bob Hall	
If YES, was immediate notice given to the OCD, to whom	NMOCD via Permitting Website	
If YES, was immediate notice given to the OCD, when	04/20/2022	
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	By filing the present NOR on Permitting Website	
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.		

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	True	
The impacted area has been secured to protect human health and the environment	True	
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True	
All free liquids and recoverable materials have been removed and managed appropriately	True	
If all the actions described above have not been undertaken, explain why	Not answered.	
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 prepare and attach a narrative of actions to date in the		

follow-up C-141 submission. 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 prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

Action 100395

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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

ACKNOWLEDGMENTS

Operator:		DGRID:
BTA OIL PROD	DUCERS, LLC	260297
104 S Pecos	A	Action Number:
Midland, TX 79	9701	100395
	A	Action Type:
		[NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

$\overline{\checkmark}$	I acknowledge that I am authorized to submit notification of a releases on behalf of my operator.
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	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.
V	I acknowledge the fact that 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.
V	I acknowledge the fact that, 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.

Action 100395

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CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	100395
	Action Type:
	[NOTIFY] Notification Of Release (NOR)

CONDITIONS

Create By	d Condition	Condition Date
bob hall	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	4/20/2022

Action 100395

From: To: Cc:	<u>Tacoma Morrissey</u> <u>ocd.enviro@state.nm.us</u> <u>Bob Hall; Hadlie Green</u>	
Subject:	BTA - Sampling Notification- Maddox Fed B #1 Well Site / NAPP2211065721	
Date:	Thursday, July 28, 2022 1:55:00 PM	
Attachments:	image001.png image002.png image003.png image004.png	

All,

On behalf of BTA Oil Producers, we respectfully submit notification of sampling to be conducted at the subject site. Sampling will occur between August 1, 2022 and August 3, 2022.

• Maddox Fed B #1 Well Site / NAPP2211065721

Thank you,



Tacoma Morrissey Senior Geologist 337-257-8307 Ensolum, LLC in f

From:	Nobui, Jennifer, EMNRD	
То:	Hadlie Green	
Cc:	Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD	
Subject:	FW: [EXTERNAL] BTA - Sampling Notification - Week of August 29th - September 2nd	
Date:	Monday, August 29, 2022 10:33:28 AM	
Attachments:	image001.png image002.png image003.png image004.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.

Thanks, Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Monday, August 29, 2022 8:06 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Nobui, Jennifer, EMNRD
<Jennifer.Nobui@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>;
Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Velez, Nelson, EMNRD
<Nelson.Velez@state.nm.us>
Chief for the for the Net for the Net for the Net for the Apple App

Subject: Fw: [EXTERNAL] BTA - Sampling Notification - Week of August 29th - September 2nd

From: Hadlie Green <<u>hgreen@ensolum.com</u>>

Sent: Friday, August 26, 2022 1:34 PM

To: Enviro, OCD, EMNRD <<u>OCD.Enviro@state.nm.us</u>>

Cc: Tacoma Morrissey <<u>tmorrissey@ensolum.com</u>>; <u>bhall@btaoil.com</u> <<u>bhall@btaoil.com</u>> **Subject:** [EXTERNAL] BTA - Sampling Notification - Week of August 29th - September 2nd

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

All,

BTA anticipates collecting confirmation samples at the following locations the week of August 29, 2022.

- Maddox Fed B #1 Well Site / Incident Number NAPP2211065721
 - GPS: 32.34997, -103.44293
- Rojo B Poly Line Rupture / Incident Number nAPP2216138632
 - GPS: 32.12237, -103.56097

Thank you,



Hadlie Green Staff Geologist 432-557-8895 hgreen@ensolum.com Ensolum, LLC in f

From:	Nobui, Jennifer, EMNRD
То:	Tacoma Morrissey
Cc:	Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD
Subject:	FW: [EXTERNAL] BTA-Extension Request - Maddox Fed B #1 Well Site (Incident Number NAPP2211065721)
Date:	Monday, July 18, 2022 3:47:30 PM
Attachments:	image001.png
	image002.png
	image003.png
	image004.png

[**EXTERNAL EMAIL**]

Tacoma

Your request for an extension to **October 17th, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Thanks Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Monday, July 18, 2022 2:43 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Nobui, Jennifer, EMNRD
<Jennifer.Nobui@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>;
Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Velez, Nelson, EMNRD
<Nelson.Velez@state.nm.us>
Subject: Fw: [EXTERNAL] BTA-Extension Request - Maddox Fed B #1 Well Site (Incident Number

NAPP2211065721)

From: Tacoma Morrissey <<u>tmorrissey@ensolum.com</u>>
Sent: Monday, July 18, 2022 1:32 PM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@state.nm.us</u>>
Cc: Bob Hall <<u>BHall@btaoil.com</u>>; Hadlie Green <<u>hgreen@ensolum.com</u>>
Subject: [EXTERNAL] BTA-Extension Request - Maddox Fed B #1 Well Site (Incident Number
NAPP2211065721)

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

All,

BTA is requesting an extension for the current deadline of July 19, 2022 for submitting a remediation work plan or closure request required in 19.15.29.12.B.(1) NMAC at the Maddox Fed B #1 Well Site (Incident Number NAPP2211065721). The release occurred on April 20, 2022. Initial assessment of the release has been completed and operations at the facility delayed remediation activities.

Operations have been completed and remediation is ongoing. In order to complete the remediation activities and submit a remediation work plan or closure request, BTA is requesting a 90-day extension until October 17, 2022.

Thank you,





APPENDIX E

Final C-141

Released to Imaging: 9/22/2022 11:39:16 AM

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	nAPP2211065721
District RP	
Facility ID	
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) nAPP2211065721
Contact mailing address: 104 S. Pecos St., Midland, TX 79701	

Location of Release Source

Latitude: 32.05980 Longitude: -103.60435

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Maddox Federal B #1	Site Type: Well Site
Date Release Discovered: 4/20/2022	API# (<i>if applicable</i>) Nearest well: 30-025-27941

Unit Letter	Section	Township	Range	County
F	35	22S	34E	Lea

Surface Owner: State Federal Tribal Private (Name:)

Nature and Volume of Release

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

	Produced Water		
produced water >10,000 mg/l? Condensate Volume Released (bbls) Volume Released (Mcf) 5 MCF Volume Recovered (Mcf) 0 MCF		Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas Volume Released (Mcf) 5 MCF Volume Recovered (Mcf) 0 MCF			Yes No
	Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)	🔀 Natural Gas	Volume Released (Mcf) 5 MCF	Volume Recovered (Mcf) O MCF
	Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Fluid flowed out of the well from around the BOP opening and into the cellar and onto the surrounding concrete pad and the caliche. After squeegeeing oil for recovery, impacted caliche was scraped and stockpiled for disposal.

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rage	2

Oil Conservation Division

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Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?	
19.15.29.7(A) NMAC?	Yes – Release greater than 25 BBL.	
Yes 🗌 No		
	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	
Yes, by filing a Notice of Release (NOR) on the NMOCD Permitting website on 4/20/2022. The Incident ID listed above was assigned after the NOR was acknowledged by the NMOCD.		

Initial Response

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

 \boxtimes 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: /s/ Bob Hall

Date: 5/5/2022

email: bhall@btaoil.com Telephone: 432-682-3753

OCD Only

Received by: _Jocelyn Harimon _____ Date: _____Date: ______Date: _____Date: _

LocationMaddox Federal B #1Area on Caliche PadAPI #30-025-27941

Spill Date 4/20/2022

Spill Dimensions

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

ENTER -	Porosity	Factor
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	90	feet
	90	feet
	2	inches
-		-



99.999

0.001

60 BBL

BBL

0.99999

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

Volume Recovered in Truck / Containment ENTER - Recovered Oil

ENTER - Recovered Water

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

calculated	1
7	7 BBL
() BBL
7	7 BBL

Calculated Values Total Release of Oil

Total Release of Water Total Release

calculated
67 BBL
0 BBL
67 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

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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	104768
	Action Type:
	[C-141] Release Corrective Action (C-141)
	-

CONDITIONS

Created By		Condition Date
jharimon	None	5/6/2022

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Application ID

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100 (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
- \square 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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maging: 9/22/2022 11:39:16 AM	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 Date:09/19/2022 email: _bhall@btaoil.com Telephone:432-682-3753				
	OCD Only Received by: Jocelyn Harim	non	Date:09-	20-2022	

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Form C-141	State of New Mexico			Incident ID	nAPP2211065721	
Page 6	Oil Conservation Division	on		District RP		
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				Application ID		
			12			
Form C-141 Page 6	C	losure			nAPP2211065721	
9 9	0.1					
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 Attach	nent Checklist: Each of the following it	tems must be inc	luded in	the closure report.		
\triangleleft A scaled site and san	ppling diagram as described in 19.15.29.1	1 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	C District office n	nust be n	otified 2 days prior	to final sampling)	
Description of remed	liation activities					
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name:Bob Hall Title:Environmental Manager Signature:Bob Hall Date:09/19/2022						
email:bhall@btaoil.com Telephone:432-682-3753						
OCD Only						
Received by: Jocely	n Harimon	Date:	09-20	-2022		
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:	Je <i>nnifer Nobui</i> er Nobui	Date:	09/22	/2022		
Printed Name: Jennife	er Nobui	Title:	Envir	onmental Specia	list A	

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Operator:		OGRID:
BTA O	OIL PRODUCERS, LLC	260297
104 S	S Pecos	Action Number:
Midlan	nd, TX 79701	144926
		Action Type:
		[C-141] Release Corrective Action (C-141)

CONDITIONS

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

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Action 144926

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