ENSOLUM

December 16, 2024

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

Re: Closure Request Poker Lake Unit 22 DTD Pad D Incident Number NAPP2411631990 Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc (XTO), has prepared this *Closure Request* to document excavation and soil sampling activities performed at the Poker Lake Unit 22 DTD Pad D (Site). The purpose of the excavation and soil sampling activities, conducted in accordance with an approved *Remediation Work Plan (Work Plan),* was to address waste-containing soil resulting from the release of produced water at the Site. XTO is submitting this *Closure Request,* describing excavation activities that have occurred and requesting no further action for the remediation of Incident Number NAPP2411631990.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 22, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.20997°, -103.86489°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On April 9, 2024, a pump failure resulted in the loss of approximately 18 barrels (bbls) of produced water at the Site. No fluid was recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via a Notification of Release (NOR) and an Initial C-141 Application (C-141) on April 25, 2024. The release was assigned Incident Number NAPP2411631990.

Ensolum conducted Site assessment and delineation activities and presented the results in a *Work Plan*. The *Work Plan* was submitted on September 10, 2024, and approved by the NMOCD on September 17, 2024. The *Work Plan* proposed excavation of waste-containing soil identified during delineation activities. The approved *Work Plan* proposed the following:

- Excavation of 18,800 square feet on pad to a depth of 1-foot bgs;
- An estimated 700 cubic yards of soil would be excavated and properly disposed of at a New Mexico approved landfill disposal facility; and
- Soil sampling would be completed following the approved sampling variance of every 400 square feet along the floor and 200 square feet along the sidewalls of the excavation.

XTO Energy Inc. Closure Request Poker Lake Unit 22 DTD Pad D

SITE CHARACTERIZATION AND CLOSURE CRITERIA

It is estimated that depth to groundwater is greater than 100 bgs. To confirm depth to groundwater at the Site XTO proposed, in the *Work Plan,* to advance a soil boring to a depth of 105 feet bgs. However, based on confirmation soil sample laboratory analytical results, the proposed soil boring was not needed nor has it been drilled prior to the date of this *Closure Request.* XTO is submitting this *Closure Request* with the following strictest NMOCD Table I Closure Criteria (Closure Criteria) applied:

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

EXCAVATION SOIL SAMPLING ACTIVITIES

Ensolum personnel returned to the Site between September 24 and October 24, 2024, to oversee excavation activities. Based on the updated Closure Criteria, impacted soil was identified from delineation soil sample laboratory analytical results provided in the approved *Work Plan*. Excavation activities were performed by use of heavy equipment. To direct excavation activities, the soil was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach[®] chloride QuanTab[®] test strips. Once field screening indicated impacted soil was adequately removed, 5-point composite soil samples were collected every 400 square feet from the floor and 200 square feet from the sidewall of the excavation extent, in accordance with the approved *Work Plan*. 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. Confirmation soil samples FS01 through FS65 were collected from the floor of the excavation at depths ranging from 1-foot to 4 feet bgs. Confirmation soil samples SW01 through SW10 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The confirmation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 1. Photographic documentation of the excavation activities is provided in Appendix A.

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

The final excavation extent measured approximately 25,728 square feet. A total of approximately 1,900 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and disposed of at the OWL Disposal Facility in Jal, New Mexico. The excavation was backfilled with material purchased locally and recontoured to match pre-existing Site conditions.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all confirmation soil samples collected indicated all COCs were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix B.



Page 2

XTO Energy Inc. Closure Request Poker Lake Unit 22 DTD Pad D

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site in accordance with the approved *Work Plan* to address the April 9, 2024 release of produced water. Delineation soil sample laboratory analytical results presented in the *Work Plan* indicated chloride impacted soil existed in soil samples SS01 through SS03, and PH05 collected at 0.5 feet bgs. The final excavation extent provided in this *Closure Request* indicates these soil samples were removed. Laboratory analytical results for excavation soil samples presented in this *Closure Request* and collected from the final excavation extent on the facility pad (FS01 through FS65, and SW01 through SW10) indicated all COC concentrations were compliant with the Closure Criteria. This includes all confirmation soil samples collected in the pasture area (FS01 through FS24), presented in the *Work Plan*. The approved September 10, 2024, *Work Plan* is included in Appendix C. Based on laboratory analytical results, no further remediation is required at this time. The excavation has been backfilled with material purchased locally and recontoured to match pre-existing Site conditions.

Excavation of soil has mitigated impacts at this Site. Depth to groundwater is estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2411631990.

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

Sincerely, Ensolum, LLC

Trace Hithard

Tracy Hillard Project Engineer

Mouissey

Tacoma Morrissey Associate Principal

cc: Colton Brown, XTO Kaylan Dirkx, XTO Bureau of Land Management

Appendices:

- Figure 1 Excavation Confirmation Soil Sample Locations
- Table 1Soil Sample Analytical Results
- Appendix A Photographic Log
- Appendix B Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix C September 10, 2024, Remediation Work Plan





FIGURES

Received by OCD: 12/17/2024 7:20:14 AM





TABLES

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E N S O L U M

				POKER L	TABLE 1 LE ANALYTIC AKE UNIT 22 I (TO Energy, Ir County, New	DTD PAD D וכ				
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (I	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
				Excavation	Confirmation S	Soil Samples			1	
FS01	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS02	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
FS03	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
FS04	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
FS05	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS06	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
FS07	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS08	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS09	09/24/2024	1	<0.050	<0.300	<10.0	18.5	<10.0	<10.0	<10.0	320
FS10	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS11	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS12	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
FS13	09/24/2024	1	<0.050	<0.300	<10.0	28.8	<10.0	28.8	28.8	160
FS14	09/24/2024	1	<0.050	<0.300	<10.0	37.0	<10.0	37.0	37.0	288
FS15	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS16	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS17	09/24/2024	1	<0.050	<0.300	<10.0	78.4	<10.0	78.4	78.4	320
FS18	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS19	09/24/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS20	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS21	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
FS22	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS23	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
FS24	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
FS25	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
FS26	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
FS27	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	416
FS28	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	464
FS29	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS30	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
FS31	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320

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E N S O L U M

	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS POKER LAKE UNIT 22 DTD PAD D XTO Energy, Inc Eddy County, New Mexico													
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)				
NMOCD Table I C	losure Criteria (I	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600				
FS32	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256				
FS33	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208				
FS34	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256				
FS35	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192				
FS36	10/04/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0				
FS37	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160				
FS38	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0				
FS39	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0				
FS40	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320				
FS41	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368				
FS42	10/07/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0				
FS43	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80 0				
FS44	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240				
FS45	09/25/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	400				
FS46	10/08/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112				
FS47	10/08/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0				
FS48	10/08/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0				
FS49	10/08/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112				
FS50	10/08/2024	2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	416				
FS51	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0				
FS52	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0				
FS53	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112				
FS54	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0				
FS55	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0				
FS56	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0				
FS57	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0				
FS58	10/24/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0				
FS59	10/10/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	384				
FS60	10/10/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288				
FS61	10/10/2024	1	<0.050	<0.300	<10.0	53.0	<10.0	53.0	53.0	368				
FS62	10/10/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	384				
FS63	10/10/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	432				

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				POKER L	TABLE 1 LE ANALYTIC, AKE UNIT 22 I (TO Energy, Ir County, New	DTD PAD D				
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (l	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
FS64	10/10/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
FS65	10/10/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
SW01	10/08/2024	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
SW02	10/08/2024	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
SW03	10/07/2024	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	416
SW04	09/25/2024	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
SW05	10/10/2024	0-1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
SW06	10/24/2024	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW07	10/24/2024	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SW08	10/24/2024	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW09	10/24/2024	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
SW10	10/24/2024	0-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240

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 I Closure Criteria or reclamation requirement where applicable.

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon NMAC: New Mexico Administrative Code Grey text indicates soil sample removed during excavation activities



APPENDIX A

Photographic Log





APPENDIX B

Laboratory Analytical Reports & Chain of Custody Documentation



September 30, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 09/26/24 13:48.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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



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Analytical Results For:

		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker

Sample ID: FS 01 1' (H245848-01)

Project Location:

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/27/2024	ND	400	100	400	0.00	
TPH 8015M	mg,	'kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	103	48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.2	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 02 1' (H245848-02)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	82.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	73.6	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 03 1' (H245848-03)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	104	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.6	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 04 1' (H245848-04)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	102	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.5	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 05 1' (H245848-05)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	104	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.6	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 06 1' (H245848-06)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	81.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	70.6	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 07 1' (H245848-07)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	220	110	200	0.850	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	231	116	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	124	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	112 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 08 1' (H245848-08)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	118 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	121	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 09 1' (H245848-09)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	110	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	18.5	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	100	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.6	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 10 1' (H245848-10)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	114 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	116 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 11 1' (H245848-11)

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	09/27/2024	ND	2.12	106	2.00	0.672	
Toluene*	<0.050	0.050	09/27/2024	ND	2.31	116	2.00	5.68	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.47	123	2.00	6.60	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	7.36	123	6.00	5.66	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	120	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	123	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 12 1' (H245848-12)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	105	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	106	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 13 1' (H245848-13)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	28.8	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	106	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 14 1' (H245848-14)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	37.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	110 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	112 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 15 1' (H245848-15)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	100	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	101	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 16 1' (H245848-16)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	113 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	115 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 17 1' (H245848-17)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	09/27/2024	ND	400	100	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	78.4	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	95.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.5	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 18 1' (H245848-18)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	114 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	114 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/24/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 19 1' (H245848-19)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	80.0	16.0	09/30/2024	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	Qualifie
GRO C6-C10*	<10.0	10.0	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	115 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	119 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-05	The surrogate recovery is outside of lab established statistical control limits but still within method limits. Data is not adversely affected.
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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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

042

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

(575) 393-23 Company Name: Ensolum, LLC	26	FAX (575) 393-2476	476	BILLTO
Project Manager:	11	and		P.O. #:
Address: 3122 N	s Hwy			company: XTO EY
City: Carlsbad		State: NM	Zip: 88220	Attn: Ann Rut
Phone #: ST	5-937-3906	Fax #:		Address: Hoy ElGnery
Project #: 030	-	Project Owner:	а	city: Carlsbad
Project Name:	LV 22 17	DIPAT		State: NM Zip: 882
Project Location:)			Phone #: 575-00
Sampler Name:	Anorala	Bradis		Fax #:
FOR LAB USE ONLY			MATRIX	PRESERV. SAMPLING
Lab I.D.	Sample I.D.	Depth (feet)		UDGE HER : ID/BASE: E / COOL HER :
H242848	TX I		≯ # C GR WA SO OIL	
71 21	HISI KUL			
15	FSIL			
81	1210			
11	1 21 1	6		
PLEASE NOTE: Liability an analyses. All claims includir service. In no event shall Ci	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim analyses. All claims including those for negligence and any other cause whatsoever shall be deemed service. In no event shall Cardinal be liable for incidental or consequential damages, including without service.	ient's exclusive remedy for r cause whatsoever shall be equental damages, includir	any claim arising whether based in contr deemed waived unless made in writing g without fimitation, business interruption of the based on the second se	PLEASE NOTE: Liability and Damages. Candhai's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Candhai within 30 days after completion of the applicab survice. In no event shall Candhai be liable for incidental or consequential damages, including which of furthation, business interruptions, loss of use, or loss of profile incurred by Client's subsidiaries.
Relinquished By:	g out of or related to the performance	Date:	Received By:	
Relinquished By	We Brown	Time: 43	Received By:	Dali
ivenindrieuer of		RhSilling	Annata	(MA)
Delivered By: (Circle One) Sampler - UPS - Bus - Otl	her:	Observed Temp. °C Corrected Temp. °C	2,5 Sample Cor 2,9 Cool Inta	ndition CHECKED 8Y: Turnaround Tim cr (Initials) Themometer ID Thes The Contraction Factor
FORM-000	K 3,2 10/0/121	+ Cardinal	cannot accept verbal cl	Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com
			cannot accept verbal ci	nanges, Please email cha

OF 2



September 30, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 09/26/24 13:48.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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


XTO

Analytical Results For:

		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker

Sample ID: FS 21 1' (H245849-01)

Project Location:

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.6	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	240	16.0	09/30/2024	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	Qualifie
GRO C6-C10*	<10.0	10.0	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	109 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	109 9	% 49.1-14	0						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 23 1' (H245849-02)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	107	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	110 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 24 1' (H245849-03)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	107	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 25 1' (H245849-04)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	97.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.4	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 26 1' (H245849-05)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 \$	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	104 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 27 1' (H245849-06)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	104	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	111 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 28 1' (H245849-07)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	99.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	98.7	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 29 1' (H245849-08)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/30/2024	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	09/27/2024	ND	209	104	200	1.34	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	217	109	200	2.96	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	108	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 30 1' (H245849-09)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	85.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	78.5	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 31 1' (H245849-10)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	95.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.4	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 32 1' (H245849-11)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	87.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	80.1	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 33 1' (H245849-12)

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	09/27/2024	ND	2.08	104	2.00	5.20	
Toluene*	<0.050	0.050	09/27/2024	ND	2.02	101	2.00	4.43	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.07	104	2.00	4.45	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.18	103	6.00	4.54	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	91.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.4	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 34 1' (H245849-13)

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	09/27/2024	ND	2.14	107	2.00	10.1	
Toluene*	<0.050	0.050	09/27/2024	ND	2.21	110	2.00	9.46	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.21	111	2.00	9.51	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.87	115	6.00	8.82	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	84.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	77.4	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 35 1' (H245849-14)

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	09/27/2024	ND	2.14	107	2.00	10.1	
Toluene*	<0.050	0.050	09/27/2024	ND	2.21	110	2.00	9.46	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.21	111	2.00	9.51	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.87	115	6.00	8.82	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	09/30/2024	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	Qualifie
GRO C6-C10*	<10.0	10.0	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	97.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.4	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: FS 37 1' (H245849-15)

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	09/27/2024	ND	2.14	107	2.00	10.1	
Toluene*	<0.050	0.050	09/27/2024	ND	2.21	110	2.00	9.46	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.21	111	2.00	9.51	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.87	115	6.00	8.82	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	85.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	78.7	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 41 1' (H245849-16)

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	09/27/2024	ND	2.14	107	2.00	10.1	
Toluene*	<0.050	0.050	09/27/2024	ND	2.21	110	2.00	9.46	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.21	111	2.00	9.51	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.87	115	6.00	8.82	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	93.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	87.2	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	ХТО			

Sample ID: FS 45 1' (H245849-17)

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	09/27/2024	ND	2.14	107	2.00	10.1	
Toluene*	<0.050	0.050	09/27/2024	ND	2.21	110	2.00	9.46	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.21	111	2.00	9.51	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.87	115	6.00	8.82	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	92.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	09/26/2024		Sampling Date:	09/25/2024
Reported:	09/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO			

Sample ID: SW 04 0-1' (H245849-18)

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	09/27/2024	ND	2.14	107	2.00	10.1	
Toluene*	<0.050	0.050	09/27/2024	ND	2.21	110	2.00	9.46	
Ethylbenzene*	<0.050	0.050	09/27/2024	ND	2.21	111	2.00	9.51	
Total Xylenes*	<0.150	0.150	09/27/2024	ND	6.87	115	6.00	8.82	
Total BTEX	<0.300	0.300	09/27/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	09/30/2024	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	09/27/2024	ND	224	112	200	2.02	
DRO >C10-C28*	<10.0	10.0	09/27/2024	ND	218	109	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	09/27/2024	ND					
Surrogate: 1-Chlorooctane	88.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	80.2	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Released to Imaging: 12/23/2024 2:07:52 PM

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and Damages. Cardinal's fing those for negligence Cardinal be liable for inod Cardinal be liable for inod sing out of or related to th sing out of or related to th	EASE NOTE: Liability and Damages. Cardmat's alyses. All claims including those for noighproach alyses. All claims including those for noighpro- nvice. In no event shall Cardinal be liable for inci-	10 (53		2 XX 80	7 FSI	6 752	& PSU	153 A	sist of	/ PSU	1245849	Lab I.D. Sample I.D.	FOR LAB USE ONLY	Sampler Name: Sin not	Project Location:030/S	Project Name: VW 7	Project #: WW 720	Phone #: STS-737	City: Carlsbad	Address: 3122 National Parks Hwy	Project Manager:	Company Name: Ensolum, LLC	101 East Marianc (575) 393-2326
Time	Date:	liability and client's exclusive remedy for any cla and any other cause whatsoever shall be deem Jental or consequential damages, including with	51	à	6	4.	< '			11		I.D. Depth (feet)		le Panoolus	28346	1 DTD &	Project Owner	3106 Fax #:	State: NM	Hwy	y Hilland	C	(575) 393-2326 FAX (575) 393-2476
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MAN	ciainti is pased upon any or and above asses	ort, shall be limited to the amou ceived by Cardinal within 30 day of use, or loss of profits incurre and when any of the above eta	0-	-							SLUD OTHE ACID/ ICE / 0 OTHE DATE	R : BASE: COOL	PRESERV.	Fax #:	Phone #: SPS	State: W Zip: 8	city: Cartsba	Address: 3,04 E	Attn: Any R	company: XTU to	P.O. #:	BILLIO	
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Page 56 of 216

Page 21 of 22

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Project Manager:

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ANALYSIS

REQUEST

Company Name: Ensolum, LLC

(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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Add'l Phone #:

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Bacteria (only) Sample Condition

Observed Temp. °C Corrected Temp. °C

Cool Intact

Page 22 of 22

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Page 57 of 216



October 10, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 10/08/24 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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
	TRACY HILLARD
	3122 NATIONAL PARKS HWY
	CARLSBAD NM, 88220
	Fax To:
10/08/2024	Sampling Date:

Received:	10/08/2024	Sampling Date:	10/07/2024
Reported:	10/10/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Shalyn Rodriguez
Project Location:	ХТО		

Sample ID: FS 22 2 (H246103-01)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.16	108	2.00	1.67	
Toluene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	1.43	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.19	110	2.00	1.64	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.52	109	6.00	1.38	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/09/2024	ND	432	108	400	7.14	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	113 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	106	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/08/2024		Sampling Date:	10/07/2024
Reported:	10/10/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO			

Sample ID: SW 03 0-1 (H246103-02)

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	10/09/2024	ND	2.16	108	2.00	1.67	
Toluene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	1.43	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.19	110	2.00	1.64	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.52	109	6.00	1.38	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	10/09/2024	ND	432	108	400	7.14	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	114 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	
Received: 10/08/2024 Sampling Date: 10/07/202	4
Reported: 10/10/2024 Sampling Type: Soil	
Project Name: PLU 22 DTD PAD D Sampling Condition: Cool & Int	act
Project Number:03C1558346Sample Received By:Shalyn RoProject Location:XTO	driguez

Sample ID: FS 20 2 (H246103-03)

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	10/09/2024	ND	2.16	108	2.00	1.67	
Toluene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	1.43	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.19	110	2.00	1.64	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.52	109	6.00	1.38	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	0 106 % 71.5-1.		34						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/09/2024	ND	432	108	400	7.14	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	120	48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	10/08/2024		Sampling Date:	10/07/2024
Reported:	10/10/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO			

Sample ID: FS 36 2 (H246103-04)

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	10/09/2024	ND	2.16	108	2.00	1.67	
Toluene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	1.43	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.19	110	2.00	1.64	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.52	109	6.00	1.38	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/09/2024	ND	416	104	400	3.77	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	104	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.3	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	10/08/2024		Sampling Date:	10/07/2024
Reported:	10/10/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number: Project Location:	03C1558346 XTO		Sample Received By:	Shalyn Rodriguez

Sample ID: FS 38 2 (H246103-05)

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	10/09/2024	ND	2.16	108	2.00	1.67	
Toluene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	1.43	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.19	110	2.00	1.64	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.52	109	6.00	1.38	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/09/2024	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	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	111 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	102	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:		
Received:	10/08/2024		Sampling Date:	10/07/2024
Reported:	10/10/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number: Project Location:	03C1558346 XTO		Sample Received By:	Shalyn Rodriguez

Sample ID: FS 39 2 (H246103-06)

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	10/09/2024	ND	2.16	108	2.00	1.67	
Toluene*	<0.050	0.050	10/09/2024	ND	2.18	109	2.00	1.43	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.19	110	2.00	1.64	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.52	109	6.00	1.38	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/09/2024	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	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	113 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	102	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/08/2024		Sampling Date:	10/07/2024
Reported:	10/10/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO			

Sample ID: FS 42 2 (H246103-07)

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	10/09/2024	ND	2.23	111	2.00	1.39	
Toluene*	<0.050	0.050	10/09/2024	ND	2.31	116	2.00	4.72	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.40	120	2.00	6.50	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.23	121	6.00	7.81	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/09/2024	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	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	107	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.5	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	(
Received:	10/08/2024		Sampling Date:	10/07/2024
Reported:	10/10/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	ХТО			

Sample ID: FS 40 2 (H246103-08)

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	10/09/2024	ND	2.23	111	2.00	1.39	
Toluene*	<0.050	0.050	10/09/2024	ND	2.31	116	2.00	4.72	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.40	120	2.00	6.50	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	7.23	121	6.00	7.81	
Total BTEX	<0.300	0.300	10/09/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	10/09/2024	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	10/09/2024	ND	206	103	200	0.329	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	199	99.3	200	0.606	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					
Surrogate: 1-Chlorooctane	98.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.0	% 49.1-14							

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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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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

ARDINAL

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

FSHO FS S FS39 Sample I.D. FS42 FS36 FS 20 203 for incider 22 38 and any Time: 410 10-8-24 Date: Time: 0-N (feet) N

Delivered By: (Circle One) including those for neglige iges, including without lim shall be deemed Received By: Received By: ÷ Spodkic 1 Studies 2 made in writing and rec 4 inter ns, loss of use, or loss of profits or fort, shall be ed by Cardinal within 30 days after i < ¢ ed by client, its subsidiaries All Results are emailed. Please provide Email address: REMARKS: Cost Center: 2242511001 Verbal Result: by the client for the 1440 letion of the applicable Ł Yes 4 ¢ O No Add'l Phone #: Incident ID: nAPP2411631990

Relinquished By: Relinquished By: PLEASE NOTE: Liability and Dam analyses. All claims including thos ervice. In no event shall Cardinal be Hogy Hogy Barrier Sampler Name: Project Location: Project Name: Phone #: City: Address: 3122 National Parks Hwy Project Manager: Company Name: Lab I.D. Project #: FOR LAB USE ONLY NN 00 6 1 W2N Q Carlsbad 337 257-8307 03C1558346 PLU 22 DTD Pad D Ensolum, LLC VCINGO Tracy Hillard Sample Depth Project Owner: XTO Fax #: 0 State: NM TIMS 0 (G)RAB OR (C)OMP Zip: 88220 + CONTAINERS GROUNDWATER WASTEWATER MATRIX SOIL OIL SLUDGE OTHER Fax #: State: NM Zip: 88220 city: Carlsbad P.O. #: Phone #: Attn: Amy Ruth Company: XTO Energy Inc. Address: 3104 E. ACID/BASE PRESERV ICE / COOL OTHER BILL TO h2-2-0 DATE SAMPLING Green St bbelill@ensolum.com, TMorrissey@ensolum.com, THillard@ensolum.com 1435 1235 1330 1210 1215 1135 1205 TIME > BTEX × TPH CHLORIDE 7 ANALYSIS REQUEST

Sampler - UPS - Bus - Other:

Observed Temp

10.61

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Cool Intact

Sample Condition

CHECKED BY:

(Injetals)

#140 -0.02

Standard Z-day

RC

ool Intact

Bacteria (only) Sample Condition

Observed Temp. Corrected Temp. °C

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Ves Yes

ction Factor 0.5 C

ter ID #113

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



October 16, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 10/10/24 14:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: Project Number: Project Manager: Fax To:		Reported: 16-Oct-24 11:37
----------------------------------------------------------	------------------------------------------------------------	--	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW 02 0-1	H246163-01	Soil	08-Oct-24 09:45	10-Oct-24 14:25
SW 01 0-1	H246163-02	Soil	08-Oct-24 10:15	10-Oct-24 14:25
FS 50 2	H246163-03	Soil	08-Oct-24 12:00	10-Oct-24 14:25
FS 49 2	H246163-04	Soil	08-Oct-24 12:05	10-Oct-24 14:25
FS 48 2	H246163-05	Soil	08-Oct-24 12:10	10-Oct-24 14:25
FS 47 2	H246163-06	Soil	08-Oct-24 12:15	10-Oct-24 14:25
FS 46 2	H246163-07	Soil	08-Oct-24 12:20	10-Oct-24 14:25

10/16/24 - The BTEX was originally batched as a water instead of a soil. This is the revised report with the corrected units and will replace the one sent on 10/11/24.

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana	ber: 03C					Reported: 16-Oct-24 11:3	37
				7 02 0-1 163-01 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					
Inorganic Compounds										
Chloride	368		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Surrogate: 4-Bromofluorobenzene (PID)		104 %	77.5-125		4101021	JH	10-Oct-24	8021B		
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctane			118 %	48.2-134		4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctadecane			118 %	49.1	-148	4101023	MS	10-Oct-24	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220							Reported: 16-Oct-24 11:3	37			
SW 01 0-1 H246163-02 (Soil)											
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
Inorganic Compounds											
Chloride	336		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-Cl-B		
Volatile Organic Compounds by	EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	JH	10-Oct-24	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	JH	10-Oct-24	8021B		
Surrogate: 4-Bromofluorobenzene (PID)		103 %	103 % 77.5-125		4101021	JH	10-Oct-24	8021B			
Petroleum Hydrocarbons by GC	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B		
Surrogate: 1-Chlorooctane			107 %	48.2	-134	4101023	MS	10-Oct-24	8015B		
Surrogate: 1-Chlorooctadecane			107 %	49.1-	-148	4101023	MS	10-Oct-24	8015B		

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Celey D. Keene, Lab Director/Quality Manager


ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana	ber: 03C					Reported: 16-Oct-24 11:3	37
				S 50 2 163-03 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	416		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	77.5	-125	4101021	JH	10-Oct-24	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctane			111 %	48.2	-134	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctadecane			116 %	49.1	-148	4101023	MS	10-Oct-24	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana	ber: 03C					Reported: 16-Oct-24 11:3	37
				'S 49 2 163-04 (So	oil)					
)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	112		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	ЛН	10-Oct-24	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	ЛН	10-Oct-24	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	ЛН	10-Oct-24	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			104 %	77.5	-125	4101021	ЈН	10-Oct-24	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctane			70.7 %	48.2	-134	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctadecane			70.7 %	49.1	-148	4101023	MS	10-Oct-24	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana	ber: 03C				1	Reported: 16-Oct-24 11:3	37
				S 48 2 163-05 (So	,il)					
			11240.	103-03 (30)II)					1
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	77.5	-125	4101021	JH	10-Oct-24	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	11-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	11-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	11-Oct-24	8015B	
Surrogate: 1-Chlorooctane			125 %	48.2	-134	4101023	MS	11-Oct-24	8015B	_
Surrogate: 1-Chlorooctadecane			115 %	49.1	-148	4101023	MS	11-Oct-24	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project Num Project Mana	ber: 03C					Reported: 16-Oct-24 11:	37
				S 47 2 163-06 (So	oil)					
			11210		,,,,,					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	96.0		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	77.5	-125	4101021	JH	10-Oct-24	8021B	
Petroleum Hydrocarbons by GC	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctane			112 %	48.2	-134	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctadecane			113 %	49.1	-148	4101023	MS	10-Oct-24	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	(Project Num Project Mana	ber: 03C					Reported: 16-Oct-24 11:3	37
				S 46 2 163-07 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds	110		16.0		4	4101116	AC	11-Oct-24	4500-Cl-B	
Chloride	112		16.0	mg/kg	4	4101116	AC	11-Oct-24	4500-CI-B	
Volatile Organic Compounds b	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	4101021	JH	10-Oct-24	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	77.5	-125	4101021	ЛН	10-Oct-24	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctane			131 %	48.2	-134	4101023	MS	10-Oct-24	8015B	
Surrogate: 1-Chlorooctadecane			133 %	49.1	-148	4101023	MS	10-Oct-24	8015B	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: Project Number: Project Manager: Fax To:		Reported: 16-Oct-24 11:37
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Inorganic Compounds - Quality Control

		Cardir	1al Lab	oratories						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4101116 - 1:4 DI Water										
Blank (4101116-BLK1)				Prepared &	analyzed:	11-Oct-24				
Chloride	ND	16.0	mg/kg							
LCS (4101116-BS1)				Prepared &	k Analyzed:	11-Oct-24				
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (4101116-BSD1)				Prepared &	k Analyzed:	11-Oct-24				
Chloride	448	16.0	mg/kg	400		112	80-120	0.00	20	

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Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: Project Number: Project Manager: Fax To:		Reported: 16-Oct-24 11:37
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal	Laboratories
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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4101021 - Volatiles										
Blank (4101021-BLK1)				Prepared: 1	10-Oct-24 A	nalyzed: 1	1-Oct-24			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0522		mg/kg	0.0500		104	77.5-125			
LCS (4101021-BS1)				Prepared &	Analyzed:	10-Oct-24				
Benzene	2.19	0.050	mg/kg	2.00		110	80.8-112			
Toluene	2.12	0.050	mg/kg	2.00		106	78.7-114			
Ethylbenzene	2.13	0.050	mg/kg	2.00		107	70.9-120			
m,p-Xylene	4.28	0.100	mg/kg	4.00		107	76.9-119			
o-Xylene	2.07	0.050	mg/kg	2.00		104	71.7-120			
Total Xylenes	6.35	0.150	mg/kg	6.00		106	75.6-119			
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	77.5-125			
LCS Dup (4101021-BSD1)				Prepared &	Analyzed:	10-Oct-24				
Benzene	2.14	0.050	mg/kg	2.00		107	80.8-112	2.46	8.26	
Toluene	2.07	0.050	mg/kg	2.00		103	78.7-114	2.33	9.03	
Ethylbenzene	2.08	0.050	mg/kg	2.00		104	70.9-120	2.46	11.9	
m,p-Xylene	4.17	0.100	mg/kg	4.00		104	76.9-119	2.56	11	
o-Xylene	2.05	0.050	mg/kg	2.00		102	71.7-120	1.12	15	
Total Xylenes	6.22	0.150	mg/kg	6.00		104	75.6-119	2.09	12.2	
Surrogate: 4-Bromofluorobenzene (PID)	0.0524		mg/kg	0.0500		105	77.5-125			

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: Project Number: Project Manager: Fax To:	TRACY HILLARD	Reported: 16-Oct-24 11:37
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Petroleum Hydrocarbons by GC FID - Quality Control

Calumai Laboratories	Cardinal	Laboratories
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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4101023 - General Prep - Organics										
Blank (4101023-BLK1)				Prepared &	analyzed:	10-Oct-24				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	58.7		mg/kg	50.0		117	48.2-134			
Surrogate: 1-Chlorooctadecane	58.2		mg/kg	50.0		116	49.1-148			
LCS (4101023-BS1)				Prepared &	z Analyzed:	10-Oct-24				
GRO C6-C10	217	10.0	mg/kg	200		109	66.4-123			
DRO >C10-C28	220	10.0	mg/kg	200		110	66.5-118			
Total TPH C6-C28	437	10.0	mg/kg	400		109	77.6-123			
Surrogate: 1-Chlorooctane	61.5		mg/kg	50.0		123	48.2-134			
Surrogate: 1-Chlorooctadecane	59.7		mg/kg	50.0		119	49.1-148			
LCS Dup (4101023-BSD1)				Prepared &	k Analyzed:	10-Oct-24				
GRO C6-C10	216	10.0	mg/kg	200		108	66.4-123	0.705	17.7	
DRO >C10-C28	220	10.0	mg/kg	200		110	66.5-118	0.0322	21	
Total TPH C6-C28	436	10.0	mg/kg	400		109	77.6-123	0.333	18.5	
Surrogate: 1-Chlorooctane	60.4		mg/kg	50.0		121	48.2-134			
Surrogate: 1-Chlorooctadecane	58.0		mg/kg	50.0		116	49.1-148			

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Celey 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 $6^{\circ}\mathrm{C}$

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

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

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

Relinquished By Relinquished/By analyses. All claims including those for a service. In no event shall Cardinal be lia Delivered By: (Circle One) LEASE NOTE: Liability and Da ENINHON Sampler Name: Project Location: Project Name: Phone #: City: Project Manager: Address: 3122 National Parks Hwy roject #: Company Name: FOR LAB USE ONLY Lab I.D. O 6 S SW Carlsbad 237-257-2307 034558346 Is for negligence and any other cause whatsoever shall be deemed be liable for incidental or consequental damages, including without ESHQ Sample I.D. PLU FSYZ SMOZ 84518 FSUL TYACH Ensolum, LLC min NO 50 NBN 22 lability and r 070 Millard time: 1425 Date: 10-10-24 vental damages, including without limitation, business interr Time: Date: Fax #: Sample Depth Project Owner: XTO State: NM NHW 0~1 0 (feet) Pach N N N N N emedy for any cla under by Ca 0 Received By: Received By: 4 (G)RAB OR (C)OMP Zip: 88220 waived u 3 6 Lineus 1 # CONTAINERS unless made in writing and received by Carofinal within 30 days after completion of the applicable in, burness interruptions, loss of use, or loss of prifits incurred by client, its subsidiaries, tes of whether such claim is based upon any of the sub-GROUNDWATER lodu WASTEWATER ÷ MATRIX SOIL OIL SLUDGE OTHER Fax #: State: NM Zip: 88220 city: Carlsbad P.O. #: Phone #: Attn: Amy Ruth Company: XTO Energy Inc Address: 3104 E. ACID/BASE PRESERV £ ICE / COOL OTHER BILL TO 12-21 DATE ¢ SAMPLING Greene Verbal Result:
Ves
No Add'I Phone #:
All Results are emailed. Please provide Email address: REMARKS: 1220 1200 bbelill@ensolum.com, TMorrissey@ensolum.com, dmcInnis@ensolum.com 1215 216 1205 Shibo 2 TIME Cost Center 22425 St BTEX É 6 × TPH < CHLORIDE × Incident ID: ANALYSIS MAPP2411 631990 REQUEST THillard@ensolum.com

Sampler - UPS - Bus - Other

Observed Temp.

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T.mp. "C-2.5

Cool Intact Sample Condition

(Initials) CHECKED BY

HINO -0.42

Rush

R

Bacteria (only) Sample Condition

Observed Temp. Corrected Temp. °C

å

Cool Intact

rection Factor

0.0.0

eter ID #113

No

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

ARDINAL aboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



October 15, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 10/11/24 9:42.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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



	TRAC 3122	DLUM CY HILLARD NATIONAL PARKS HWY SBAD NM, 88220 Fo:	
Received:	10/11/2024	Sampling Date:	10/10/2024
Reported:	10/15/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.86489		

Sample ID: SW 05 0-1 (H246199-01)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	10/14/2024	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/11/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/11/2024	ND					
Surrogate: 1-Chlorooctane	82.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.8	% 49.1-14	0						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	1 3 (ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW ^Y CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.86	5489		

Sample ID: FS 59 1 (H246199-02)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	10/14/2024	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	10/11/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/11/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/11/2024	ND					
Surrogate: 1-Chlorooctane	70.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	75.4	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	1 3 (ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW ^Y CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.86	5489		

Sample ID: FS 60 1 (H246199-03)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	10/14/2024	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	10/11/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/11/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/11/2024	ND					
Surrogate: 1-Chlorooctane	85.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	90.6	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	1 3 (ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW ^Y CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.86	5489		

Sample ID: FS 61 1 (H246199-04)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	10/14/2024	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	10/11/2024	ND	212	106	200	0.905	
DRO >C10-C28*	53.1	10.0	10/11/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/11/2024	ND					
Surrogate: 1-Chlorooctane	96.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105	% 49.1-14	8						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	1 3 (ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW ^Y CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.86	5489		

Sample ID: FS 62 1 (H246199-05)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	10/14/2024	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/11/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/11/2024	ND					
Surrogate: 1-Chlorooctane	90.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	6489		

Sample ID: FS 63 1 (H246199-06)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	10/14/2024	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/11/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/11/2024	ND					
Surrogate: 1-Chlorooctane	88.3 % 48.2-13		4						
Surrogate: 1-Chlorooctadecane	95.2	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.80	6489		

Sample ID: FS 64 1 (H246199-07)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Analyzed Method Blank		% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	10/14/2024	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/12/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/12/2024	ND					
Surrogate: 1-Chlorooctane	97.8 % 48.2-13		4						
Surrogate: 1-Chlorooctadecane	105	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	1 3 (ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW ^Y CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/11/2024		Sampling Date:	10/10/2024
Reported:	10/15/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.86	5489		

Sample ID: FS 65 1 (H246199-08)

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	10/14/2024	ND	1.95	97.3	2.00	4.37	
Toluene*	<0.050	0.050	10/14/2024	ND	1.99	99.4	2.00	4.61	
Ethylbenzene*	<0.050	0.050	10/14/2024	ND	2.01	101	2.00	4.53	
Total Xylenes*	<0.150	0.150	10/14/2024	ND	6.01	100	6.00	4.47	
Total BTEX	<0.300	0.300	10/14/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	ed Method Blank		% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/14/2024	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2024	ND	212	106	200	0.905	
DRO >C10-C28*	<10.0	10.0	10/12/2024	ND	203	101	200	0.990	
EXT DRO >C28-C36	<10.0	10.0	10/12/2024	ND					
Surrogate: 1-Chlorooctane	77.8% 48.2-13		4						
Surrogate: 1-Chlorooctadecane	82.1	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 12/17/2024 7:20:14 AM



Notes and Definitions

S-05	The surrogate recovery is outside of lab established statistical control limits but still within method limits. Data is not adversely affected.
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

101 East Marland, Hobbs, NM 88240 aboratories ARDINAL

Project Manager: Tracy Hillard

Address: 3122 National Parks Hwy

Project #: 03C/558346 Phone #: 575-937-3906

Project Owner:

City: Carlsbad

Address: 3/04 E. Greene St. Attn: (0)ton Brown company: XTO Energy

Fax #: State: NM

Zip: 88220

P.O. #:

BILLTO

ANALYSIS REQUEST

City: Carlsbad

Company Name: Ensolum, LLC

(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Delivered By: (Circle One) Sampler - UPS - Bus - Other	Relinquished By:	11.2	PLEASE NOTE: Liability and Damages makyees. All claims including three for service. In no event shall Cardinal be in amaine or surcessors arising out of or r	8	7	6	N	t	N	2	10000	Lab I.D.	FOR LAB USE ONLY	Sampler Name:	Project Location: 3 2.	Project Name:
rcle One) 3us - Other:		م	ability and Damages. Cardinal's liability a Including those for negligence and any schall Cardinals to liable for incidental or one average out of or crolated to the perfor	F565	F364	F\$63	6562	F561	FS 60	F559	Soms	Sample I.D.		Mario Sal	32.2099	PLU 22 I
Observed Temp. "C	Date: O-112	Date: [0]10/24 Time: 16:5-3	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim atising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and raceived by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal to liable to inclental or competential damages, including without limitation, business interruptions, less of use, or toss of profils incurred by client. Its subbidiaries, amount and by the client of the amount paid by the client of the amount paid by the client of the applicable services are event shall Cardinal to a cluent of a routent of an extension of services hereinoter by Cardinal, regardless of whether Steht claim is based upon any of the amount paid by the client willow.	-	1	I	1	1	1	-	0-1	Depth (feet)		rhis	7,-103,86489	DTD Pad D
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^	ner	91	tort, shall be limited sceived by Cardinal v s of use, or loss of p based upon any of th	<	, <	<	5	<	<	<	<	OTHER : ACID/BASE: ICE / COOL OTHER :	PRESERV	Fax #:	Phone #: 575 - 489-2390	State: NM Zip: 88220
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Bacteria (only) Sample Condi Cool Intact Observed Te Yes Yes No No Corrected Te		n, com/msai											_		_	



October 29, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 10/25/24 12:06.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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



XTO 32.20997,-103.86489

Analytical Results For:

		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez

Sample ID: FS 43 4' (H246514-01)

Project Location:

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	108	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.	86489		

Sample ID: FS 44 4' (H246514-02)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	108	48.2-13	4						
Surrogate: 1-Chlorooctadecane	106	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.	86489		

Sample ID: FS 51 4' (H246514-03)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	99.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.7	% 49.1-14	8						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.	86489		

Sample ID: FS 52 4' (H246514-04)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	111 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	36489		

Sample ID: FS 53 4' (H246514-05)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	106 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	104 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	36489		

Sample ID: FS 54 4' (H246514-06)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	102 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	100 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.	.86489		

Sample ID: FS 55 4' (H246514-07)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	106 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	104 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	36489		

Sample ID: FS 56 4' (H246514-08)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	104	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	101	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	86489		

Sample ID: FS 57 4' (H246514-09)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	ng/kg Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/28/2024	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	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	103 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	103 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	86489		

Sample ID: FS 58 4' (H246514-10)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/28/2024	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	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	104 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	102 9	% 49.1-14	8						

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		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	86489		

Sample ID: SW 06 0-4' (H246514-11)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	mg/kg Analyzed By: HM		ed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/28/2024	ND	432	108	400	0.00	
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	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	94.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.8	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.	.86489		

Sample ID: SW 07 0-4' (H246514-12)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	mg/kg Analyzed By: HM		d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/28/2024	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	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	94.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.7	% 49.1-14							

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.8	36489		

Sample ID: SW 08 0-4' (H246514-13)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS % Recovery	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/28/2024	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	99.6% 48.2-13		4						
Surrogate: 1-Chlorooctadecane	96.8	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:						
Received:	10/25/2024		Sampling Date:	10/24/2024				
Reported:	10/29/2024		Sampling Type:	Soil				
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact				
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez				
Project Location:	XTO 32.20997,-103.80	6489						

Sample ID: SW 09 0-4' (H246514-14)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/28/2024	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	108 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	104 9	% 49.1-14	0						

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Celey D. Keene, Lab Director/Quality Manager


Analytical Results For:

		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	10/25/2024		Sampling Date:	10/24/2024
Reported:	10/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO 32.20997,-103.	.86489		

Sample ID: SW 10 0-4' (H246514-15)

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	10/25/2024	ND	2.26	113	2.00	9.24	
Toluene*	<0.050	0.050	10/25/2024	ND	2.26	113	2.00	7.57	
Ethylbenzene*	<0.050	0.050	10/25/2024	ND	2.29	114	2.00	8.22	
Total Xylenes*	<0.150	0.150	10/25/2024	ND	7.08	118	6.00	7.05	
Total BTEX	<0.300	0.300	10/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	10/28/2024	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	10/26/2024	ND	203	102	200	2.53	
DRO >C10-C28*	<10.0	10.0	10/26/2024	ND	182	90.9	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	10/26/2024	ND					
Surrogate: 1-Chlorooctane	96.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.5	% 49.1-14	8						

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*=Accredited Analyte

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Celez 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

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Time:	Date: Received by.	Time:010	ther cause whatsoever shall be deerned waved waved or onsequental damages, including without limitation, busin onsequental damages, including including of wave onsequential damages of wave ance of services hereunder by including the onsequence of services hereunder by	d client's exclusive remedy for any claim arising whether	H C -	4 (1	4 61	4 (1	4 (1	4 61	4 (1)	4 61	4 61	# C GR WA	ONTA OUND	Depth INERS INERS INVATER	-		80	Project Owner-	Fax #:	MM	7:0: 98220			((575) 393-2476
CHECKED BY:	c	Spadiapult	Imitation, business interruptions, loss of use, or loss of proits incurred or regardless of whether such claim is based upon any of the above stated in concord Rv:	arking whether based in contract or tort, shall be limited to the amount pr arking whether based in contract or tort, shall be cardinal within 30 days at universe of moless made in writing and received by Cardinal within 30 days at						V V	V	N N	A TOTAL			ASE:	MATRIX PRESERV.	Fax #: SAMPI ING	Phone #: 575-988-2390	State: NM Zip: 88220	City: Carlsbad	Address: 3104 E Greene	Attn: Colton Brown	Company: XTO Energy	P.O. #	BILL TO
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(575) 393-2326 FAX (575) 393-2476 Company Name: Ensolum, LLC

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ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Corrected Temp.	Depth (feet) 0-4 0-4 0-4 0-4			6489		Project Owner:	Fax #:	State: NM		
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APPENDIX C

September 10, 2024, Remediation Work Plan

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E N S O L U M

September 10, 2024

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Remediation Work Plan Poker Lake Unit 22 DTD Pad D Incident Number NAPP2411631990 Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan* (*Work Plan*) to document the site assessment, delineation and soil sampling activities completed to date and propose a work plan to address waste-containing soil identified at the Poker Lake Unit 22 DTD Pad D (Site). The purpose of the remediation activities was to determine the presence or absence of impacted and/or waste-containing soil resulting from a produced water release at the Site. The following *Work Plan* proposes to confirm depth to groundwater via temporary soil boring and remove waste-containing soil identified within the release extent.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 22, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.20997°, -103.86489°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On April 9, 2024, a pump failure resulted in the release of 18 barrels (bbls) of produced water into a temporary lined containment area, onto the pad surface, and into the adjacent pasture area. No fluids were recovered. XTO submitted an Initial C-141 Application (C-141) on April 25, 2024. The release was assigned Incident Number NAPP2411631990.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented below and potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. On March 26, 1959, a USGS groundwater monitoring well (USGS 321203103511801) was measured and recorded with a depth to groundwater as 423.1 feet bgs. The total depth of the well is 474 feet bgs. The location of the well is approximately 0.83 miles southeast of the release and is depicted on Figure 1. The Well Record and Log is included in Appendix A.

XTO Energy, Inc. Remediation Work Plan Poker Lake Unit 22 DTD Pad D

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 1,873 feet north 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).

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum Hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation standard of 600 mg/kg chloride and 100 mg/kg TPH applies 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 AND DELINEATION ACTIVITIES

On April 9, 2024 Ensolum personnel conducted a Site visit to evaluate the release extent based on information provided from XTO and visual observations. The release extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. Photographic documentation was completed during the Site visits and a photographic log is included in Appendix B.

On April 25, 2024, Ensolum returned to the Site to take assessment samples from within the release. Five delineation soil samples (SS01 through SS05) were collected from a depth of 0.5 feet bgs. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach[®] chloride QuanTab[®] test strips. The delineation soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 2.

On May 21 and 22, 2024, Ensolum personnel returned to the site to oversee delineation activities. Delineation boreholes BH01 through BH04 and potholes PH01 through PH05 were advanced via hand auger and backhoe to assess the vertical extent of the release to a maximum depth of 1-foot bgs. Delineation soil samples were collected from each pothole at depths ranging from 0.5 feet to 1-foot bgs. Delineation soil sample PH04 was taken at the point of release below the removed temporary lined contaiment. Additional delineation soil samples (SS06 through SS11) were taken surrounding the release to confirm the lateral extent of the release. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 2.

Based on field screenings, no impacted or waste-containing soil was identified in the pasture areas. Vegetation in this area appears to be healthy and not impacted by the release. In order to confirm the absense of impacted or waste-containing soil, twenty-three 5-point composite confirmation soil samples were taken from the pasture area that represented no more than 200 square feet of the release extent in an approximate 4,587 square foot area. The 5-point composite samples were collected by placing five



XTO Energy, Inc. Remediation Work Plan Poker Lake Unit 22 DTD Pad D

equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS06, and FS08 through FS24 were collected at a depth of 0.5 feet bgs. Please note FS07 was inadvertantly skipped in the sampling nomenclature. The soil samples were field screened for VOCs and chloride and mapped with a handheld GPS unit. The confirmation soil sample locations are depicted on Figure 3.

All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COCs): 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 Standards Method SM4500.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples indicated all COCs were compliant with the Closure Criteria. All COC concentrations for terminal soil samples of the delineation boreholes and potholes were in compliance with the Closure Criteria and reclamation requirement, successfully defining the vertical extent of the release. All COC concentrations for the delineation soil samples collected outside the release extent met Closure Criteria and reclamation requirement, successfully defining the lateral extent of the release. Laboratory analytical results for all COC concentrations for composite soil samples FS01 through FS24 were in compliance with the strictest Table 1 Closure Criteria, verifying the absence of impacted or waste-containing soil in the pasture area. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIATION WORK PLAN

In order to confirm depth to groundwater is greater than 100 feet bgs at the Site, XTO proposes to advance a soil boring to a depth of 105 feet bgs. The soil boring will be located within 0.5 miles of the Site and a field geologist will log and describe soils continuously. The soil boring will be left open for over 72 hours to allow for equilibration of groundwater levels within the temporary boring casing. After the 72-hour waiting period, depth to groundwater will be assessed and the soil boring will be backfilled following New Mexico Office of the State Engineer (NMOSE) approved procedures. A well record or soil boring log will be included in the follow-up Closure Report.

The delineation soil sampling results indicate soil containing elevated chloride concentrations exist on pad across an approximate 18,800 square foot area and extends to depths ranging from 0.5 feet to 1-foot bgs. As such, XTO proposes to complete the following remediation activities:

- Excavation of waste-containing soil to a depth of 1-foot bgs. Excavation will proceed laterally until sidewall samples confirm all COC concentrations are compliant with the Closure Criteria and reclamation requirement.
- The area below the temporary lined containment that has been removed will be composite sampled to confirm the absence of waste-containing soil. If waste-containing soil is located, it will be included in the excavation area increasing the total area by 4,335 square feet and total volume by 160 cubic yards.
- Due to the estimated size of the excavation, XTO requests a variance for the frequency of confirmation soil samples. XTO proposes five-point composite samples to be collected at a sampling frequency of 400 square feet along the excavation floor and a sampling frequency of



XTO Energy, Inc. Remediation Work Plan Poker Lake Unit 22 DTD Pad D

200 square feet along the excavation sidewalls. The proposed sampling frequency would reduce the total amount of samples from approximately 118 samples (200 square feet) to approximately 62 samples. The soil samples will be handled as described above and analyzed for all COCs. The 200 square foot and 400 square foot sampling grids are depicted in Figure 4a and Figure 4b, respectively, based on the proposed excavation extent.

- An estimated 700 cubic yards of waste-containing soil will be excavated and disposed of at the R360 disposal facility in Hobbs, New Mexico.
- The excavation will be backfilled with locally procured material and recontoured to match preexisting conditions.
- Vegetation in the pasture area of the release will continue to be monitored and may be re-seeded as necessary.

XTO plans to drill the depth to water boring in November 2024, once the schedule is confirmed with the licensed drillers. XTO will complete the excavation and soil sampling activities within 90 days of the date of approval of this *Work Plan* by the NMOCD.

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

Sincerely, Ensolum, LLC

Tran Hittart

Tracy Hillard Staff Engineer

cc: Amy Ruth, XTO Amanda Garcia, XTO BLM

Appendices:

- Figure 1 Site Location Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Confirmation Soil Sample Locations
- Figure 4a Proposed Excavation Extent with 200 Square Foot Sampling Grid
- Figure 4b Proposed Excavation Extent with 400 Square Foot Sampling Grid
- Table 1Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Lithologic / Soil Sampling Logs
- Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation



Ashley L. ager

Ashley Ager, PG, MS Program Director



FIGURES

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TABLES

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E N S O L U M

				P	TABLE 1 LE ANALYTIC LU 22 DTD Pa XTO Energy, Iu County, New	d D าc				
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (I	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delii	neation Soil Sa	mples		I		
SS01	04/26/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,360
PH01	05/22/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS02	04/26/2024	0.5	<0.050	<0.300	<10.0	34.1	<10.0	34.1	34.1	1,300
PH02	05/22/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
SS03	04/26/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	672
PH03	05/22/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
SS04	04/26/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
BH03	05/21/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
SS05	04/26/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
BH01	05/21/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
SS06	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SS07	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SS08	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
SS09	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
SS10	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
SS11	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
BH02	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
BH02	05/21/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
BH04	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
BH04	05/21/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
PH04	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	496
PH04	05/22/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
PH05	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,260
PH05	05/22/2024	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	480
				Confi	irmation Soil Sa	amples				
FS01	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS02	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS03	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
FS04	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256

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				P	TABLE 1 LE ANALYTIC LU 22 DTD Pa XTO Energy, In County, New	d D nc				
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
FS05	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
FS06	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS08	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS09	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS10	05/21/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
FS11	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FS12	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
FS13	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
FS14	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
FS15	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS16	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336
FS17	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS18	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS19	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS20	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
FS21	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
FS22	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
FS23	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
FS24	05/22/2024	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240

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 I Closure Criteria or reclamation requirement where applicable.

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



APPENDIX A

Referenced Well Records

USGS Home Contact USGS Search USGS

Science for a changing world

National Water Information System: Web Interface

USGS Water Resources

Data Category:		Geographic Area:	
Groundwater	~	United States	✓ GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 321203103511801 24S.30E.23.3124143

Eddy County, New Mexico Latitude 32°12'03", Longitude 103°51'18" NAD27 Land-surface elevation 3,423 feet above NAVD88 The depth of the well is 474 feet below land surface. This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer. This well is completed in the Rustler Formation (312RSLR) local aquifer.

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

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source (measur(
1959-03-26		D	62610		2998.18	NGVD29	1	:	Ζ	
1959-03-26		D	62611		2999.90	NAVD88	1	:	Ζ	
1959-03-26		D	72019	423.10			1	:	Ζ	

Explanation

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

R bites: Lowis Vaterdates usp2/29/20/20/24/99/19/els3sites no=321203103511801&agency_cd=USGS&format=html

Received by QCD: 1	2/17/2024	7:20:14 AM
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Section	Code	Description
Water-level approval status	А	Approved for publication Processing and review completed.

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

 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?

USA.gov

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2024-07-03 12:20:34 EDT 0.39 0.37 nadww02



APPENDIX B

Photographic Log





APPENDIX C

Lithologic Soil Sampling Logs

Environmental, Engineering and Hydrogeologic Consultants Incident Numb Job Number: 0 LITHOLOGIC / SOIL SAMPLING LOG Logged By: TH Coordinates: 32.210014, -103.865368 Hole Diameter Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl unit op in the pin the	Method: Hand Auger 4" Total Depth: 1' bgs and vapor, respectively. Chloride test uded in all chloride screenings. Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.
Hydrogeologic Consultants Job Number: 0 Job Number: 0 Job Number: 0 LITHOLOGIC / SOIL SAMPLING LOG Logged By: TH Coordinates: 32.210014, -103.865368 Hole Diameter Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl and tion of the colspan="2">Sample Depth (ft bgs) bit of tion o	3C1558326 Method: Hand Auger 4" Total Depth: 1' bgs and vapor, respectively. Chloride test uded in all chloride screenings. Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.
Job Number: 0 LITHOLOGIC / SOIL SAMPLING LOG Logged By: TH Coordinates: 32.210014, -103.865368 Hole Diameter Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl ann tion of big of test strips and test strips and PID for chloride for test strips ann tion of test strips and PID for chloride for test strips and PID for chloride for test strips ann tion of test strips and PID for chloride for test strips and PID for chloride for test strips ann tion of test strips and PID for chloride for test strips and PID for chloride for test strips ann tion of test strips and PID for chloride for test strips and PID for chloride for test strips ann tion of test strips and PID for chloride for test strips and PID for chloride for test strips ann tion of test strips and PID for test strips and PID for chloride for test strips ann tion of test strips and PID for test strips and PID for chloride for test strips ann tion of test strips and PID for test strips and PID for test strips ann tion of test strips ann tistestest strips ann test strips </td <td>Method: Hand Auger 4" Total Depth: 1' bgs and vapor, respectively. Chloride test uded in all chloride screenings. Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.</td>	Method: Hand Auger 4" Total Depth: 1' bgs and vapor, respectively. Chloride test uded in all chloride screenings. Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.
Coordinates: 32.210014, -103.865368 Hole Diameter Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl M 196 O.0 N Sample Depth (ft bgs) Somple M 196 0.0 N SS05 0.5 1 0 SP-SC 0-1' SILTY S/ graded, r M 196 0.0 N BH01 1 1 1	4" Total Depth: 1' bgs and vapor, respectively. Chloride test uded in all chloride screenings. Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.
Coordinates: 32.210014, -103.865368 Hole Diameter Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl Output of the performed water. A 40%	4" Total Depth: 1' bgs and vapor, respectively. Chloride test uded in all chloride screenings. Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.
performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is incl and by the second	Lithologic Descriptions AND with clay, dark brown, poorly o stain, no odor.
M 196 0.0 N SS05 0.5 M <156.8 0.0 N BH01 1 1	AND with clay, dark brown, poorly o stain, no odor.
M 196 0.0 N SS05 0.5 M <156.8 0.0 N BH01 1 1	o stain, no odor.
M <156.8 0.0 N BH01 1 1	@ 1' bgs.
M <156.8 0.0 N BH01 1 TD Total Depth	@ 1' bgs.
I I I I I I TD I Total Depth	@ 1' bgs.

							Sample Name: BH02	Date: 5/21/2024
	- E		I S	OL	UΜ		Site Name: Poker Lake Unit	
	En	viron	mental, E	ngineering			Incident Number: NAPP241	1631990
	Hy	arog	eologic Co	onsultants			Job Number: 03C1558326	
LITHOLOGIC / SOIL SAMPLING LOG Coordinates: 32.210079, -103.865737							Logged By: TH	Method: Hand Auger
							Hole Diameter: 4"	Total Depth: 1' bgs
							PID for chloride and vapor, r on factor is included in all ch	
Moisture <u>Content</u> Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		c Descriptions
M <158.6	5 0.0	N	BH02	0.5	0	SP	0-1' SILTY SAND, dark k stain, no odor.	prown, poorly graded, no
M <156.8	3 0.0	N	BH02	1	 		Total Depth @ 1' bgs.	

								Sample Name: BH03	Date: 5/21/2024
		7 E		I S	OL	UΜ		Site Name: Poker Lake Unit	
		En	viron	mental, E	ngineering onsultants	and		Incident Number: NAPP2412	1631990
		ну	urog		nsultants			Job Number: 03C1558326	
		LITHOL	OGI	C / SOIL S	SAMPLING	LOG		Logged By: TH	Method: Hand Auger
Coord	linates: 32	2.210194	, -103	.865573				Hole Diameter: 4"	Total Depth: 1' bgs
								PID for chloride and vapor, r on factor is included in all ch	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		ic Descriptions
					T	L O	SP-SC	0-1' SILTY SAND with cl graded, no stain, no	lay, dark brown, poorly odor
М	196	0.0	Ν	SS04	0.5	-		gradea, no stain, no	
М	156.8	0.0	N	BH03	1	- 1			
141	1.50.0	0.0	IN	5105	<u> </u>	TD		Total Depth @ 1' bgs.	

				Sample Name: BH04	Date: 5/21/2024
	ENS	OLUM		Site Name: Poker Lake Unit 22 I	DTD Pad D
	Environmental, E Hydrogeologic C	ingineering and	ſ	Incident Number: NAPP241163	1990
	Hydrogeologic C	unsultants		Job Number: 03C1558326	
LIT	HOLOGIC / SOIL	SAMPLING LOG		Logged By: TH	Method: Hand Auger
Coordinates: 32.21	0248, -103.865364			Hole Diameter: 4"	Total Depth: 1' bgs
				PID for chloride and vapor, resp on factor is included in all chlori	
Noisture Content Chloride (ppm) Vapor	(ppm) Staining Sample ID	Sample Depth (ft bgs)	USCS/Rock Symbol	Lithologic D	
M 190.4 0	.0 N BH04		SP-SC	0-1' SILTY SAND with clay graded, no stain, no oc	, dark brown, poorly lor.
		I T I			
M 156.8 0	.0 N BH04	1 <u>1</u> TD		Total Depth @ 1' bgs.	

Enviror Hydrog LITHOLOGI 2.210323, -103 d screening co	C / SOIL S 3.865125 onducted w	AMPLING ith HACH Ch I to distilled Sample	and LOG loride Test S		Site Name: Poker Lake Unit 2 Incident Number: NAPP2411 Job Number: 03C1558326 Logged By: TH Hole Diameter: ~1.5' PID for chloride and vapor, re on factor is included in all chlo	631990 Method: Backhoe Total Depth: 1' bgs spectively. Chloride test
Enviror Hydrog LITHOLOGI 2.210323, -103 d screening co a 1:4 dilution f	C / SOIL S 3.865125 onducted w factor of soi	AMPLING	and LOG loride Test S		Job Number: 03C1558326 Logged By: TH Hole Diameter: ~1.5' PID for chloride and vapor, re	Method: Backhoe Total Depth: 1' bgs spectively. Chloride test
LITHOLOGI 2.210323, -103 d screening co a 1:4 dilution f	C / SOIL S 3.865125 onducted w factor of soi	AMPLING ith HACH Ch I to distilled Sample	loride Test S		Logged By: TH Hole Diameter: ~1.5' PID for chloride and vapor, re	Total Depth: 1' bgs spectively. Chloride test
2.210323, -103 d screening co 1:4 dilution f	3.865125 onducted w factor of soi	ith HACH Ch I to distilled Sample	loride Test S		Hole Diameter: ~1.5' PID for chloride and vapor, re	Total Depth: 1' bgs spectively. Chloride test
2.210323, -103 d screening co 1:4 dilution f	3.865125 onducted w factor of soi	ith HACH Ch I to distilled Sample	loride Test S		Hole Diameter: ~1.5' PID for chloride and vapor, re	spectively. Chloride test
1:4 dilution f	actor of soi	l to distilled Sample				
Vapor (ppm) Staining	mple ID	-				
	Sa	Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic	: Descriptions
		1	L 0	CCHE	0-1' CALICHE, pad fill, n	o stain, no odor.
0.6 N	SS01	0.5	-			
		Ī	-			
0.0 N	PH01	1 _	1 TD		Total Denth @ 1' hgs	
						old 1 1 1 TD Total Depth @ 1' bgs.

Site Name: Poker Lake Unit 22 DTD Pad D Incident Number: NAPP2411631990 Job Number: 03C1558326 Coordinates: 32.210032, -103.865056 Coordinates: 32.210032, -103.865056 Coordinates: 32.210032, -103.865056 Hole Diameter: ~1.5' Total Depth: 1' bgs Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1.4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. a) a) a) a) b) bpth (ft bgs) b) b) c) b) c) b) b) b) c) c) c) c) c) c)			_					Sample Name: PH02	Date: 5/22/2024
Hydrogeologic Consultants Job Number: 03C1558326 LITHOLOGIC / SOIL SAMPLING LOG Logged By: TH Method: Backhoe Coordinates: 32.210032, -103.865056 Hole Diameter: ~1.5' Total Depth: 1' bgs Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an total Depth (ft bgs) <					OL	UΜ		Site Name: Poker Lake Unit	22 DTD Pad D
Job Number: 03C1558326 LITHOLOGIC / SOIL SAMPLING LOG Logged By: TH Method: Backhoe Coordinates: 32.210032, -103.865056 Hole Diameter: ~1.5' Total Depth: 1' bgs Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. ant single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. b single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. b single of the sector of soil to distilled water. A 40% correction factor is included in all chloride screenings. <		En	vironr	mental, Er	ngineering	and		Incident Number: NAPP241	1631990
Coordinates: 32.210032, -103.865056 Hole Diameter: ~1.5' Total Depth: 1' bgs Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. an tion of the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. ba		ну	uroge		nsultants			Job Number: 03C1558326	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings.		LITHOL	OGIC	/ SOIL S	AMPLING	LOG		Logged By: TH	Method: Backhoe
performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings.	Coordinates: 3	2.210032,	-103.	865056				Hole Diameter: ~1.5'	Total Depth: 1' bgs
D 1,254 0.7 N SS02 0.5 1 1 D 308 0.0 N PH02 1 1									
D 1,254 0.7 N SS02 0.5 D 308 0.0 N PH02 1 1	Moisture <u>Content</u> Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Depth	-	_		
D 308 0.0 N PH02 1 1					4	L 0	CCHE	0-1' CALICHE, pad fill, r	no stain, no odor.
D 308 0.0 N PH02 1 1	D 1,254	0.7	Ν	SS02	0.5	-			
U SUO UU V PRUZ I TITO Total Depth @ 1' bgs.					T	- 1			
	808 U	0.0	IN	PHUZ	± 4	TD		Total Depth @ 1' bgs.	

Environmental, E Hydrogeologic C THOLOGIC / SOIL 09580, -103.865067 screening conducted v	onsultants SAMPLING LOG vith HACH Chloride Test :	Strips and	Site Name: Poker Lake Unit 22 Incident Number: NAPP24116 Job Number: 03C1558326 Logged By: TH Hole Diameter: ~1.5' PID for chloride and vapor, res on factor is included in all chlo	31990 Method: Backhoe Total Depth: 1' bgs pectively. Chloride test
Hydrogeologic C THOLOGIC / SOIL 09580, -103.865067 screening conducted v :4 dilution factor of so	onsultants SAMPLING LOG vith HACH Chloride Test s il to distilled water. A 40		Job Number: 03C1558326 Logged By: TH Hole Diameter: ~1.5' PID for chloride and vapor, res	Method: Backhoe Total Depth: 1' bgs pectively. Chloride test
THOLOGIC / SOIL 1 109580, -103.865067 screening conducted v :4 dilution factor of so	SAMPLING LOG with HACH Chloride Test : il to distilled water. A 40		Logged By: TH Hole Diameter: ~1.5' PID for chloride and vapor, res	Total Depth: 1' bgs pectively. Chloride test
09580, -103.865067 screening conducted v :4 dilution factor of so	vith HACH Chloride Test s il to distilled water. A 40		Hole Diameter: ~1.5' PID for chloride and vapor, res	Total Depth: 1' bgs pectively. Chloride test
screening conducted v :4 dilution factor of so	il to distilled water. A 40		PID for chloride and vapor, res	pectively. Chloride test
:4 dilution factor of so	il to distilled water. A 40			
apor pm) ining ple ID	Samplo			nue screenings.
(p Sta Sam	Depth (ft bgs)	USCS/Rock Symbol		Descriptions
	– 0	CCHE	0-1' CALICHE, pad fill, no	stain, no odor.
0.0 N SS03	0.5			
	I T			
0.0 N PH03			Total Depth @ 1' bgs.	
	0.0 N SS03 0.0 N PH03		D.0 N PH03 1 T 1	D.0 N PH03 1 T 1

								Sample Name: PH04	Date: 5/22/2024
		7 E		15	OL	UΜ		Site Name: Poker Lake Unit 2	
		En	viron	mental, E	ngineering onsultants	and		Incident Number: NAPP2411	631990
		Ну	arog		isuitants			Job Number: 03C1558326	
		LITHOL	OGI	C / SOIL S	SAMPLING	i LOG		Logged By: TH	Method: Backhoe
Coordi	nates: 32	2.210165	, -103	.865206				Hole Diameter: ~1.5'	Total Depth: 1' bgs
								PID for chloride and vapor, re on factor is included in all chl	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologi	c Descriptions
					I	0	CCHE	0-1' CALICHE, pad fill, n	o stain, no odor.
D	554.4	0.0	Ν	PH04	0.5	-			
						- 1			
D	268.6	0.0	Ν	PH04	1	TD		Total Depth @ 1' bgs.	
				\mathbf{i}					

Dip Enclose that is equine if ing and hydrogeneous in the Name: Poker Lake Unit 22 DT Pard Directing and hydrogeneous in the Name: NAPP2411631990 lob Number: 03C1558326 Incident Number: NAPP2411631990 lob Number: 03C158326 Incident Number: NAPP24100 lob Number: 03				_					Sample Name: PH05	Date: 5/22/2024
Environmental, Engineering and Hydrogeologic Consultants Incident Number: NAPP2411631990 Job Number: 03C1558326 Job Number: 03C1558326 LITHOLOGIC / SOIL SAMPLING LOG Logged By: TH Method: Backhoe Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% Correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% Correction factor is included in all chloride screenings. and the performed with 1:4 dilution factor of soil to distilled water. A 40% Correction factor is included in all chloride screenings. bi to the performed with 1:4 dilution factor			E		I S	OL	UΜ			
Job Number: 03C1558326LITHOLOGIC / SOIL SAMPLING LOGLogged By: THMethod: BackhoeCoordinates: 32.210189, -103.865053Hole Diameter: ~1.5'Total Depth: 1' bgsComments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings.and big to big			Env	riron	mental, E	ngineering			Incident Number: NAPP241	1631990
Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Coordinates: Siled screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test beerformed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings. Total Depth: 1' bgs Option of soil to distilled water. A 40% correction factor is included in all chloride screenings. Total Depth: 1' bgs Total Depth: 1' bgs Option of soil to distilled water. A 40% correction factor is included in all chloride screenings. Total Depth: 1' bgs Total Depth: 1' bgs Depth (ft bgs) Option of soil to distilled water. A 40% correction factor is included in all chloride screenings. Total Depth: 1' bgs Depth (ft bgs) Depth (ft bgs) Depth (S) Option of SC			нус	iroge		onsultants			Job Number: 03C1558326	
Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Coordinates: 32.210189, -103.865053 Hole Diameter: ~1.5' Total Depth: 1' bgs Coordinates: Steld screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test Provide test total Depth: 1' bgs Optimize the provide test Strips and PID for chloride and vapor, respectively. Chloride test total Depth: 1' bgs Depth (ft bgs) Depth (ft bgs) Depth (ft bgs) Depth (ft bgs) Depth (ft bgs) O		LIT	HOLO	OGIC	C / SOIL S	SAMPLING	i LOG		Logged By: TH	Method: Backhoe
erformed with 1:4 dilution factor of soil to distilled water. A 40% correction factor is included in all chloride screenings.	oordinat	es: 32.21	0189,	-103	.865053				Hole Diameter: ~1.5'	Total Depth: 1' bgs
D 610.4 0.0 N PH05 0.5 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <t< th=""><th></th><th></th><th></th><th>-</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>				-						
D 610.4 0.0 N PH05 0.5 D 1 1	Chloride	(ppm) Vapor	(mdd)	Staining	Sample ID	Depth	(ft bgs)			
D 448 0.0 N PH05 1 1 1						T	L 0	CCHE	0-1' CALICHE, pad fill, r	no stain, no odor.
D 448 0.0 N PHOS 1 <u>1</u> <u>1</u> TO Total Depth @ 1'bgs.	D 61	LO.4 0	0.0	Ν	PH05	0.5	-			
D 448 0.0 N PHOS I T TD Total Depth @ 1' bgs.		10 0		N	рцое	1	- 1			
	0 4	40 0	5.0	IN	FIUS	± _	TD		Total Depth @ 1' bgs.	



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



May 02, 2024

TRACY HILLARD ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 04/26/24 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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



XTO

Analytical Results For:

		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220 Fax To:	Y	
Received:	04/26/2024		Sampling Date:	04/25/2024
Reported:	05/02/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez

Sample ID: SS 01 0.5' (H242245-01)

Project Location:

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	04/30/2024	ND	2.22	111	2.00	5.78	
Toluene*	<0.050	0.050	04/30/2024	ND	2.25	113	2.00	4.41	
Ethylbenzene*	<0.050	0.050	04/30/2024	ND	2.25	112	2.00	4.29	
Total Xylenes*	<0.150	0.150	04/30/2024	ND	6.82	114	6.00	3.97	
Total BTEX	<0.300	0.300	04/30/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	04/30/2024	ND	432	108	400	7.69	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	04/30/2024	ND	208	104	200	1.58	
DRO >C10-C28*	<10.0	10.0	04/30/2024	ND	189	94.6	200	6.21	
EXT DRO >C28-C36	<10.0	10.0	04/30/2024	ND					
Surrogate: 1-Chlorooctane	89.2 % 48.2-13		4						
Surrogate: 1-Chlorooctadecane	76.7	% 49.1-14	0						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager


		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	04/26/2024		Sampling Date:	04/25/2024
Reported:	05/02/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	ХТО			

Sample ID: SS 02 0.5' (H242245-02)

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	04/30/2024	ND	2.22	111	2.00	5.78	
Toluene*	<0.050	0.050	04/30/2024	ND	2.25	113	2.00	4.41	
Ethylbenzene*	<0.050	0.050	04/30/2024	ND	2.25	112	2.00	4.29	
Total Xylenes*	<0.150	0.150	04/30/2024	ND	6.82	114	6.00	3.97	
Total BTEX	<0.300	0.300	04/30/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	04/30/2024	ND	432	108	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/30/2024	ND	208	104	200	1.58	
DRO >C10-C28*	34.1	10.0	04/30/2024	ND	189	94.6	200	6.21	
EXT DRO >C28-C36	<10.0	10.0	04/30/2024	ND					
Surrogate: 1-Chlorooctane	76.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	68.3	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	04/26/2024		Sampling Date:	04/25/2024
Reported:	05/02/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	XTO			

Sample ID: SS 03 0.5' (H242245-03)

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	04/30/2024	ND	2.05	103	2.00	0.0123	
Toluene*	<0.050	0.050	04/30/2024	ND	2.10	105	2.00	1.56	
Ethylbenzene*	<0.050	0.050	04/30/2024	ND	2.12	106	2.00	1.12	
Total Xylenes*	<0.150	0.150	04/30/2024	ND	6.20	103	6.00	1.20	
Total BTEX	<0.300	0.300	04/30/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	04/30/2024	ND	432	108	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/30/2024	ND	208	104	200	1.58	
DRO >C10-C28*	<10.0	10.0	04/30/2024	ND	189	94.6	200	6.21	
EXT DRO >C28-C36	<10.0	10.0	04/30/2024	ND					
Surrogate: 1-Chlorooctane	87.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	79.0	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	04/26/2024		Sampling Date:	04/25/2024
Reported:	05/02/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	ХТО			

Sample ID: SS 04 0.5' (H242245-04)

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	04/30/2024	ND	2.05	103	2.00	0.0123	
Toluene*	<0.050	0.050	04/30/2024	ND	2.10	105	2.00	1.56	
Ethylbenzene*	<0.050	0.050	04/30/2024	ND	2.12	106	2.00	1.12	
Total Xylenes*	<0.150	0.150	04/30/2024	ND	6.20	103	6.00	1.20	
Total BTEX	<0.300	0.300	04/30/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/30/2024	ND	432	108	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/30/2024	ND	208	104	200	1.58	
DRO >C10-C28*	<10.0	10.0	04/30/2024	ND	189	94.6	200	6.21	
EXT DRO >C28-C36	<10.0	10.0	04/30/2024	ND					
Surrogate: 1-Chlorooctane	71.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	63.7	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM TRACY HILLARD 3122 NATIONAL PARKS HW CARLSBAD NM, 88220 Fax To:	Y	
Received:	04/26/2024		Sampling Date:	04/25/2024
Reported:	05/02/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Shalyn Rodriguez
Project Location:	ХТО			

Sample ID: SS 05 0.5' (H242245-05)

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	04/30/2024	ND	2.05	103	2.00	0.0123	
Toluene*	<0.050	0.050	04/30/2024	ND	2.10	105	2.00	1.56	
Ethylbenzene*	<0.050	0.050	04/30/2024	ND	2.12	106	2.00	1.12	
Total Xylenes*	<0.150	0.150	04/30/2024	ND	6.20	103	6.00	1.20	
Total BTEX	<0.300	0.300	04/30/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/30/2024	ND	432	108	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/30/2024	ND	208	104	200	1.58	
DRO >C10-C28*	<10.0	10.0	04/30/2024	ND	189	94.6	200	6.21	
EXT DRO >C28-C36	<10.0	10.0	04/30/2024	ND					
Surrogate: 1-Chlorooctane	81.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	72.8	% 49.1-14	8						

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Celez 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

Received by OCD: 12/17/2024 7:20:14 AM

Labora	ratories		CHAIN-OF-CUS	CHAIN-OF-CUSTODY AND ANALYSIS REQUEST
101 East Marlan (575) 393-2326	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476			
Company Name: Ensolum, LLC		BILL TO		ANALYSIS REQUEST
Project Manager: Tracy Hillard		P.O. #:		
Address: 3122 National Parks	Hwy	Company: XTO Energ	Energy Inc.	
city: Carlsbad	State:NM Zip: 88220	Attn: Amy Ruth		
Phone #: 337 257-8307		in	Green St.	
Project #: 03C1558346	Project Owner: XTO	city: Carlsbad		
Project Name: PLU 22 DTD Pad D		State: NM Zip: 88220	20	
Project Location:		Phone #:		
Sampler Name: Connor Whitman		Fax #:		
FOR LAB USE ONLY	P. MATRIX	PRESERV. SAMP	SAMPLING	
Lab I.D. Sample I.D.	Sample Depth (feet)	OTHER : ACID/BASE: ICE / COOL OTHER : DATE	BTEX TPH	CHLORIDE
2 502	0.5' G1	4-25-24	1215	
2055 C			1225	
502) 5		4	1235 /	
PLEASE NOTE: Lability and Damages. Cardinal's liability a analyses. All claims including those for negligence and any service. In no event shall Cardinal be liable for incidental or artitutes or successors arising out of or related in the negligence artitutes or successors arising out of or related in the negligence.	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and receiver by Cardinal within 30 days after completion of the applicable service. If no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred to your the subsidiaries. artificate or subsection of the andormation of resolves here writed by Cardinal writing and use of use or loss of use or the above stated reasons or demoker.	or tort, shall be limited to the amount paid d received by Cardinal within 30 days after loss of use, or loss of profits incurred by cl is based upon any of the above stated rea	unt paid by the client for the ays after completion of the applicable red by client, its subsidiaries. and reasons or otherwise.	
3C sh	Time: 0/00 Received By:		ult:	s DNO Add'I Phone #: Please provide Email address: TMorrissey@ensolum.com, TH;illerd@Ensolum.com
Relinquished By:	Time: 1330 Received By:	ment	REMARKS: NAPP2411631990 Cost Center: 2242511001	1990
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Corrected Temp. Sample Condition Corrected Temp. Sh. Cool Intact No No No	s (Initials)	Turnaround Time:	Standard Bacteria (only) Sample Condition Rush Cool Intact Observed Temp. °C
FURM-000 R 3.2 10/07/21	0	nges. Please email char	nges to celey.keene@ca	



May 29, 2024

TRACY HILLARD ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND, TX 79705

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 05/23/24 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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



	TRA 705	SOLUM, LLC ACY HILLARD 5 W WADLEY AVE. DLAND TX, 79705 5 To:		
Received:	05/23/2024		Sampling Date:	05/22/2024
Reported:	05/29/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.8648	39		

Sample ID: PH 01 1' (H242874-01)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	48.0	16.0	05/29/2024	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	Qualifie
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	191	95.4	200	0.0335	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	193	96.4	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	95.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 9	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: PH 02 1' (H242874-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	% 71.5-13	24						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	05/29/2024	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	05/24/2024	ND	191	95.4	200	0.0335	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	193	96.4	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	96.5	% 48.2-13	24						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14							

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: PH 03 1' (H242874-03)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	05/29/2024	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	05/24/2024	ND	191	95.4	200	0.0335	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	193	96.4	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	98.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	8						

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*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY A MIDLAND TX, 797 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: PH 04 0.5' (H242874-04)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	05/29/2024	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	05/24/2024	ND	191	95.4	200	0.0335	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	193	96.4	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	99.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	110 9	% 49.1-14	8						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AV MIDLAND TX, 7970 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: PH 04 1' (H242874-05)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	05/29/2024	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	05/24/2024	ND	191	95.4	200	0.0335	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	193	96.4	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	72.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	79.2	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY A MIDLAND TX, 797 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: PH 05 0.5' (H242874-06)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	05/29/2024	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	05/24/2024	ND	191	95.4	200	0.0335	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	193	96.4	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	89.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	100 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: PH 05 1' (H242874-07)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	108 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	102 9	% 49.1-14	8						

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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

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose site to the services interruptors, loss of profits incurred by client, its subsidiaries, afflictes or successor arising out of or related to the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 12/17/2024 7:20:14 AM

CARDIN	AL	CH/	CHAIN-OF-CUSTODY AND ANALYSIS REQUEST
Laboratories	Ies		1961
101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	M 88240 393-2476		210
Company Name: Ensolum, LLC		BILL TO	ANALYSIS REQUEST
Project Manager: Tracy Hillard		P.O. #:	
a		company: XTO Energy	
e	TX Zip: 79701	Attn: Anny Ruth	
Phone #: 575.937.3906 Fax #:		Address: 3104 Green	
1361558346	Project Owner: XTO	city: Cay Shad	
Ime: PUL J2 DTD		State: NM Zip: 88220	
m: 32, 20997, -103,	66498	Phone #: 432. 661.057	
racy Hillard		1	*]
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPLING	
Lab I.D. Sample I.D. (feet)	G)RAB OR (C)OMP. CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER : ACID/BASE: ICE / COOL OTHER :	TPH 8015 BTEX 8021 Chloride 4500
	X	X Str.M	NAHZ
2 PHN3		0	0120
PHOY	0.5		Chbo
hold		0	0950
6 PHOS 0.	S		020
PHOS 1	1		
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based is contract or tort, shall be limited to the amount paid by the client for the applicable of the sophicable of the sophicab	ges. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contra for negligence and any other cause whatsoewer shall be deemed waived unless made in writing a sub-to to incidental or consequential damages. Including without imitation, business interruptions	cct or tort, shall be limited to the amount paid by the client for the and received by Cardinal within 30 days after completion of the a s, loss of use, or loss of profits incurred by client, its subaidaries.	he cliant for the pieton of the applicable Its subsidiaries,
Relinquished By:	Time: 2 A Received By:	ALA ANALY IN A LAND	Verbal Result: Pres No Add'I Phone #: All Results are emailed. Please provide Email address: BBellill@ensolum.com, TMorrissey@ensolum.com, THillard@ensolum.com
Relinquished By: Date:	Received By:	Reality	REMARKS: 241163132 490
Time:			Hr : 2242
Delivered By: (Circle One)	*C 1.9 Sample Con Cool Intac	CHECKED BY: (Initials)	ne: Standard
Sampler - UPS - Bus - Other: Corrected		No To Co	No
TURM-000 R 3.2 10/07/21 + 0	ardinal cannot accept verbal ch	nanges. Please email chang	Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Page 160 of 216



May 29, 2024

TRACY HILLARD ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND, TX 79705

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 05/23/24 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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



	TRAC 705 V	DLUM, LLC CY HILLARD W WADLEY AVE. AND TX, 79705 To:	
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489)	

Sample ID: SS 06 0.5 (H242875-01)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	80.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	73.9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: SS 07 0.5 (H242875-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	72.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	66.8	% 49.1-14	8						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: SS 08 0.5 (H242875-03)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	98.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.1	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: SS 09 0.5 (H242875-04)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	84.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	78.8	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: SS 10 0.5 (H242875-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	80.1	48.2-13	4						
Surrogate: 1-Chlorooctadecane	79.1	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: SS 11 0.5 (H242875-06)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	2.04	102	2.00	15.1	
Toluene*	<0.050	0.050	05/26/2024	ND	2.05	103	2.00	10.3	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.09	104	2.00	8.54	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.13	102	6.00	7.95	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	87.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	79.3	% 49.1-14	8						

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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

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 12/17/2024 7:20:14 AM

2

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Relinquished By: Relinquished By:	PLEASE NOTE: Lability and Damages. Cardinal's liability and cli analyses. All claims including those for negligence and any other service. In no event shall Cardinal be liable for incidental or corres affiliate or successors arising out of or related to the performance affiliate or successors arising out of or related to the performance	6		5 5 1		Hattakis	Lab I.D. Sa	Sampler Name: Tracy Hillard	Project Location: 30, 00997	9(Phone #: 210-1	City: Midland	Address: 601 N Marienfeld Street, Suite 400	Project Manager:	Company Name: Ensolum, LLC	Inter
	hadd	d Damages. Cardinal's liability and c ng those for negligence and any othe ardinal be liable for incidental or con ng out of or related to the performan	1100	510	8055 8055	SSOT	202	Sample I.D.	Hillard	- (3	0112 1212 121 2010	27 2001-	nfeld Street, Suit	racy Hillord	lum, LLC	aboratories 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476
Observed Temp. °C Corrected Temp. °C	Time: Date: Time:	client's exclusive remedy for i recause whatsoever shall be sequental damages, includin ce of services hereunder by	-		_	-	0.5	Depth (feet)		-103.86489	Pad D	Project Owner: XTC	IX	1	rd		atories nd, Hobbs, NM 8824 6 FAX (575) 393-247
1.9 Sample	Received By:	edy for any claim arising whether based shall be deemed waived unless made it including without limitation, business int der by Cardinal, regardless of whether der by Cardinal, regardless of whether					- # 0 V X	G)RAB OR (C)OMP. CONTAINERS GROUNDWATER WASTEWATER GOIL	MATRIX	2		XTO	Lip. raivi	7			60 VI.
•mp. °C Imple Condition CHECKED BY: Turnaround Time: Standard Condition •mp. °C Cool Intact (Initials) Thermometer ID #MS Imple Condition Condi	the Will	ant's exclusive remedy for any claim arising whether based in contract or text, shall be limited to the amount paid by the client for the cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable equential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdairés, equential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdairés, equential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subdairés, e of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.					X X	SLUDGE DTHER : ACID/BASE: ICE / COOL OTHER :	PRESERV.	Phone #: 432 . (1/21 . 057)	State: NM Zip: 88	0	Address: 3104 Gu	20	P.O. #	BILL TO	
Turnaround Time: Thermometer ID #113- Correction Factor -0.5*C	All Results are emailed. Please BBellil@ensolum.com, TMorriss REMARKS: 0.APP 2411 631 990 CoSt CANton 224	ount paid by the client for the lays after completion of the applicable rand reasons or oftenvise. tanted reasons or oftenvise.		0001	1150	1140	I Iais XX	TPH 8015 BTEX 8021	SAMPLING	1150	00.088		Giverne	inth the	- AL		CHAIN-UF-CUSTOUT AND ANALTON ALGOLD
Rush +//40	II Results are emailed. Please provide Email address: BBelill@ensolum.com, TMomssey@ensolum.com, THillard@ensolum.com REMARKS: CoSt Conter: 3243511001	by the client for the completion of the applicable completion of the applicable ent, its subsidiaries, sons or otherwise.					×	Chloride 4500								ANALYSIS	
ol Intact Yes ☐ Yes Nc ☐ No	nall address: m.com, THillard@ensolum.com 001	Phone #:														YSIS REQUEST	
Corrected Temp. °C	solum.com																1 0 € 1

Page 169 of 216



May 29, 2024

TRACY HILLARD ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND, TX 79705

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 05/23/24 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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, LLC TRACY HILLAR 705 W WADLE [*] MIDLAND TX, 7 Fax To:	D Y AVE.	
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: BH 01 1' (H242876-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/29/2024	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	Qualifie
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	87.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	81.2	% 49.1-14	0						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY A MIDLAND TX, 797 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: BH 02 0.5' (H242876-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	101 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.6	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: BH 02 1' (H242876-03)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	101 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.5	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: BH 03 1' (H242876-04)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	105 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	100 9	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received: Reported:	05/23/2024 05/29/2024	Sampling Date: Sampling Type:	05/21/2024 Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number: Project Location:	03C1558346 XTO 32.209997-103.86489	Sample Received By:	Tamara Oldaker

Sample ID: BH 04 0.5' (H242876-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 %	6 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	104 %	6 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.4 \$	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/29/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: BH 04 1' (H242876-06)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/29/2024	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	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	100 \$	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	98.7	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

Received by OCD: 12/17/2024 7:20:14 AM

Relinquished By:	Project Manager: Tracu Hillord Address: 601 N Marienfeld Street, Suite 400 City: Midland Stat Phone #: 575-937-3906 Fax Project #: 03C ISS 8346 Proj Project Name: PUL 22 DTD Pac Project Location: 32, 30 1977, -10 Sampler Name: Tracy Hillard Por For UAB USE ONLY Sample I.D. Lab I.D. Sh103 2 BH01 3 BH03 4 BH04 5 BH04 6 BH04 7 BH04 8 BH04 9 BH04 9 BH04 9 BH04	101 East Maria (575) 393-23 Company Name: Ensolum, LLC
cie One) Sus - Other:	oject Manager: Tracu Hillov idress: 601 N Marienfeld Street, Suit vy: Midland none #: 575-937-3906 oject #: 0/3C ISS & 346 oject Name: PUU 22 DTD opect Location: 32, 30 9977, oject Location: 32, 30 9977, ampler Name: Tracy Hillard or LAB USE ONLY OR LAB USE ONLY SAMPLE BH01 2 BH03 3 BH03 4 BH04 4 BH04 4 BH04 5 BH04 4 BH04 5 BH04 4 BH04 5 BH04	aboratories 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 : Ensolum, LLC
Time Date Date Date Date	Suite 400 State: TX Zip: 7970 Fax #: Project Owner: X TO Pool D Pool D P	and, Hobbs, NM 88240 326 FAX (575) 393-2476
Received By: Received By: Received By: Received By: Received By: No No No	Zip: 79701	
By: By: By: By: By: By: By: By: By: By:	P.O. #: Company: XT0 Attn: Annu A Address: 304 City: CarlSb State: NW Zip Phone #: 432 Fax #: Fax #: PRESERV. OTHER: ACID/BASE: ICE / COOL OTHER: ACID/BASE: ICE / COOL OTHER: ACID/BASE: State: NW Zip Phone #: 432 OTHER: ACID/BASE: State: NW Zip Phone #: 432 OTHER: ACID/BASE: State: NW Zip PRESERV. OTHER: ACID/BASE: State: NW Zip Phone #: 432 State: NW Zip State: NW Zip State	BILL TO
All Results are ema BBelili@ensolum.c REMARKS: NAPPA4116 (JOST LEATE Turnaround Time: Thermometer ID #40 Correction Factor A	Chrecky H Chrecky H	
Yes No Add'I Phone #: alled. Please provide Email address: com, TMorrissey@ensolum.com, THillard@en 3/990 r: 024251/001 r: 024251/001 Standard Bacteria (only) S Standard Cool Intact sc #140 23/244 Yes sc #140 23/244 No		ANALYSIS REQUEST
nsolum.com ample Condition Observed Temp. °C Corrected Temp. °C		



May 30, 2024

TRACY HILLARD ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND, TX 79705

RE: PLU 22 DTD PAD D

Enclosed are the results of analyses for samples received by the laboratory on 05/23/24 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024		Sampling Date:	05/21/2024
Reported:	05/30/2024		Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D		Sampling Condition:	Cool & Intact
Project Number:	03C1558346		Sample Received By:	Tamara Oldaker

XTO 32.209997-103.86489

Sample ID: FS 01 0.5 (H242877-01)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/29/2024	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	103	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	98.6	% 49.1-14	8						

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose site to the services interruptors, loss of profits incurred by client, its subsidiaries, afflictes or successor arising out of or related to the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager


	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AV MIDLAND TX, 7970 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 02 0.5 (H242877-02)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	91.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.0	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 03 0.5 (H242877-03)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	97.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.8	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY MIDLAND TX, 79 Fax To:	AVE.	
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 04 0.5 (H242877-04)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	102	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	<i>98.3</i>	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE MIDLAND TX, 79705 Fax To:	-	
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 05 0.5 (H242877-05)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	104	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	98.2	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 06 0.5 (H242877-06)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	99.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.1	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 08 0.5 (H242877-07)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	206	103	200	0.718	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	203	101	200	4.10	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	114 9	48.2-13	4						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	8						

Cardinal Laboratories

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 09 0.5 (H242877-08)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/25/2024	ND	1.92	96.2	2.00	18.8	
Toluene*	<0.050	0.050	05/25/2024	ND	1.90	94.9	2.00	14.2	
Ethylbenzene*	<0.050	0.050	05/25/2024	ND	1.97	98.6	2.00	14.8	
Total Xylenes*	<0.150	0.150	05/25/2024	ND	6.00	100	6.00	14.7	
Total BTEX	<0.300	0.300	05/25/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	92.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	103 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/21/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 10 0.5 (H242877-09)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	104 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	117 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE MIDLAND TX, 79705 Fax To:	-	
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 11 0.5 (H242877-10)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	103	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	113 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE MIDLAND TX, 79705 Fax To:	-	
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 12 0.5 (H242877-11)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	103	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	114 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 13 0.5 (H242877-12)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	97.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	110 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 14 0.5 (H242877-13)

BTEX 8021B	mg,	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	102	48.2-13	4						
Surrogate: 1-Chlorooctadecane	118 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 15 0.5 (H242877-14)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	92.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	104 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE MIDLAND TX, 79705 Fax To:	-	
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 16 0.5 (H242877-15)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	97.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 17 0.5 (H242877-16)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	24						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	97.1	% 48.2-13	24						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	10						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE MIDLAND TX, 79705 Fax To:	-	
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 18 0.5 (H242877-17)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	103 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	115 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY A MIDLAND TX, 793 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 19 0.5 (H242877-18)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	99.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	110 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 20 0.5 (H242877-19)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	104 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	114 9	% 49.1-14	8						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 21 0.5 (H242877-20)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	98.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE MIDLAND TX, 79705 Fax To:	-	
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 22 0.5 (H242877-21)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/29/2024	ND	416	104	400	10.9	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	96.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 23 0.5 (H242877-22)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	05/30/2024	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	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	93.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	104 9	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



	ENSOLUM, LLC TRACY HILLARD 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:		
Received:	05/23/2024	Sampling Date:	05/22/2024
Reported:	05/30/2024	Sampling Type:	Soil
Project Name:	PLU 22 DTD PAD D	Sampling Condition:	Cool & Intact
Project Number:	03C1558346	Sample Received By:	Tamara Oldaker
Project Location:	XTO 32.209997-103.86489		

Sample ID: FS 24 0.5 (H242877-23)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/26/2024	ND	1.90	94.9	2.00	23.9	
Toluene*	<0.050	0.050	05/26/2024	ND	1.98	99.1	2.00	23.0	
Ethylbenzene*	<0.050	0.050	05/26/2024	ND	2.06	103	2.00	22.3	
Total Xylenes*	<0.150	0.150	05/26/2024	ND	6.34	106	6.00	22.0	
Total BTEX	<0.300	0.300	05/26/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	05/30/2024	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	05/24/2024	ND	187	93.4	200	0.623	
DRO >C10-C28*	<10.0	10.0	05/24/2024	ND	205	103	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	05/24/2024	ND					
Surrogate: 1-Chlorooctane	96.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107 9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Received by OCD: 12/17/2024 7:20:14 AM

Project Manager: Troomy PIO.#: Address: 601 Manager: Troomy YC English Project Amme: YUL 30: 7000 Fax # Company: YC English Project Amme: YUL 30: 7000 Fax # Address: State: YC English Address: YC English YC English Address: YC English YC Fig. 200 Fig.

Released to Imaging: 12/23/2024 2:07:52 PM



Delivered By: (Circle One) Sampler - UPS - Bus - Other:	y and the second s	Relinquished By:	affiliates or successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of or related to the performance of the successors arising out of the performance of the successors arising out of the successors are	ns including those for negligence and a nt shall Cardinal be liable for incidental	PLEASE NOTE: Liability and Damagood Cardinalia liability				as FS24	J	Sect 10	1.1	to tomit	Lab I.D. Sample I.D.	FOR LAB USE ONLY	Sampler Name: Tracy Hillard	Project Location: 30, 0091	Project Name: YUA 22 UTI	155	Phone #: 515-937-3906		Address: 601 N Marienfeld Street, Suite 400	Project Manager: Iroucy	Company Name: Ensolum, LLC	101 East Maria (575) 393-232	Labor
Observed Temp. °C	Time:	11	ormance of services heraunde by Cardinal, resulting on the service of the solution of the solu	revenue aux vorinages. Versionals lability and client's exclusive remedy for any client arising whether based in contract or fort, shall has including those for negligence and any other cause whatsover shall be demed waived unlest an table in writing and received by int shall Cardinal be lable for incidental or consecuential damages inclusion using the based in tertain traction								0.0		Depth (feet)			7,-10:5,86489	DP	Project Owner:	Ole Fax #:	State: TX	et, Suite 400	Hillard		101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	Undrones
Gool Intact	Received By:	Jamara	final, regardless of whether such claim is base Received By:	aim arising whether based in contract on ned waived unless made in writing and							-	X	# G S O	G)RAB OR (C)OMF CONTAINERS BROUNDWATER VASTEWATER COIL DIL LUDGE	MATRIX				XTO		Zip: 79701				σ Θ	01
ON CHECKED BY:		Malt	s based upon any of the above stated re-	or tort, shall be limited to the amount pak received by Cardinal within 30 days after								X 5.2.0	A	OTHER : CID/BASE: CE / COOL THER :	PRESERV. SAM	Fax #:	Phone #: 432. (0/01.057	State: NW Zip: 80	city: Carlsbad	E.	Attn: Anny Ruth	Company: XTO STALGU	P.O. #:	BILL TO		
Turnaround Time:	111-10	All Results are emailed. BBelill@ensolum.com,	lient, Its subsidiaries, asons or otherwise.	d by the client for the r completion of the applicable				(())	1745	1252	1250 1 1	TX SH21	⊢	TPH 8015 3TEX 8021	SAMPLING		.0571	00003		Growne	th'	erqu				
	(0) DOD IS I LONI	Please provi Morrissey@e										+	(Chloride 4500										ANALYSIS F		
\ Bacteria (only) Sample Condition Cool Intact Observed Temp. ℃ TYes		rd@ensolum.com		-																				REQUEST	()0)	

Received by OCD: 12/17/2024 7:20:14 AM

Page 28 of 28

Page 206 of 216

From:	Tacoma Morrissey	
То:	Wells, Shelly, EMNRD	
Cc:	Brown, Colton S	
Subject:	[EXTERNAL] RE: NAPP2411631990 POKER LAKE UNIT 22 DTD PAD D	
Date:	Monday, December 23, 2024 10:40:52 AM	
Attachments:	image001.png image002.png image003.png	

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

Hi Shelly,

Attached are photos 2 and 3. Unfortunately when getting the pdf to a proper size to submit sometimes the photos become grainy. The temporary lined containment was within the release extent already, so sampling was completed as part of the release extent. I'm confirming with the staff onsite if they have any additional photos from the section of the excavation taken to 4 feet bgs. One of the staff onsite confirmed they did not take photos, but I'm hoping the second staff onsite did. I'll let you know- we have reiterated to our staff that these photos are critical.

The lined containment was removed before delineation activities which is why it was not included in the figures. However, the release description states "...a pump failure resulted in the release of 18 barrels (bbls) of produced water into a temporary lined containment area, onto the pad surface, and into the adjacent pasture area." Though the containment was removed, some equipment, visible in the Work Plan photolog, impeded delineation to be completed beneath the area that the containment had been, so we proposed confirmation sampling to confirm if impacts existed beneath that area. The Work Plan proposed sampling prior to excavation, but based on surface soil sample screenings, the entire release extent was excavated to at least 1-foot bgs prior to confirmation soil sampling and submittal to the laboratory.

Hope this helps, please let me know of any other questions.

Thanks,



Tacoma Morrissey Associate Principal 337-257-8307 Ensolum, LLC in f X

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, December 23, 2024 10:36 AM
To: Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: NAPP2411631990 POKER LAKE UNIT 22 DTD PAD D

[**EXTERNAL EMAIL**]

Hi Tacoma,

I am reviewing the remediation closure report for the following release NAPP2411631990 POKER LAKE UNIT 22 DTD PAD D and have two questions for you. Do you possibly have any better excavation photos? Photos 2 and 3 that are in the closure report are grainy, specifically. Your backfill photograph 4 is perfect. If you have a clearer photo of the entire excavation as well as the deeper parts of the excavation that would be appreciated. Also, in the 9/17/24 approved remediation plan, it was stated the area below the temporary lined containment that has been removed would be sampled. No mention of sampling around that area was made in the remediation summary. Was this done? As its location was never clearly pointed out in the Figure, I can not tell.

I appreciate hearing back from you when you are able to get back to me.

I hope you have a Merry Christmas,

Shelly

Shelly Wells * Environmental Specialist-Advanced Environmental Bureau EMNRD-Oil Conservation Division 1220 S. St. Francis Drive|Santa Fe, NM 87505 (505)469-7520<u>|Shelly.Wells@emnrd.nm.gov</u> http://www.emnrd.state.nm.us/OCD/

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

Page 209 of 216

QUESTIONS

Action 412707

QUESTIONS		
Operator:	OGRID:	
XTO ENERGY, INC	5380	
6401 Holiday Hill Road	Action Number:	
Midland, TX 79707	412707	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2411631990
Incident Name	NAPP2411631990 POKER LAKE UNIT 22 DTD PAD D @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

Location of Release Source

Please answer all the questions in this group.	
Site Name	POKER LAKE UNIT 22 DTD PAD D
Date Release Discovered	04/09/2024
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	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	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 18 BBL Recovered: 0 BBL Lost: 18 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
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)	Not answered.

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS, Page 2

Action 412707

QUESTIONS (continued)		
Operator:	OGRID:	
XTO ENERGY, INC	5380	
6401 Holiday Hill Road	Action Number:	
Midland, TX 79707	412707	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

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 Subsection A of 19.15.29.7 NMAC	No	
Reasons why this would be considered a submission for a notification of a major release	Unavailable.	
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 Paragraph (4) of Subsection B of 19.15.29.8 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 Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.		
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.		
I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 09/10/2024	

Page	210	of 216

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS	(continued)
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Operator:	UGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	412707
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site	Characterization
------	------------------

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)	
What method was used to determine the depth to ground water	U.S. Geological Survey	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)	
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)	
Any other fresh water well or spring	Between 1 and 5 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
A wetland	Between ½ and 1 (mi.)	
A subsurface mine	Greater than 5 (mi.)	
An (non-karst) unstable area	Between 1 and 5 (mi.)	
Categorize the risk of this well / site being in a karst geology	Low	
A 100-year floodplain	Between ½ and 1 (mi.)	
Did the release impact areas not on an exploration, development, production, or storage site	Yes	

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the	e appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes	
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination a	ssociated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Was this release entirely contained within a lined containment area	No	
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride (EPA 300.0 or SM4500 Cl B)	2360	
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	34.1	
GRO+DRO (EPA SW-846 Method 8015M)	34.1	
BTEX (EPA SW-846 Method 8021B or 8260B)	0	
Benzene (EPA SW-846 Method 8021B or 8260B)	0	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed e which includes the anticipated timelines for beginning and completing the remediation.	fforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,	
On what estimated date will the remediation commence	04/26/2024	
On what date will (or did) the final sampling or liner inspection occur	11/18/2024	
On what date will (or was) the remediation complete(d)	11/18/2024	
What is the estimated surface area (in square feet) that will be reclaimed	22275	
What is the estimated volume (in cubic yards) that will be reclaimed	845	
What is the estimated surface area (in square feet) that will be remediated	22275	
What is the estimated volume (in cubic yards) that will be remediated	845	
These estimated dates and measurements are recognized to be the best guess or calculation at the ti		

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 3

Action 412707

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

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QUESTIONS, Page 4

Action 412707

QUESTIONS (continued)		
Operator:	OGRID:	
XTO ENERGY, INC	5380	
6401 Holiday Hill Road	Action Number:	
Midland, TX 79707	412707	
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Remediation Plan (continued)

Remediation Fian (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the This remediation will (or is expected to) utilize the following processes to remediate	
(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed ef which includes the anticipated timelines for beginning and completing the remediation.	fforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

Date: 12/17/2024

General Information Phone: (505) 629-6116

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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

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QUESTIONS, Page 5

Action 412707

QUESTIONS (continued)	
Operator: OGRID:	
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	412707
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only		
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.		
Requesting a deferral of the remediation closure due date with the approval of this submission	No	

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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:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	412707
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	394400
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/24/2024
What was the (estimated) number of samples that were to be gathered	130
What was the sampling surface area in square feet	23000

Remediation Closure Request

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Only answer the questions in this group if seeking remediation closure for this release because all r	remediation steps have been completed.
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	25728
What was the total volume (cubic yards) remediated	1900
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	25728
What was the total volume (in cubic yards) reclaimed	1900
Summarize any additional remediation activities not included by answers (above)	Site assessment and excavation activities were conducted at the Site, in accordance with the Work Plan, to address the April 9, 2024 release of produced water. The approved September 10, 2024, Work Plan is included in Appendix C. Laboratory analytical results for excavation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the strictest Table I Closure Criteria. Based on laboratory analytical results, no further remediation is required at this time. The excavation has been backfilled with material purchased locally and recontoured to match pre-existing Site conditions.
	closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of
to report and/or file certain release notifications and perform corrective actions for release the OCD does not relieve the operator of liability should their operations have failed to water, human health or the environment. In addition, OCD acceptance of a C-141 report	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface rt does not relieve the operator of responsibility for compliance with any other federal, state, or tially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed ing notification to the OCD when reclamation and re-vegetation are complete.
	Name: Colton Brown

I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 12/17/2024
----------------------------------------------------	----------------------------------------------------------------------------------------------------------------

Action 412707

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Sante Fe	e Main Office	
Phone: ((505) 476-3441	

General Information Phone: (505) 629-6116

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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

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Action 412707

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QUESTIONS (continued)		
Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380	
	Action Number: 412707	
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	
QUESTIONS		

QUESTIONS

Reclamation Report		
Only answer the questions in this group if all reclamation steps have been completed.		
Requesting a reclamation approval with this submission	No	

General Information Phone: (505) 629-6116

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CONDITIONS

Action 412707

 Operator:
 XTO ENERGY, INC
 0GRID:

 6401 Holiday Hill Road
 Action Number:
 412707

 Midland, TX 79707
 Action Type:
 [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	/ Condition	Condition Date
scwells	Remediation closure approved.	12/23/2024