ENSOLUM

January 27, 2025

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

RE: Updated Remediation Work Plan
CTB 90 (Caballo 23)
Lea County, New Mexico
Western Refining Pipeline LLC
NMOCD Incident Number: nAPP2408539690

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Western Refining Pipeline LLC (Western), presents this *Updated Remediation Work Plan* associated with a release discovered at the CTB 90 (Caballo 23) tank battery (Site). The Site is located on federal land managed by the Bureau of Land Management (BLM) in Unit J, Section 23, Township 25 South, Range 33 East in Lea County, New Mexico (Figure 1).

1.0 SITE BACKGROUND

On March 15, 2024, Western identified a release of approximately 16 barrels (bbls) of crude oil at the Site based on monthly tank gauging data. Following this discovery, a vacuum truck was dispatched, and approximately 1 bbl of crude oil was recovered. Western submitted a Form C-141 to the New Mexico Oil Conservation Division (NMOCD) on March 25, 2024, via the NMOCD Permitting database. The release was assigned NMOCD Incident Number nAPP2408539690.

Following the discovery of the release, Ensolum mapped the surface extent of the impacts and collected three surface samples at the Site on March 15, 2024 (Figure 2). Soil samples SS1 through SS3 were collected and submitted to Eurofins Environment Testing (Eurofins) for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) following United States Environmental Protection Agency (EPA) Method 8021B, total petroleum hydrocarbons (TPH)–gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) following EPA Method 8015M/D, and chloride following EPA Method 300.0. Concentrations of total BTEX and total TPH exceeding the NMOCD Table I Closure Criteria were detected in samples SS1, SS2, and SS3.

Based on the soil analytical data collected at the Site and the volume of the release, petroleum hydrocarbon-impacted soil was assumed to be present from the ground surface to a depth of approximately 2 feet below ground surface (bgs). Western submitted a *Remediation Work Plan* (prepared by Ensolum, April 16, 2024) to the NMOCD for review and approval. The *Remediation Work Plan* described the proposed remediation and sampling activities at the Site, including the

use of soil shredding technology to treat impacted soil onsite. The NMOCD approved the *Remediation Work Plan* on April 29, 2024.

1.1 SITE CHARACTERIZATION AND CLOSURE CRITERIA

As part of the Site investigation, local geology/hydrogeology, and nearby sensitive receptors (shown on Figure 1) were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC). As presented in Ensolum's *Remediation Work Plan*, the nearest significant watercourse and wetland to the Site is an unnamed riverine located approximately 7,630 feet north of the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake.

The nearest fresh-water well is New Mexico Office of the State Engineer (NMOSE) permitted well C-02373, located approximately 7,965 feet northwest of the Site. The recorded depth to water on the NMOSE database is 180 feet below ground surface (bgs); however, because the distance between the Site and this water well is greater than ½-mile, the depth to water below the Site is unknown.

The Site is located more than 200 feet from any lakebed, sinkhole, or playa lake, and over 300 feet from any wetland. There are no wellhead protection areas, springs, or domestic/stock wells within ½ mile of the Site. Additionally, the Site is not within a 100-year floodplain, does not overlie a subsurface mine, and is not underlain by unstable geology (not designated as high-potential karst by the BLM). No schools, hospitals, institutions, churches, or other occupied permanent structures are located within 300 feet of the Site.

Based on the information presented above and in accordance with the *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 of the NMAC), the following "Closure Criteria" are applied to the Site constituents of concern (COCs) based on the proximity to a significant watercourse:

- Benzene: 10 milligrams per kilogram (mg/kg)
- BTEX: 50 mg/kg
- (TPH as a combination of GRO, DRO, and MRO: 100 mg/kg
- Chloride: 600 mg/kg

2.0 2024 EXCAVATION AND CONFIRMATION SOIL SAMPLING ACTIVITIES

Ensolum mobilized to the Site with an excavation crew on April 19, 2024. The release was located within a Western and an EOG pipeline right-of-way, requiring the pipelines to be daylighted before excavation activities could proceed. On April 23, 2024, Ensolum returned to the Site with a hydrovac crew, accompanied by representatives from Marathon and EOG. Due to the proximity of the EOG pipelines, an EOG operator was required to be present during excavation near their line, and a 48-hour notice was required before digging. After the pipelines were properly exposed, excavation began on April 24, 2024. No confirmation samples were collected during this mobilization because field screening with a calibrated photoionization detector (PID) indicated impacts were still present.

At the request of EOG, their lines were re-daylighted using a hydrovac on May 15, 2024, as the spotting holes had filled with windblown silt. Excavation activities resumed once the lines were properly exposed. During excavation activities, the floor and sidewalls were periodically field screened with a calibrated PID prior to sampling. Confirmation samples were collected as five-point composite floor samples (FS01 through FS06) and sidewall samples (SW01 through SW05) at a frequency of one sample per 200 square feet. Five-point composite samples were prepared

by combining five equivalent aliquots of soil into a 1-gallon resealable plastic bag and thoroughly homogenizing the mixture. The samples were then submitted to Eurofins for analysis of TPH, BTEX, and chloride. The NMOCD was notified at least 48 hours in advance of the sampling activities conducted at the Site, and all notifications and correspondence with the NMOCD are included in Appendix A.

Analytical results for FS01, FS03, FS05, and SW01 exceeded the NMOCD Closure Criteria of 100 mg/kg for total TPH. Based on results from samples collected May 15, 2024, Ensolum conducted additional soil removal on May 24, 2024, and collected an additional five-point composite confirmation floor soil sample labeled FS05A. As indicated by the analytical results, FS05A was compliant with the NMOCD Closure Criteria; however, impacts remained in place at FS01, FS03, SW01, and overlying the EOG operated lines.

On July 9, 2024, Ensolum returned to the Site to continue excavation activities to the maximum extent practicable (MEP) and collect additional confirmation samples. Floor samples FS03A, FS07 though FS16, and sidewall samples SW06 through SW10 were collected and submitted to Eurofins for analysis of BTEX, TPH, and chloride. Of these samples, FS03A and FS13 were in exceedance of the NMOCD Closure Criteria for total TPH. The excavation extent and sample locations are shown on figure 3. Analytical results are summarized in Table 1, with complete laboratory analytical reports included in Appendix B. Photographs taken during excavation efforts are included in Appendix C.

3.0 SOIL SHREDDING RESULTS

Due to the extent of the impacts, the volume of impacted soil, and the Site's remote location, soil shredding was selected as the remediation technique, as outlined in the approved *Remediation Work Plan*. Following excavation, the impacted soil was processed through a soil shredding unit, where a hydrogen peroxide solution was applied. A total of 588 cubic yards of impacted soil were treated. After treatment, the soil was placed into 100-cubic-yard stockpiles and left to process for 2 months, allowing the oxidant to degrade petroleum hydrocarbon contaminants. After this period, five-point composite soil samples were collected from each stockpile for analysis. Based on the delineation results and the proposed analysis in the *Remediation Work Plan*, chloride was excluded from the confirmation soil sampling.

On September 20, 2024, five-point composite soil samples were collected from six stockpiles (CTB 90-1 through CTB 90-6) and submitted to Cardinal Laboratories (Cardinal) for analysis of TPH and BTEX. Results from the initial soil shredding operations indicated total TPH concentrations in the stockpiled soil exceeded the NMOCD Closure Criteria, ranging from 4,010 mg/kg to 5,180 mg/kg (Table 1).

The stockpiled soil was processed through the soil shredding unit a second time and allowed to process for 1 month. On October 16, 2024, the stockpiled soil was resampled and submitted to Cardinal for analysis of TPH and BTEX (CTB 90-7 through CTB 90-12). Results from the second shredding process showed TPH concentrations still exceeded the NMOCD Closure Criteria, ranging from 2,640 mg/kg to 3,660 mg/kg. The second shredding process reduced TPH concentrations by an average of 32.6 percent (%), but no biological amendments, such as Micro-Blaze®, were applied during the operation.

4.0 PROPOSED ADDITIONAL REMEDIATION

Soil sample results indicate petroleum hydrocarbon impacts from the March 2024 crude oil release have been successfully remediated, except in the areas around FS01, FS03, FS13, and SW01. Additionally, 588 cubic yards of stockpiled soil still exceed the NMOCD Closure Criteria for TPH. All other confirmation samples collected from the excavation meet the NMOCD Table I Closure Criteria.

The remaining TPH-impacted soil near FS01, FS03, and SW01 is located adjacent to Western's pig launcher system, while FS13 is directly above an active EOG pipeline. Based on the low-level TPH concentrations at FS13, the impacted soil appears to be *de minimis* in both volume and depth. The petroleum hydrocarbon-impacted soil near the pig launcher has been fully delineated laterally and vertically. A sample collected from the most impacted material beneath the pig launcher (CS01) indicated TPH concentrations of 7,190 mg/kg. To further delineate the area, three hand-auger boreholes (BH01 through BH03) were advanced around the pig launcher. All samples from the boreholes were non-detect for TPH, indicating the limited lateral and vertical extent. The location of the delineation boreholes are shown on Figure 3.

Ensolum proposes to remediate the existing impacts near FS01, FS03, SW01, and FS13 using an in-situ biological amendment with Micro-Blaze® Emergency Liquid Spill Control. Micro-Blaze® will also be applied to the soil shredding stockpiles to enhance remediation, with the stockpiles mechanically turned after treatment.

An initial application of Micro-Blaze® will target hydrocarbon impacts in areas where excavation is not feasible due to the proximity of existing infrastructure, such as the pig launcher and nearby EOG flowlines. Micro-Blaze®, a microbial solution designed to break down and digest hydrocarbons, was chosen because the TPH impacts consist primarily of carbon chains in the TPH-GRO and TPH-DRO ranges, which are more conducive to biodegradation. For the initial application, a 3% diluted Micro-Blaze® solution (prepared at a ratio of 3 parts Micro-Blaze® to 97 parts potable water) will be applied to saturate the impacted soil at a rate of 1 gallon per 10 cubic yards. The solution will be delivered using a handheld sprayer to the areas around FS01, FS03, SW01, FS13, and the stockpiled soil. This treatment will initiate microbial breakdown of hydrocarbons in the treated areas. The Micro-Blaze® product information sheet is included as Appendix D.

After a minimum of 28 days, post-application monitoring will be conducted to assess the effectiveness of the initial Micro-Blaze® treatment. Five-point composite soil samples will be recollected at least every 200 square feet from FS01, FS03, SW01, and FS13, as well as from treated the treated stockpiles. All samples will be submitted to Eurofins for analysis of BTEX and TPH. If the laboratory results indicate the treated samples still exceed NMOCD Closure Criteria, a second application of Micro-Blaze® will be implemented.

If required, a second application of Micro-Blaze® will involve re-saturating the impacted soil with a 10% diluted solution (prepared at a ratio of 10 parts Micro-Blaze® to 90 parts water) using the same procedure as the first application. Following a 28-day infiltration period, post-application confirmation sampling will be conducted at the same locations and from the stockpiles to determine if Closure Criteria have been met. If samples meet the Closure Criteria, the stockpiled soil will be used to backfill the excavation. If samples exceed Closure Criteria near or beneath infrastructure that cannot be disturbed, a deferral request may be submitted to the NMOCD. For stockpile soil exceeding Closure Criteria, the impacted soil will be hauled to a licensed waste disposal facility, and the excavation will be backfilled with clean fill.

We appreciate the opportunity to provide this *Updated Remediation Work Plan* to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,
Ensolum, LLC

Wes Weichert, PG (Licensed in WY)
Project Geologist
(816) 266-8732
wweichert@ensolum.com

Devin Hencmann
Senior Managing Geologist
(970) 403-6023
dhencmann@ensolum.com

Attachments:

Figure 1: Site Receptor Map
Figure 2: Initial Release Extent
Figure 3: Excavation Extent and Confirmation Samples

Table 1: Soil Sample Analytical Results

Appendix A: Agency Correspondence
Appendix B: Laboratory Analytical Reports
Appendix C: Site Photographs
Appendix D: Micro-Blaze® Product Information

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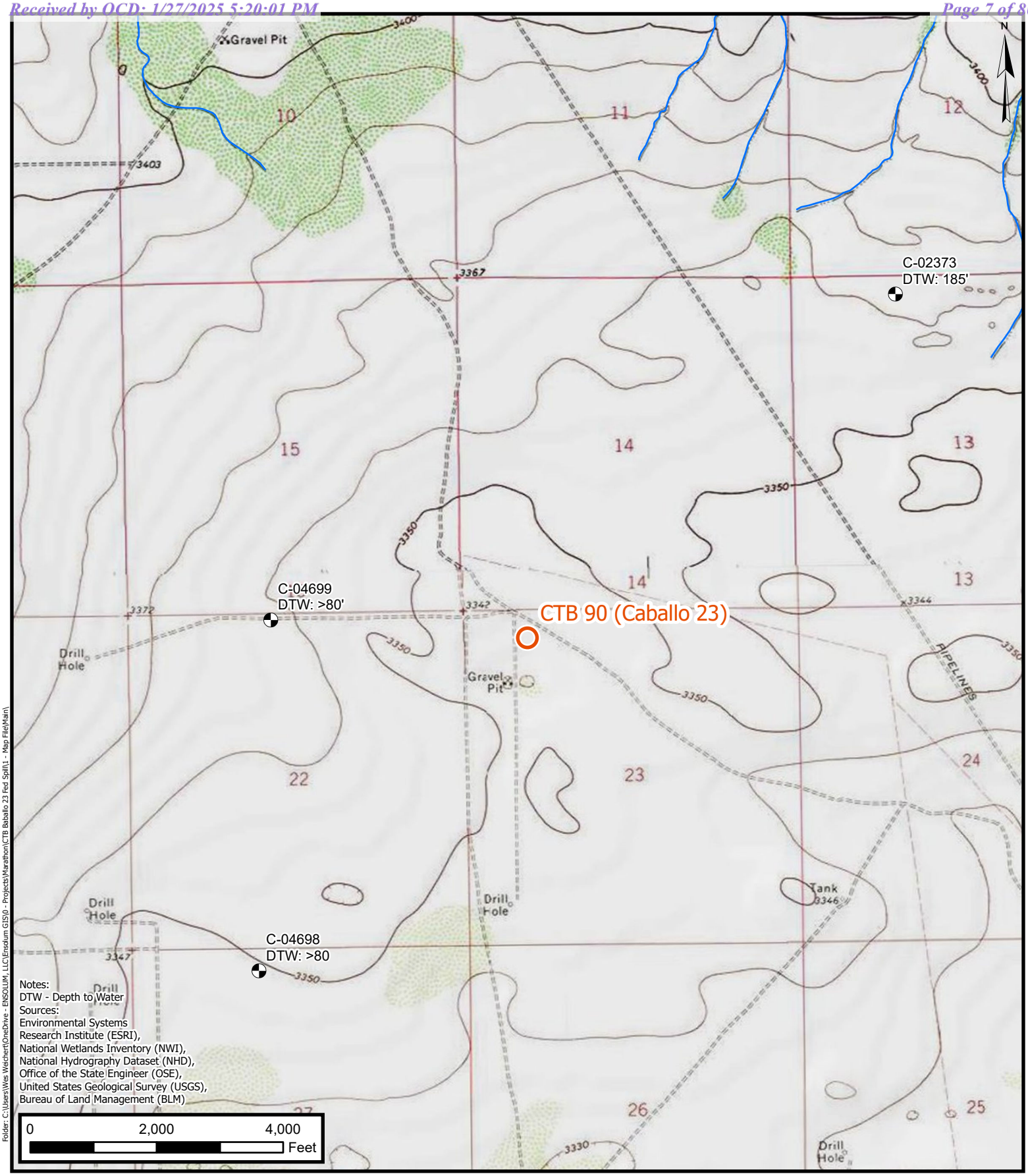
FIGURES



Folder: C:\Users\Wes Weichert\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Marathon\CTB Baballo 23 Fed Spill\1 - Map File\Main\

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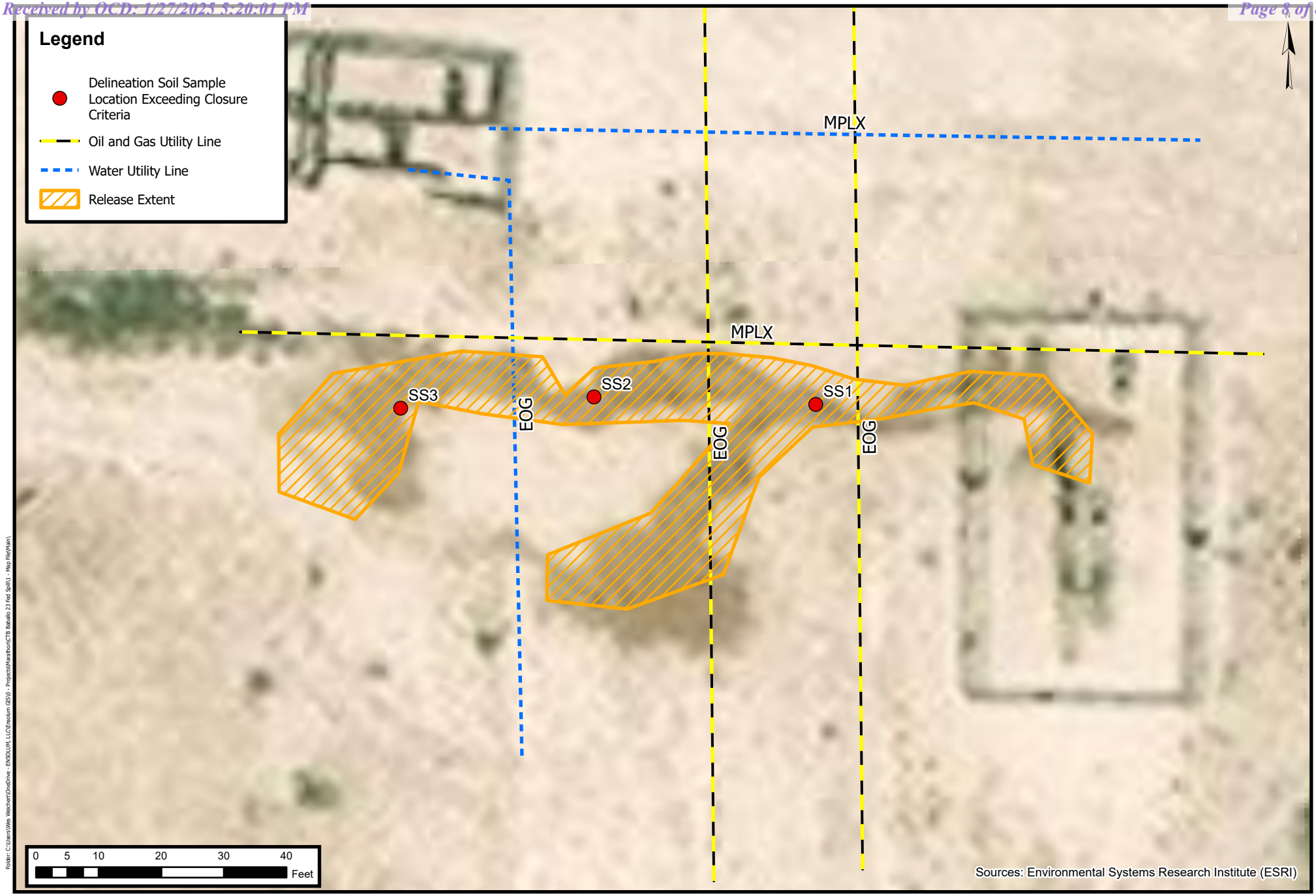
Site Receptor Map

Western Refining Pipeline LLC.
CTB 90 (Caballo 23)
Incident Number: nAPP2408539690
Unit J, Sec 23, T25S, R33E
Lea County, New Mexico, United States

FIGURE 1



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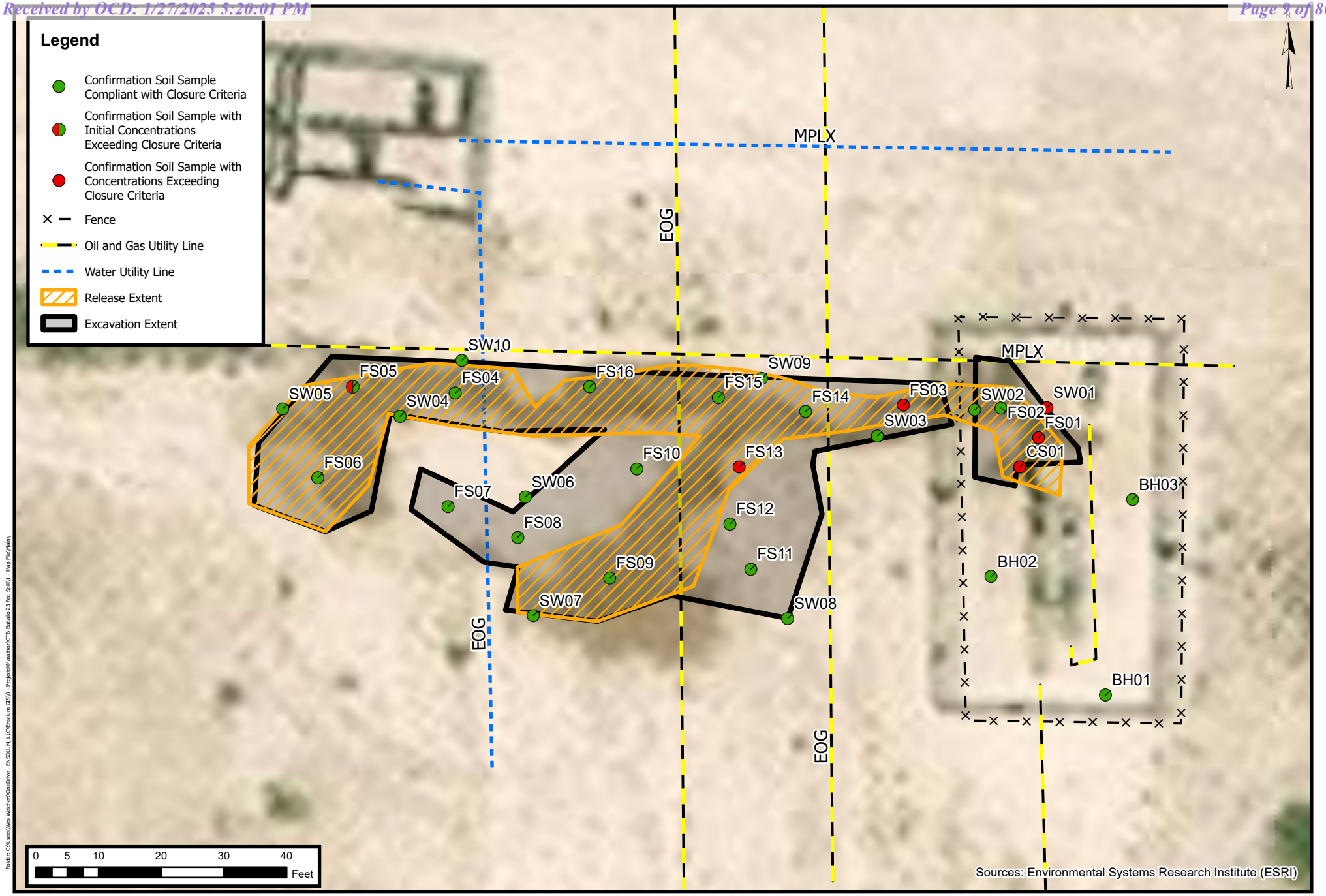
Initial Release Extent

Western Refining Pipeline LLC.
CTB 90 (Caballo 23)
Incident Number: nAPP2408539690
Unit J, Sec 23, T25S, R33E
Lea County, New Mexico, United States

FIGURE 2



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Excavation Extent and Confirmation Samples

Western Refining Pipeline LLC.
CTB 90 (Caballo 23)
Incident Number: nAPP2408539690
Unit J, Sec 23, T25S, R33E
Lea County, New Mexico, United States

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
CTB 90 (Caballo 23)
Marathon Petroleum
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
Delineation Surface Soil Samples										
~~SS1~~	~~3/15/2024~~	~~0.5~~	~~<0.0200~~	~~0.0471~~	~~<49.7 U~~	~~116~~	~~<49.7 U~~	~~116~~	~~116~~	~~72.1~~
~~SS2~~	~~3/15/2024~~	~~0.5~~	~~**63.1**~~	~~**928**~~	~~11,000~~	~~16,800~~	~~674~~	~~**27,800**~~	~~**28,500**~~	~~71.2~~
~~SS3~~	~~3/15/2024~~	~~0.5~~	~~**16.1**~~	~~**623**~~	~~10,900~~	~~17,900~~	~~787.0~~	~~**28,800**~~	~~**29,600**~~	~~51.1~~
Excavation Confirmation Soil Samples										
FS01	05/15/2024	4	0.00796	0.0918	<50.0	213	<50.0	213	**213**	<5.00
FS02	05/15/2024	4	<0.00201	0.116	<49.8	105	<49.8	105	105	26.7
~~FS03~~	~~05/15/2024~~	~~4~~	~~0.00587~~	~~0.144~~	~~<50.0~~	~~290~~	~~<50.0~~	~~290~~	~~**290**~~	~~<5.00~~
FS 03A	7/9/2024	4	<0.00200	<0.00400	<49.8	524	<49.8	524	**524**	33.3
FS04	05/15/2024	4	<0.00198	0.0624	<49.8	75.1	<49.8	75	75.1	<4.97
~~FS05~~	~~05/15/2024~~	~~4~~	~~<0.00198~~	~~0.00992~~	~~<49.9~~	~~422~~	~~<49.9~~	~~422~~	~~**422**~~	~~6.34~~
FS05A	5/24/2024	4.5	0.00258	0.147	<50.0	91.6	<50.0	91.6	91.6	97.2
FS06	05/15/2024	4	<0.00200	0.038	<49.8	<49.8	<49.8	<49.8	<49.8	6.57
FS 07	7/9/2024	4	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	68.3
FS 08	7/9/2024	4	<0.00201	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	52.8
FS 09	7/9/2024	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	36.3
FS 10	7/9/2024	4	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	65.9
FS 11	7/9/2024	4	<0.00199	0.00438	<49.9	<49.9	<49.9	<49.9	<49.9	<4.99
FS 12	7/9/2024	4	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	<49.7	36.2
FS 13	7/9/2024	4	<0.00201	0.0531	<49.9	112	<49.9	112	**112**	35.9
FS 14	7/9/2024	4	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	28.7
FS 15	7/9/2024	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	48
FS 16	7/9/2024	4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	63.8
SW01	05/15/2024	0-4	0.00733	0.0935	<49.8	208	<49.8	208	**208**	10.9
SW02	05/15/2024	0-4	0.0129	0.276	<49.9	<49.9	<49.9	<49.9	<49.9	16.8
SW03	05/15/2024	0-4	<0.00199	0.0125	<50.0	<50.0	<50.0	<50.0	<50.0	5.21
SW04	05/15/2024	0-4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	<4.95
SW05	05/15/2024	0-4	<0.00200	0.0251	<49.8	<49.8	<49.8	<49.8	<49.8	<5.03
SW06	7/9/2024	0-4	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	<49.7	17
SW07	7/9/2024	0-4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	15
SW08	7/9/2024	0-4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	11
SW09	7/9/2024	0-4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	35

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
CTB 90 (Caballo 23)
Marathon Petroleum
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
SW10	7/9/2024	0-4	<0.00200	<0.00399	<50.0	<49.8	<49.8	<49.8	<49.8	40
Soil Shredding Confirmation Samples										
CTB 90-1	9/20/2024	--	<0.025	5.92	427	3,490	666	3,917	**4,580**	--
CTB 90-2	9/20/2024	--	<0.025	9.74	501	3,540	728	4,041	**4,770**	--
CTB 90-3	9/20/2024	--	<0.025	12.6	605	3,830	750	4,435	**5,180**	--
CTB 90-4	9/20/2024	--	<0.025	5.64	392	3,000	618	3,392	**4,010**	--
CTB 90-5	9/20/2024	--	<0.025	6.94	445	3,500	728	3,945	**4,670**	--
CTB 90-6	9/20/2024	--	<0.025	2.97	383	3,700	726	4,083	**4,810**	--
CTB 90-7	10/16/2024	--	<0.025	0.729	166	2,090	419	2,256	**2,680**	--
CTB 90-8	10/16/2024	--	<0.025	1.31	241	2,520	510	2,761	**3,270**	--
CTB 90-9	10/16/2024	--	<0.025	2.47	258	2,430	517	2,688	**3,200**	--
CTB 90-10	10/16/2024	--	<0.025	4.32	334	2,760	569	3,094	**3,660**	--
CTB 90-11	10/16/2024	--	<0.025	2.82	262	2,390	490	2,652	**3,140**	--
CTB 90-12	10/16/2024	--	<0.025	2.3	233	2,240	462	2,473	**2,940**	--
Delineation Samples for Micro-Blaze Application										
CS 01	5/24/2024	0	<0.0398	0.385	429	6,760	<49.9	7,189	**7,190**	118
BH01	7/9/2024	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	-
BH01A	7/9/2024	4	<0.00199	<0.00389	<49.8	<49.8	<49.8	<49.8	<49.8	-
BH02	7/9/2024	0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	-
BH02A	7/9/2024	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	-
BH03	7/9/2024	0.5	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	-
BH03A	7/9/2024	4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	-

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
"<": Laboratory Analytical result is less than reporting limit
--: Not Analyzed / Not Applicable

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
~~Strikethrough~~ : removed during excavation

*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.*
** Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.*

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APPENDIX A

Agency Notifications

Wes Weichert

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, October 28, 2024 11:53 AM
To: Wes Weichert
Cc: Devin Hencmann; Krakow, Matthew J.; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD
Subject: Re: [EXTERNAL] CTB-90 – Caballo 23 (nAPP2408539690) Extension Request

[**EXTERNAL EMAIL**]
Good afternoon Wes,

Thank you for the correspondence.

Your 90-day time extension request is approved. Remediation Due date has been updated to January 27, 2025.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, October 28, 2024 11:29 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] CTB-90 – Caballo 23 (nAPP2408539690) Extension Request

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From: Wes Weichert <wweichert@ensolum.com>
Sent: Monday, October 28, 2024 11:18 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Devin Hencmann <dhencmann@ensolum.com>; Krakow, Matthew J. <MJKrakow@Marathonpetroleum.com>
Subject: [EXTERNAL] CTB-90 – Caballo 23 (nAPP2408539690) Extension Request

Nelson,

On behalf of Western Refining Pipeline LLC, Ensolum respectfully requests a 90-day extension to the Closure deadline for the CTB-90 – Caballo 23 (nAPP2408539690) in order to submit an amended Remediation Work Plan to the NMOCD. We are evaluating the viability of continued soil shredding and looking at alternative options to enhance hydrocarbon reduction.

The requested 90-day extension will allow sufficient time to develop and submit the amended Remediation Work Plan to the NMOCD.

If approved, the new Closure deadline would be **January 26, 2025**.

Thank you for considering this request. Please feel free to contact me if you have any questions or require additional information.

Best regards,

Wes Weichert, PG*
**Licensed in Wyoming*
Project Geologist
816-266-8732
Ensolum, LLC

From: Stuart Hyde
To: Wes Weichert
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 341593
Date: Tuesday, May 7, 2024 11:22:20 AM
Attachments: image001.png
image002.png
image003.png

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

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From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, May 7, 2024 11:21 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 341593

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for Western Refining Southwest LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2408539690.

The sampling event is expected to take place:

When: 05/10/2024 @ 08:30
Where: J-23-25S-33E 0 FNL 0 FEL (32.11185,-103.54721)

Additional Information: Contact PM Stuart Hyde (970-903-1607) or Wes Weichert (816-266-8732)

Additional Instructions: CTB 90 (Caballo 23) GPS: 32.1220574, -103.5484923

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: Wes Weichert
To: Devin Hencmann
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 342922 - CTB 90
Date: Friday, May 10, 2024 10:02:00 AM

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Friday, May 10, 2024 10:01 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 342922

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for Western Refining Southwest LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2408539690.

The sampling event is expected to take place:

When: 05/15/2024 @ 08:30
Where: J-23-25S-33E 0 FNL 0 FEL (32.11185,-103.54721)

Additional Information: Contact PM Stuart Hyde (970-903-1607) or Wes Weichert (816-266-8732)

Additional Instructions: CTB 90 (Caballo 23) GPS: 32.1220574, -103.5484923

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: Wes Weichert
To: Devin Hencmann
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 346156
Date: Tuesday, May 21, 2024 11:50:00 AM

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, May 21, 2024 8:54 AM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 346156

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for Western Refining Southwest LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2408539690.

The sampling event is expected to take place:

When: 05/24/2024 @ 08:30
Where: J-23-25S-33E 0 FNL 0 FEL (32.11185,-103.54721)

Additional Information: Please contact PM Stuart Hyde (970-903-1607) or Wes Weichert (970-903-1607)

Additional Instructions: CTB 90 (Caballo 23) GPS: 32.1220574, -103.5484923

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

From: Stuart Hyde
To: Wes Weichert
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 360582
Date: Tuesday, July 2, 2024 1:55:10 PM
Attachments: image001.png
image002.png
image003.png

Stuart Hyde, PG
(Licensed in WA/TX)
Senior Managing Geologist
970-903-1607
Ensolum, LLC

"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

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From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, July 2, 2024 1:42 PM
To: Stuart Hyde <shyde@ensolum.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 360582

[**EXTERNAL EMAIL**]

To whom it may concern (c/o Stuart Hyde for Western Refining Southwest LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2408539690.

The sampling event is expected to take place:

When: 07/09/2024 @ 08:30
Where: J-23-25S-33E 0 FNL 0 FEL (32.11185,-103.54721)

Additional Information: Contact PM Stuart Hyde 970-903-1607 or Wes Weichert 816-266-8732

Additional Instructions: CTB 90 (Caballo 23) GPS: 32.1220574, -103.5484923

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

ENSOLUM

APPENDIX B

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devin Hencmann
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 3/25/2024 5:24:46 PM

JOB DESCRIPTION

CTB 90 BABALLO 23 FED
07A2015016

JOB NUMBER

890-6368-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

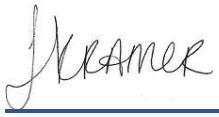
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
3/25/2024 5:24:46 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Laboratory Job ID: 890-6368-1
SDG: 07A2015016

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum Job ID: 890-6368-1
Project: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1 Eurofins Carlsbad

Job Narrative
890-6368-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/18/2024 1:32 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS 1 (890-6368-1), SS 2 (890-6368-2) and SS 3 (890-6368-3).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SS 1 (890-6368-1), SS 2 (890-6368-2) and SS 3 (890-6368-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Batch preparation batch 880-76120 and analytical batch 880-76264 is reported without a matrix spike/matrix spike duplicate (MS/MSD). The batch MS/MSD was originally performed on another client's sample, and this test was canceled at client request. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: SS 1 (890-6368-1). Elevated reporting limits (RLs) are provided.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS 2 (890-6368-2) and SS 3 (890-6368-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-76094 and analytical batch 880-76143 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS 1 (890-6368-1), SS 2 (890-6368-2), SS 3 (890-6368-3), (880-40964-A-5-D MS) and (880-40964-A-5-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-76094 and analytical batch 880-76143 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-76083 and 880-76083 and analytical batch 880-76116 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Case Narrative

Client: Ensolum Job ID: 890-6368-1
Project: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1 (Continued) Eurofins Carlsbad

SS 1 (890-6368-1), SS 2 (890-6368-2), SS 3 (890-6368-3), (880-41060-A-2-B), (880-41060-A-2-C MS) and (880-41060-A-2-D MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Client Sample ID: SS 1

Lab Sample ID: 890-6368-1
Matrix: Solid
Date Collected: 03/15/24 15:35
Date Received: 03/18/24 13:32
Sample Depth: 0.5'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		03/20/24 13:45	03/22/24 17:56	10
Toluene	<0.0200	U	0.0200		mg/Kg		03/20/24 13:45	03/22/24 17:56	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		03/20/24 13:45	03/22/24 17:56	10
m-Xylene & p-Xylene	**0.0471**		0.0400		mg/Kg		03/20/24 13:45	03/22/24 17:56	10
o-Xylene	<0.0200	U	0.0200		mg/Kg		03/20/24 13:45	03/22/24 17:56	10
Xylenes, Total	**0.0471**		0.0400		mg/Kg		03/20/24 13:45	03/22/24 17:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*180*	*S1+*	*70 - 130*	*03/20/24 13:45*	*03/22/24 17:56*	*10*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/20/24 13:45*	*03/22/24 17:56*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0471**		0.0400		mg/Kg			03/22/24 17:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**116**		49.7		mg/Kg			03/21/24 22:48	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/20/24 10:51	03/21/24 22:48	1
Diesel Range Organics (Over C10-C28)	**116**		49.7		mg/Kg		03/20/24 10:51	03/21/24 22:48	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/20/24 10:51	03/21/24 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*59*	*S1-*	*70 - 130*	*03/20/24 10:51*	*03/21/24 22:48*	*1*
o-Terphenyl	*56*	*S1-*	*70 - 130*	*03/20/24 10:51*	*03/21/24 22:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**72.1**		4.96		mg/Kg			03/21/24 00:02	1

Client Sample ID: SS 2

Lab Sample ID: 890-6368-2
Matrix: Solid
Date Collected: 03/15/24 15:40
Date Received: 03/18/24 13:32
Sample Depth: 0.5'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**63.1**		2.02		mg/Kg		03/25/24 10:58	03/25/24 15:16	1000
Toluene	**334**		2.02		mg/Kg		03/25/24 10:58	03/25/24 15:16	1000
Ethylbenzene	**99.9**		2.02		mg/Kg		03/25/24 10:58	03/25/24 15:16	1000
m-Xylene & p-Xylene	**333**		4.03		mg/Kg		03/25/24 10:58	03/25/24 15:16	1000
o-Xylene	**97.9**		2.02		mg/Kg		03/25/24 10:58	03/25/24 15:16	1000
Xylenes, Total	**431**		4.03		mg/Kg		03/25/24 10:58	03/25/24 15:16	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*176*	*S1+*	*70 - 130*	*03/20/24 13:45*	*03/22/24 19:39*	*100*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Client Sample ID: SS 2

Date Collected: 03/15/24 15:40
Date Received: 03/18/24 13:32
Sample Depth: 0.5'

Lab Sample ID: 890-6368-2

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*03/20/24 13:45*	*03/22/24 19:39*	*100*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**928**		4.03	mg/Kg			03/25/24 15:16	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**28500**		248	mg/Kg			03/22/24 00:15	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**11000**		248	mg/Kg		03/20/24 10:51	03/22/24 00:15	5
Diesel Range Organics (Over C10-C28)	**16800**		248	mg/Kg		03/20/24 10:51	03/22/24 00:15	5
Oil Range Organics (Over C28-C36)	**674**		248	mg/Kg		03/20/24 10:51	03/22/24 00:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*552*	*S1+*	*70 - 130*	*03/20/24 10:51*	*03/22/24 00:15*	*5*
o-Terphenyl	*235*	*S1+*	*70 - 130*	*03/20/24 10:51*	*03/22/24 00:15*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**71.2**		4.95	mg/Kg			03/21/24 00:09	1

Client Sample ID: SS 3

Date Collected: 03/15/24 15:45
Date Received: 03/18/24 13:32
Sample Depth: 0.5'

Lab Sample ID: 890-6368-3

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**16.1**		0.0992	mg/Kg		03/20/24 13:45	03/22/24 19:18	50
Toluene	**215**		2.01	mg/Kg		03/25/24 10:58	03/25/24 16:40	1000
Ethylbenzene	**68.7**		1.01	mg/Kg		03/25/24 10:58	03/25/24 14:55	500
m-Xylene & p-Xylene	**247**		2.01	mg/Kg		03/25/24 10:58	03/25/24 14:55	500
o-Xylene	**76.3**		1.01	mg/Kg		03/25/24 10:58	03/25/24 14:55	500
Xylenes, Total	**323**		2.01	mg/Kg		03/25/24 10:58	03/25/24 14:55	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*212*	*S1+*	*70 - 130*	*03/20/24 13:45*	*03/22/24 19:18*	*50*
1,4-Difluorobenzene (Surr)	*57*	*S1-*	*70 - 130*	*03/20/24 13:45*	*03/22/24 19:18*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**623**		2.01	mg/Kg			03/25/24 16:40	1

Client Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Client Sample ID: SS 3

Date Collected: 03/15/24 15:45
Date Received: 03/18/24 13:32
Sample Depth: 0.5'

Lab Sample ID: 890-6368-3

Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	29600		250		mg/Kg			03/22/24 00:36	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	10900		250		mg/Kg		03/20/24 10:51	03/22/24 00:36	5
Diesel Range Organics (Over C10-C28)	17900		250		mg/Kg		03/20/24 10:51	03/22/24 00:36	5
Oil Range Organics (Over C28-C36)	787		250		mg/Kg		03/20/24 10:51	03/22/24 00:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*610*	*S1+*	*70 - 130*	*03/20/24 10:51*	*03/22/24 00:36*	*5*
o-Terphenyl	*257*	*S1+*	*70 - 130*	*03/20/24 10:51*	*03/22/24 00:36*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.1		4.97		mg/Kg			03/21/24 00:17	1

Surrogate Summary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-40948-A-1-E MS	Matrix Spike	102	105
880-40948-A-1-F MSD	Matrix Spike Duplicate	120	98
880-41103-A-1-B MS	Matrix Spike	96	104
880-41103-A-1-C MSD	Matrix Spike Duplicate	102	104
890-6368-1	SS 1	180 S1+	108
890-6368-2	SS 2	176 S1+	67 S1-
890-6368-3	SS 3	212 S1+	57 S1-
LCS 880-76120/1-A	Lab Control Sample	97	104
LCS 880-76470/1-A	Lab Control Sample	85	103
LCSD 880-76120/2-A	Lab Control Sample Dup	100	93
LCSD 880-76470/2-A	Lab Control Sample Dup	94	103
MB 880-76120/5-A	Method Blank	77	97
MB 880-76470/5-A	Method Blank	74	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-40964-A-5-D MS	Matrix Spike	52 S1-	42 S1-
880-40964-A-5-E MSD	Matrix Spike Duplicate	53 S1-	45 S1-
890-6368-1	SS 1	59 S1-	56 S1-
890-6368-2	SS 2	552 S1+	235 S1+
890-6368-3	SS 3	610 S1+	257 S1+
MB 880-76094/1-A	Method Blank	129	148 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-76120/5-A
Matrix: Solid
Analysis Batch: 76264

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76120

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/20/24 13:45	03/22/24 11:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/20/24 13:45	03/22/24 11:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/20/24 13:45	03/22/24 11:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/20/24 13:45	03/22/24 11:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/20/24 13:45	03/22/24 11:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/20/24 13:45	03/22/24 11:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*03/20/24 13:45*	*03/22/24 11:41*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/20/24 13:45*	*03/22/24 11:41*	*1*

Lab Sample ID: LCS 880-76120/1-A
Matrix: Solid
Analysis Batch: 76264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76120

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.0998	0.1181		mg/Kg		118	70 - 130		
Toluene			0.0998	0.1013		mg/Kg		101	70 - 130		
Ethylbenzene			0.0998	0.1016		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.1993		mg/Kg		100	70 - 130		
o-Xylene			0.0998	0.09789		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-76120/2-A
Matrix: Solid
Analysis Batch: 76264

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 76120

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1276		mg/Kg		127	70 - 130	8	35
Toluene			0.100	0.1105		mg/Kg		110	70 - 130	9	35
Ethylbenzene			0.100	0.1100		mg/Kg		110	70 - 130	8	35
m-Xylene & p-Xylene			0.201	0.2152		mg/Kg		107	70 - 130	8	35
o-Xylene			0.100	0.1062		mg/Kg		106	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-41103-A-1-B MS
Matrix: Solid
Analysis Batch: 76264

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 76120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.101	0.1044		mg/Kg		104	70 - 130		
Toluene	<0.00200	U	0.101	0.09086		mg/Kg		90	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-41103-A-1-B MS
Matrix: Solid
Analysis Batch: 76264

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 76120

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethylbenzene	<0.00200	U	0.101	0.09290		mg/Kg		92	70 - 130		
m-Xylene & p-Xylene	<0.00400	U	0.202	0.1837		mg/Kg		91	70 - 130		
o-Xylene	<0.00200	U	0.101	0.09054		mg/Kg		90	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-41103-A-1-C MSD
Matrix: Solid
Analysis Batch: 76264

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 76120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.1116		mg/Kg		113	70 - 130	7	35
Toluene	<0.00200	U	0.0990	0.09573		mg/Kg		96	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0990	0.09658		mg/Kg		98	70 - 130	4	35
m-Xylene & p-Xylene	<0.00400	U	0.198	0.1897		mg/Kg		96	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.09355		mg/Kg		94	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-76470/5-A
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76470

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/24 10:58	03/25/24 11:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/24 10:58	03/25/24 11:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/24 10:58	03/25/24 11:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/25/24 10:58	03/25/24 11:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/24 10:58	03/25/24 11:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/25/24 10:58	03/25/24 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*03/25/24 10:58*	*03/25/24 11:34*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/25/24 10:58*	*03/25/24 11:34*	*1*

Lab Sample ID: LCS 880-76470/1-A
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76470

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1042		mg/Kg		104	70 - 130		
Toluene			0.100	0.08713		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08121		mg/Kg		81	70 - 130		
m-Xylene & p-Xylene			0.200	0.1595		mg/Kg		80	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-76470/1-A
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76470

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.07840		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-76470/2-A
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 76470

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09800		mg/Kg		98	70 - 130	6	35
Toluene			0.100	0.08723		mg/Kg		87	70 - 130	0	35
Ethylbenzene			0.100	0.08214		mg/Kg		82	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1626		mg/Kg		81	70 - 130	2	35
o-Xylene			0.100	0.08061		mg/Kg		81	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-40948-A-1-E MS
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 76470

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0996	0.09590		mg/Kg		96	70 - 130		
Toluene	<0.00199	U	0.0996	0.09390		mg/Kg		93	70 - 130		
Ethylbenzene	<0.00199	U	0.0996	0.09641		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1976		mg/Kg		99	70 - 130		
o-Xylene	<0.00199	U	0.0996	0.09634		mg/Kg		97	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-40948-A-1-F MSD
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 76470

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08068		mg/Kg		81	70 - 130	17	35
Toluene	<0.00199	U	0.100	0.09409		mg/Kg		92	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.100	0.1014		mg/Kg		101	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2184		mg/Kg		109	70 - 130	10	35
o-Xylene	<0.00199	U	0.100	0.1074		mg/Kg		107	70 - 130	11	35

QC Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-40948-A-1-F MSD
Matrix: Solid
Analysis Batch: 76416

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 76470

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-76094/1-A
Matrix: Solid
Analysis Batch: 76143

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76094

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/20/24 10:51	03/21/24 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/20/24 10:51	03/21/24 18:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/20/24 10:51	03/21/24 18:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	03/20/24 10:51	03/21/24 18:25	1
o-Terphenyl	148	S1+	70 - 130	03/20/24 10:51	03/21/24 18:25	1

Lab Sample ID: LCS 880-76094/2-A
Matrix: Solid
Analysis Batch: 76143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76094

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	906.4		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	887.6		mg/Kg		89	70 - 130		

Lab Sample ID: LCSD 880-76094/3-A
Matrix: Solid
Analysis Batch: 76143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 76094

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	869.4		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	864.4		mg/Kg		86	70 - 130	3	20

Lab Sample ID: 880-40964-A-5-D MS
Matrix: Solid
Analysis Batch: 76143

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 76094

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	995	507.5	F1	mg/Kg		47	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U F1	995	406.9	F1	mg/Kg		37	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-40964-A-5-D MS
Matrix: Solid
Analysis Batch: 76143

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 76094

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	52	S1-	70 - 130
o-Terphenyl	42	S1-	70 - 130

Lab Sample ID: 880-40964-A-5-E MSD
Matrix: Solid
Analysis Batch: 76143

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 76094

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	995	591.4	F1	mg/Kg		55	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	995	426.8	F1	mg/Kg		39	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	53	S1-	70 - 130
o-Terphenyl	45	S1-	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-76083/1-A
Matrix: Solid
Analysis Batch: 76116

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/20/24 20:35	1

Lab Sample ID: LCS 880-76083/2-A
Matrix: Solid
Analysis Batch: 76116

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	248.7		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-76083/3-A
Matrix: Solid
Analysis Batch: 76116

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	245.5		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-41060-A-2-C MS
Matrix: Solid
Analysis Batch: 76116

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2760	F1	2490	5581	F1	mg/Kg		113	90 - 110		

QC Sample Results

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-41060-A-2-D MSD
Matrix: Solid
Analysis Batch: 76116

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2760	F1	2490	5537	F1	mg/Kg		112	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

GC VOA

Prep Batch: 76120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Total/NA	Solid	5035	
890-6368-2	SS 2	Total/NA	Solid	5035	
890-6368-3	SS 3	Total/NA	Solid	5035	
MB 880-76120/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-76120/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-76120/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-41103-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-41103-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 76264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Total/NA	Solid	8021B	76120
890-6368-2	SS 2	Total/NA	Solid	8021B	76120
890-6368-3	SS 3	Total/NA	Solid	8021B	76120
MB 880-76120/5-A	Method Blank	Total/NA	Solid	8021B	76120
LCS 880-76120/1-A	Lab Control Sample	Total/NA	Solid	8021B	76120
LCSD 880-76120/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	76120
880-41103-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	76120
880-41103-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	76120

Analysis Batch: 76416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-2	SS 2	Total/NA	Solid	8021B	76470
890-6368-3	SS 3	Total/NA	Solid	8021B	76470
890-6368-3	SS 3	Total/NA	Solid	8021B	76470
MB 880-76470/5-A	Method Blank	Total/NA	Solid	8021B	76470
LCS 880-76470/1-A	Lab Control Sample	Total/NA	Solid	8021B	76470
LCSD 880-76470/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	76470
880-40948-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	76470
880-40948-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	76470

Analysis Batch: 76433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Total/NA	Solid	Total BTEX	
890-6368-2	SS 2	Total/NA	Solid	Total BTEX	
890-6368-3	SS 3	Total/NA	Solid	Total BTEX	

Prep Batch: 76470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-2	SS 2	Total/NA	Solid	5035	
890-6368-3	SS 3	Total/NA	Solid	5035	
MB 880-76470/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-76470/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-76470/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-40948-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-40948-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

GC Semi VOA

Prep Batch: 76094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Total/NA	Solid	8015NM Prep	
890-6368-2	SS 2	Total/NA	Solid	8015NM Prep	
890-6368-3	SS 3	Total/NA	Solid	8015NM Prep	
MB 880-76094/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-76094/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-76094/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-40964-A-5-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-40964-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 76143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Total/NA	Solid	8015B NM	76094
890-6368-2	SS 2	Total/NA	Solid	8015B NM	76094
890-6368-3	SS 3	Total/NA	Solid	8015B NM	76094
MB 880-76094/1-A	Method Blank	Total/NA	Solid	8015B NM	76094
LCS 880-76094/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	76094
LCSD 880-76094/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	76094
880-40964-A-5-D MS	Matrix Spike	Total/NA	Solid	8015B NM	76094
880-40964-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	76094

Analysis Batch: 76274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Total/NA	Solid	8015 NM	
890-6368-2	SS 2	Total/NA	Solid	8015 NM	
890-6368-3	SS 3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 76083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Soluble	Solid	DI Leach	
890-6368-2	SS 2	Soluble	Solid	DI Leach	
890-6368-3	SS 3	Soluble	Solid	DI Leach	
MB 880-76083/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-76083/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-76083/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-41060-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-41060-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 76116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6368-1	SS 1	Soluble	Solid	300.0	76083
890-6368-2	SS 2	Soluble	Solid	300.0	76083
890-6368-3	SS 3	Soluble	Solid	300.0	76083
MB 880-76083/1-A	Method Blank	Soluble	Solid	300.0	76083
LCS 880-76083/2-A	Lab Control Sample	Soluble	Solid	300.0	76083
LCSD 880-76083/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	76083
880-41060-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	76083
880-41060-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	76083

Lab Chronicle

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Client Sample ID: SS 1

Lab Sample ID: 890-6368-1

Date Collected: 03/15/24 15:35
Matrix: Solid
Date Received: 03/18/24 13:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	76120	03/20/24 13:45	AA	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	76264	03/22/24 17:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76433	03/22/24 17:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			76274	03/21/24 22:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	76094	03/20/24 10:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	76143	03/21/24 22:48	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	76083	03/20/24 09:42	SA	EET MID
Soluble	Analysis	300.0		1			76116	03/21/24 00:02	SMC	EET MID

Client Sample ID: SS 2

Lab Sample ID: 890-6368-2

Date Collected: 03/15/24 15:40
Matrix: Solid
Date Received: 03/18/24 13:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	76120	03/20/24 13:45	AA	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	76264	03/22/24 19:39	MNR	EET MID
Total/NA	Prep	5035			4.96 g	5 mL	76470	03/25/24 10:58	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	76416	03/25/24 15:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76433	03/25/24 15:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			76274	03/22/24 00:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	76094	03/20/24 10:51	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	76143	03/22/24 00:15	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	76083	03/20/24 09:42	SA	EET MID
Soluble	Analysis	300.0		1			76116	03/21/24 00:09	SMC	EET MID

Client Sample ID: SS 3

Lab Sample ID: 890-6368-3

Date Collected: 03/15/24 15:45
Matrix: Solid
Date Received: 03/18/24 13:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	76120	03/20/24 13:45	AA	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	76264	03/22/24 19:18	MNR	EET MID
Total/NA	Prep	5035			4.97 g	5 mL	76470	03/25/24 10:58	MNR	EET MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	76416	03/25/24 14:55	MNR	EET MID
Total/NA	Prep	5035			4.97 g	5 mL	76470	03/25/24 10:58	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	76416	03/25/24 16:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76433	03/25/24 16:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			76274	03/22/24 00:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	76094	03/20/24 10:51	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	76143	03/22/24 00:36	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	76083	03/20/24 09:42	SA	EET MID
Soluble	Analysis	300.0		1			76116	03/21/24 00:17	SMC	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: CTB 90 BABALLO 23 FED

Job ID: 890-6368-1
SDG: 07A2015016

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6368-1	SS 1	Solid	03/15/24 15:35	03/18/24 13:32	0.5'
890-6368-2	SS 2	Solid	03/15/24 15:40	03/18/24 13:32	0.5'
890-6368-3	SS 3	Solid	03/15/24 15:45	03/18/24 13:32	0.5'

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Devin Hencmann	Bill to: (if different)	Ensolum LLC
Company Name:	Ensolum LLC	Company Name:	Ensolum LLC
Address:	776 E 2nd Ave	Address:	776 E 2nd Ave
City, State ZIP:	Durango, CO, 81301	City, State ZIP:	Durango, CO, 81301
Phone:	970 403 6023	Email:	dhencmann@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	CTB 90 Baballo 23Fed	Turn Around	☑ Routine ☐ Rush
Project Number:	07A2015016	Due Date:	5 days
Project Location:	32.122027, -103.548301	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Uriel Santillana		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TNM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.6	
Total Containers:		Corrected Temperature:	4.2	

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
~~$Na_2S_2O_3$: $NaSO_3$~~
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

890-6368 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH	BTEX	Sample Comments
SS1	S	3/15/24	1535	0.5'	Grab	1		X	X	X	Incident ID:
SS2	S	3/15/24	1540	0.5'	G	1		X	X	X	
SS3	S	3/15/24	1545	0.5'	G	1		X	X	X	Cost Center:

Parameters

HS

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	2		2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6368-1
SDG Number: 07A2015016

Login Number: 6368
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6368-1
SDG Number: 07A2015016

Login Number: 6368
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/19/24 11:55 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

CARDINAL Laboratories

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

September 23, 2024

RAYMOND HEMPHILL

BASIN ENVIRONMENTAL SAFETY & TECH

8117 BOURBON ST

OKLAHOMA CITY, OK 73128

RE: MPLX CTB90

Enclosed are the results of analyses for samples received by the laboratory on 09/20/24 15:00.

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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	09/20/2024	Sampling Date:	09/20/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Tamara Oldaker
Project Location:	32.122027-103.548301		

Sample ID: CTB 90-1 (H245745-01)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	**0.164**	0.050	09/20/2024	ND	2.04	102	2.00	2.32	GC-NC1
Ethylbenzene*	**0.640**	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	**5.11**	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTEX	**5.92**	0.275	09/20/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *230 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**427**	25.0	09/23/2024	ND	214	107	200	1.14	
DRO >C12-C28	**3490**	25.0	09/23/2024	ND	219	109	200	1.44	
DRO >C28-C35	**666**	25.0	09/23/2024	ND					
Total TPH C6-C35*	**4580**	25.0	09/23/2024	ND	432	108	400	1.29	

Surrogate: 1-Chlorooctane *122 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *115 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	09/20/2024	Sampling Date:	09/20/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Tamara Oldaker
Project Location:	32.122027-103.548301		

Sample ID: CTB 90-2 (H245745-02)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	**0.350**	0.050	09/20/2024	ND	2.04	102	2.00	2.32	GC-NC1
Ethylbenzene*	**1.03**	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	**8.36**	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTEX	**9.74**	0.275	09/20/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *268 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**501**	25.0	09/23/2024	ND	214	107	200	1.14	
DRO >C12-C28	**3540**	25.0	09/23/2024	ND	219	109	200	1.44	
DRO >C28-C35	**728**	25.0	09/23/2024	ND					
Total TPH C6-C35*	**4770**	25.0	09/23/2024	ND	432	108	400	1.29	

Surrogate: 1-Chlorooctane *140 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *126 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	09/20/2024	Sampling Date:	09/20/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Tamara Oldaker
Project Location:	32.122027-103.548301		

Sample ID: CTB 90-3 (H245745-03)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	**0.497**	0.050	09/20/2024	ND	2.04	102	2.00	2.32	GC-NC1
Ethylbenzene*	**1.19**	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	**10.9**	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTEX	**12.6**	0.275	09/20/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *302 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**605**	25.0	09/23/2024	ND	214	107	200	1.14	
DRO >C12-C28	**3830**	25.0	09/23/2024	ND	219	109	200	1.44	
DRO >C28-C35	**750**	25.0	09/23/2024	ND					
Total TPH C6-C35*	**5180**	25.0	09/23/2024	ND	432	108	400	1.29	

Surrogate: 1-Chlorooctane *154 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *134 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	09/20/2024	Sampling Date:	09/20/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Tamara Oldaker
Project Location:	32.122027-103.548301		

Sample ID: CTB 90-4 (H245745-04)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	**0.183**	0.050	09/20/2024	ND	2.04	102	2.00	2.32	GC-NC1
Ethylbenzene*	**0.404**	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	**5.05**	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTEX	**5.64**	0.275	09/20/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *242 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**392**	25.0	09/23/2024	ND	214	107	200	1.14	
DRO >C12-C28	**3000**	25.0	09/23/2024	ND	219	109	200	1.44	
DRO >C28-C35	**618**	25.0	09/23/2024	ND					
Total TPH C6-C35*	**4010**	25.0	09/23/2024	ND	432	108	400	1.29	

Surrogate: 1-Chlorooctane *134 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *121 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	09/20/2024	Sampling Date:	09/20/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Tamara Oldaker
Project Location:	32.122027-103.548301		

Sample ID: CTB 90-5 (H245745-05)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	**0.254**	0.050	09/20/2024	ND	2.04	102	2.00	2.32	GC-NC1
Ethylbenzene*	**0.670**	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	**6.02**	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTEX	**6.94**	0.275	09/20/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *236 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**445**	25.0	09/23/2024	ND	214	107	200	1.14	
DRO >C12-C28	**3500**	25.0	09/23/2024	ND	219	109	200	1.44	
DRO >C28-C35	**728**	25.0	09/23/2024	ND					
Total TPH C6-C35*	**4670**	25.0	09/23/2024	ND	432	108	400	1.29	

Surrogate: 1-Chlorooctane *127 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *117 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	09/20/2024	Sampling Date:	09/20/2024
Reported:	09/23/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Tamara Oldaker
Project Location:	32.122027-103.548301		

Sample ID: CTB 90-6 (H245745-06)

BTEX 8021B mg/kg **Analyzed By: JH** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	**0.080**	0.050	09/20/2024	ND	2.04	102	2.00	2.32	GC-NC1
Ethylbenzene*	**0.222**	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	**2.67**	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTEX	**2.97**	0.275	09/20/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *190 %* *71.5-134*

TPH TX1005 mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**383**	25.0	09/23/2024	ND	214	107	200	1.14	
DRO >C12-C28	**3700**	25.0	09/23/2024	ND	219	109	200	1.44	
DRO >C28-C35	**726**	25.0	09/23/2024	ND					
Total TPH C6-C35*	**4810**	25.0	09/23/2024	ND	432	108	400	1.29	

Surrogate: 1-Chlorooctane *134 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *132 %* *41.9-170*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Basin Enviromental
Project Manager: Raymond Hemphill
Address: 8117 Bourbon St
City: OKC State: OK Zip: 73128
Phone #: (405) 232-5737 Fax #:
Project #: 03-15-24469 Project Owner:
Project Name: MPLX CTB 90
Project Location: 32.122027 -103.548301
Sampler Name: Shane A. Miller

BILL TO
P.O. #: 03-15-24469
Company: Basin Enviromental
Attn: bestap@basin.com
Address: 8117 bourbon St
City: OKC
State: OK Zip: 74881
Phone #: (405) 232-5737
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	TPH (TX 1005)	BTEX
H245745																
1	CTB 90-1	C	2			✓					✓		9/20/24	10:00 AM	X	X
2	CTB 90-2	C	2			✓					✓		9/20/24	10:10 AM	X	X
3	CTB 90-3	C	2			✓					✓		9/20/24	10:20 AM	X	X
4	CTB 90-4	C	2			✓					✓		9/20/24	10:30 AM	X	X
5	CTB 90-5	C	2			✓					✓		9/20/24	10:40 AM	X	X
6	CTB 90-6	C	2			✓					✓		9/20/24	10:50 AM	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Shane A. Miller Date: 9-20-24 Time: 1500 Received By: Tamara Mckaskle
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #: (405) 612-7285
All Results are emailed. Please provide Email address: rhemphill@basinusa.com
REMARKS:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
Observed Temp. °C 6.6
Corrected Temp. °C 6.0
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) TO.

Turnaround Time: Standard ☐ Rush ☒ 24hrs
Thermometer ID #140
Correction Factor -0.6°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

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

FORM-006 R 3.3 08/05/24

CARDINAL Laboratories

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

October 17, 2024

RAYMOND HEMPHILL

BASIN ENVIRONMENTAL SAFETY & TECH

8117 BOURBON ST

OKLAHOMA CITY, OK 73128

RE: MPLX CTB90

Enclosed are the results of analyses for samples received by the laboratory on 10/16/24 11:16.

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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	10/16/2024	Sampling Date:	10/16/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Alyssa Parras
Project Location:	32.122027-103.548301		

Sample ID: CTB - 90 - 7 (H246300-01)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/17/2024	ND	2.03	102	2.00	9.77	
Toluene*	<0.050	0.050	10/17/2024	ND	2.11	105	2.00	10.9	
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.14	107	2.00	12.4	
Total Xylenes*	**0.729**	0.150	10/17/2024	ND	6.32	105	6.00	11.7	GC-NC1
Total BTEX	**0.729**	0.275	10/17/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *158 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**166**	25.0	10/16/2024	ND	201	101	200	2.12	
DRO >C12-C28	**2090**	25.0	10/16/2024	ND	188	93.8	200	8.43	
DRO >C28-C35	**419**	25.0	10/16/2024	ND					
Total TPH C6-C35*	**2680**	25.0	10/16/2024	ND	389	97.2	400	5.26	

Surrogate: 1-Chlorooctane *116 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *121 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	10/16/2024	Sampling Date:	10/16/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Alyssa Parras
Project Location:	32.122027-103.548301		

Sample ID: CTB - 90 - 8 (H246300-02)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/17/2024	ND	2.03	102	2.00	9.77	
Toluene*	<0.050	0.050	10/17/2024	ND	2.11	105	2.00	10.9	
Ethylbenzene*	<0.050	0.050	10/17/2024	ND	2.14	107	2.00	12.4	
Total Xylenes*	**1.31**	0.150	10/17/2024	ND	6.32	105	6.00	11.7	GC-NC1
Total BTEX	**1.31**	0.275	10/17/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *177 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**241**	25.0	10/16/2024	ND	201	101	200	2.12	
DRO >C12-C28	**2520**	25.0	10/16/2024	ND	188	93.8	200	8.43	
DRO >C28-C35	**510**	25.0	10/16/2024	ND					
Total TPH C6-C35*	**3270**	25.0	10/16/2024	ND	389	97.2	400	5.26	

Surrogate: 1-Chlorooctane *123 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *127 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	10/16/2024	Sampling Date:	10/16/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Alyssa Parras
Project Location:	32.122027-103.548301		

Sample ID: CTB - 90 - 9 (H246300-03)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/16/2024	ND	1.93	96.3	2.00	5.33	
Toluene*	<0.050	0.050	10/16/2024	ND	1.99	99.4	2.00	5.08	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.02	101	2.00	4.48	QM-07
Total Xylenes*	**2.47**	0.150	10/16/2024	ND	6.02	100	6.00	4.46	GC-NC1
Total BTEX	**2.47**	0.275	10/16/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *148 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**258**	25.0	10/16/2024	ND	201	101	200	2.12	
DRO >C12-C28	**2430**	25.0	10/16/2024	ND	188	93.8	200	8.43	
DRO >C28-C35	**517**	25.0	10/16/2024	ND					
Total TPH C6-C35*	**3200**	25.0	10/16/2024	ND	389	97.2	400	5.26	

Surrogate: 1-Chlorooctane *122 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *127 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	10/16/2024	Sampling Date:	10/16/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Alyssa Parras
Project Location:	32.122027-103.548301		

Sample ID: CTB - 90 - 10 (H246300-04)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/16/2024	ND	1.93	96.3	2.00	5.33	
Toluene*	<0.050	0.050	10/16/2024	ND	1.99	99.4	2.00	5.08	GC-NC
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.02	101	2.00	4.48	
Total Xylenes*	**4.32**	0.150	10/16/2024	ND	6.02	100	6.00	4.46	GC-NC1
Total BTEX	**4.32**	0.275	10/16/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *172 %* *71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**334**	25.0	10/16/2024	ND	201	101	200	2.12	
DRO >C12-C28	**2760**	25.0	10/16/2024	ND	188	93.8	200	8.43	
DRO >C28-C35	**569**	25.0	10/16/2024	ND					
Total TPH C6-C35*	**3660**	25.0	10/16/2024	ND	389	97.2	400	5.26	

Surrogate: 1-Chlorooctane *127 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *127 %* *41.9-170*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	10/16/2024	Sampling Date:	10/16/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Alyssa Parras
Project Location:	32.122027-103.548301		

Sample ID: CTB - 90 - 11 (H246300-05)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/16/2024	ND	1.93	96.3	2.00	5.33	
Toluene*	<0.050	0.050	10/16/2024	ND	1.99	99.4	2.00	5.08	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.02	101	2.00	4.48	
Total Xylenes*	**2.82**	0.150	10/16/2024	ND	6.02	100	6.00	4.46	GC-NC1
Total BTEX	**2.82**	0.275	10/16/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID	*161 %*	*71.5-134*

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**262**	25.0	10/16/2024	ND	201	101	200	2.12	
DRO >C12-C28	**2390**	25.0	10/16/2024	ND	188	93.8	200	8.43	
DRO >C28-C35	**490**	25.0	10/16/2024	ND					
Total TPH C6-C35*	**3140**	25.0	10/16/2024	ND	389	97.2	400	5.26	

Surrogate: 1-Chlorooctane	*121 %*	*48.6-153*
Surrogate: 1-Chlorooctadecane	*124 %*	*41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

BASIN ENVIRONMENTAL SAFETY & TECH
RAYMOND HEMPHILL
8117 BOURBON ST
OKLAHOMA CITY OK, 73128
Fax To:

Received:	10/16/2024	Sampling Date:	10/16/2024
Reported:	10/17/2024	Sampling Type:	Soil
Project Name:	MPLX CTB90	Sampling Condition:	Cool & Intact
Project Number:	03-15-24469	Sample Received By:	Alyssa Parras
Project Location:	32.122027-103.548301		

Sample ID: CTB - 90 - 12 (H246300-06)

BTEX 8021B mg/kg **Analyzed By: JH** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	10/16/2024	ND	1.93	96.3	2.00	5.33	
Toluene*	<0.050	0.050	10/16/2024	ND	1.99	99.4	2.00	5.08	
Ethylbenzene*	<0.050	0.050	10/16/2024	ND	2.02	101	2.00	4.48	GC-NC
Total Xylenes*	**2.30**	0.150	10/16/2024	ND	6.02	100	6.00	4.46	GC-NC1
Total BTEX	**2.30**	0.275	10/16/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *152 %* *71.5-134*

TPH TX1005 mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	**233**	25.0	10/16/2024	ND	201	101	200	2.12	
DRO >C12-C28	**2240**	25.0	10/16/2024	ND	188	93.8	200	8.43	
DRO >C28-C35	**462**	25.0	10/16/2024	ND					
Total TPH C6-C35*	**2940**	25.0	10/16/2024	ND	389	97.2	400	5.26	

Surrogate: 1-Chlorooctane *119 %* *48.6-153*

Surrogate: 1-Chlorooctadecane *122 %* *41.9-170*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Basin Environmental
Project Manager:	Raymund Hemphill
Address:	8117 bourbon St
City:	OKC State: OK Zip: 73128
Phone #:	(405) 232-5737 Fax #:
Project #:	03-15-24469 Project Owner:
Project Name:	MPLX CTB 90
Project Location:	32.122027 -103.548301
Sampler Name:	Shane B. Miller

BILL TO

P.O. #:	03-15-24469
Company:	Basin Environmental
Attn:	bestap@basinusa.com
Address:	8117 bourbon St
City:	OKC
State:	OK Zip: 73128
Phone #:	(405) 232-5737
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH (TX 1005)	BTEX
H246300																
1	CTB-90 - 7	C	-			✓					✓		10/16/24	9 AM	X	X
2	CTB-90 - 8	C	1			✓					✓		10/16/24	9:10 AM	X	X
3	CTB-90 - 9	C	1			✓					✓		10/16/24	9:15 AM	X	X
4	CTB-90 - 10	C	1			✓					✓		10/16/24	9:20 AM	X	X
5	CTB-90 - 11	C	1			✓					✓		10/16/24	9:25 AM	X	X
6	CTB-90 - 12	C	1			✓					✓		10/16/24	9:30 AM	X	X

Relinquished By:	Date: 10.16.24	Received By:	
Shane B. Miller	Time: 1116		
Relinquished By:	Date:	Received By:	
	Time:		

Verbal Result: ☐ Yes ☐ No Add'l Phone #: (405) 612-7295
All Results are emailed. Please provide Email address:
rhemphill@basinusa.com
REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 3.3	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☑
Sampler - UPS - Bus - Other:	Corrected Temp. °C 2.7	☑ Yes ☑ Yes ☐ No ☐ No	AD	Thermometer ID #140 Correction Factor -0.6°C 24

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.3 08/05/24

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

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
Western Refining Pipeline LLC.
CTB 90 (Caballo 23)
nAPP2408539690

Photograph: 1 Date: 3/15/2024
Description: Site Location
View: Southwest

Photograph: 2 Date: 3/15/2024
Description: Surface staining under fence near pig
View: Southwest

Photograph: 3 Date: 3/15/2024
Description: Surface staining
View: Northwest

Photograph: 4 Date: 3/15/2024
Description: Release Extent
View: Southeast

ENSOLUM

Photographic Log
Western Refining Pipeline LLC.
CTB 90 (Caballo 23)
nAPP2408539690

Photograph: 5 Date: 4/24/2024
Description: Spotting EOG lines
View: Southwest

Photograph: 6 Date: 10/4/2024
Description: Remaining impacts under pig launcher
View: Southeast

Photograph: 7 Date: 5/24/2024
Description: Excavation Extent May 2024
View: Northwest

Photograph: 8 Date: 7/9/2024
Description: Excavation Extent July 2024
View: Northwest

ENSOLUM

APPENDIX D

Micro-Blaze® Product Information

Micro-Blaze®
MICROBIAL PRODUCTS

Micro-Blaze®

Emergency Liquid Spill Control

PRODUCT INFORMATION

EMERGENCY LIQUID SPILL CONTROL (ELSC)

Micro-Blaze®

Emergency Liquid Spill Control

Micro-Blaze® Emergency Liquid Spill Control is a safe, non-toxic, microbial formulation used for the bioremediation of hydrocarbons and other organic compounds. It breaks down, degrades, and digests organic waste while also suppressing vapors and eliminating flammability. The proprietary combination of wetting agents, nutrients, and microbes makes it an ideal formulation for use on many pollutants found in spills and contaminated sites.

Our microbes are naturally occurring, not genetically engineered, and found in soils and waters all over the earth. These microbes have been carefully researched, tested, and chosen for their affinity to degrade hydrocarbons and other organic waste.

USES

- Clean up hydrocarbon spills/leaks
- Soil bioremediation
- Vapor suppression
- Equipment, tank, and pipeline cleaning

BENEFITS

- Safe and cost-effective method for in-situ bioremediation of contaminated soils and water
- Elimination of vapors and LELs, creating a safe working environment
- Residue and runoff can be safely sent to industrial and municipal WWTPs
- 10-year shelf life and easy to use concentrate make it convenient to maintain on hand for future emergencies or everyday usage
- Listed on EPA NCP List as a bioremediation agent for 30 years*

** This listing does not mean the EPA approves, recommends, licenses, certifies or authorizes the use of Micro-Blaze® Emergency Liquid Spill Control or any other product on an oil discharge. This listing only means that data has been submitted to EPA as required by subpart J of the NCP §300.915.*

REMEDIATES (LIST NOT EXHAUSTIVE)

- Acetone
- Acrylonitrite
- AFFF Waste
- Anti-Freeze
- Aviation Fuels
- Benzene & Benzene Compounds
- Crude Oil
- Diesel Fuel
- Dimethylformanide
- Fats
- Gasoline
- Grease
- Glycols
- Hydrocarbon Waste
- Kerosene
- Methanol
- Methyl Tertiary Butyl Ether (MTBE)
- Motor Oil
- Odor
- Organic Chemical Waste
- Organic Waste
- Paint Sludge
- Pipeline Condensation
- Polyurethane Resin Waste
- Sludge
- Toluene

Product Details

Appearance:
Cream to tan, opaque liquid, perfumed

pH:
7.0 - 8.0

Shelf Life:
10 Years

Storage:
Avoid temperatures over 48°C for long periods of time. Avoid prolonged freezing.

CAUTION: KEEP OUT OF REACH OF CHILDREN. Do not take internally. Avoid contact with eyes. Wash thoroughly after handling. Avoid breathing mist. Contains surfactants (soaps) which may irritate eyes or respiratory system. Use with adequate ventilation.

APPLICATION

Micro-Blaze® is a liquid concentrate and must be diluted before application.

DILUTION
Dilute with water between a 3% solution (3 parts Micro-Blaze®, 97 parts water) and a 10% solution (10 parts Micro-Blaze®, 90 parts water). Shake well before dilution and before application.

APPLICATION
Spray the diluted Micro-Blaze® directly onto the contamination with as much agitation as possible until the area is completely saturated. You can use any delivery system/sprayer, such as hand-held sprayers, fire extinguishers, power washers, CAFS systems, and water trucks.
For soil remediation, tilling the soil after application will help in achieving optimal results, though it is not required where not feasible.

HOW MUCH MICRO-BLAZE® DO I NEED?
1 gallon of Micro-Blaze® concentrate, after diluted, will treat either of the following:

- 10 gallons of spilled contamination
- 500 – 700 square feet of contaminated surface
- 5 – 7 cubic yards of contaminated soil

Contact a Micro-Blaze® sales representative for any additional application questions:
technical@micro-blaze.com

PRODUCT SIZES & SPECS

1 Gallon Pail

SKU	MBELSC-1
Dimensions	8"x8"x12"
Weight	9 lbs

5 Gallon Pail

SKU	MBELSC-5
Dimensions	12"x12"x15"
Weight	47 lbs
	36 pails /pallet

55 Gallon Drum

SKU	MBELSC-55
Dimensions	24"x 24"x35"
Weight	500 lbs
	4 drums/pallet

275 Gallon Tote

SKU	MBELSC-275
Dimensions	40"x48"x45"
Weight	2,500 lbs

330 Gallon Tote

SKU	MBELSC-330
Dimensions	40"x48"x54"
Weight	3,000 lbs

RELATED PRODUCTS:

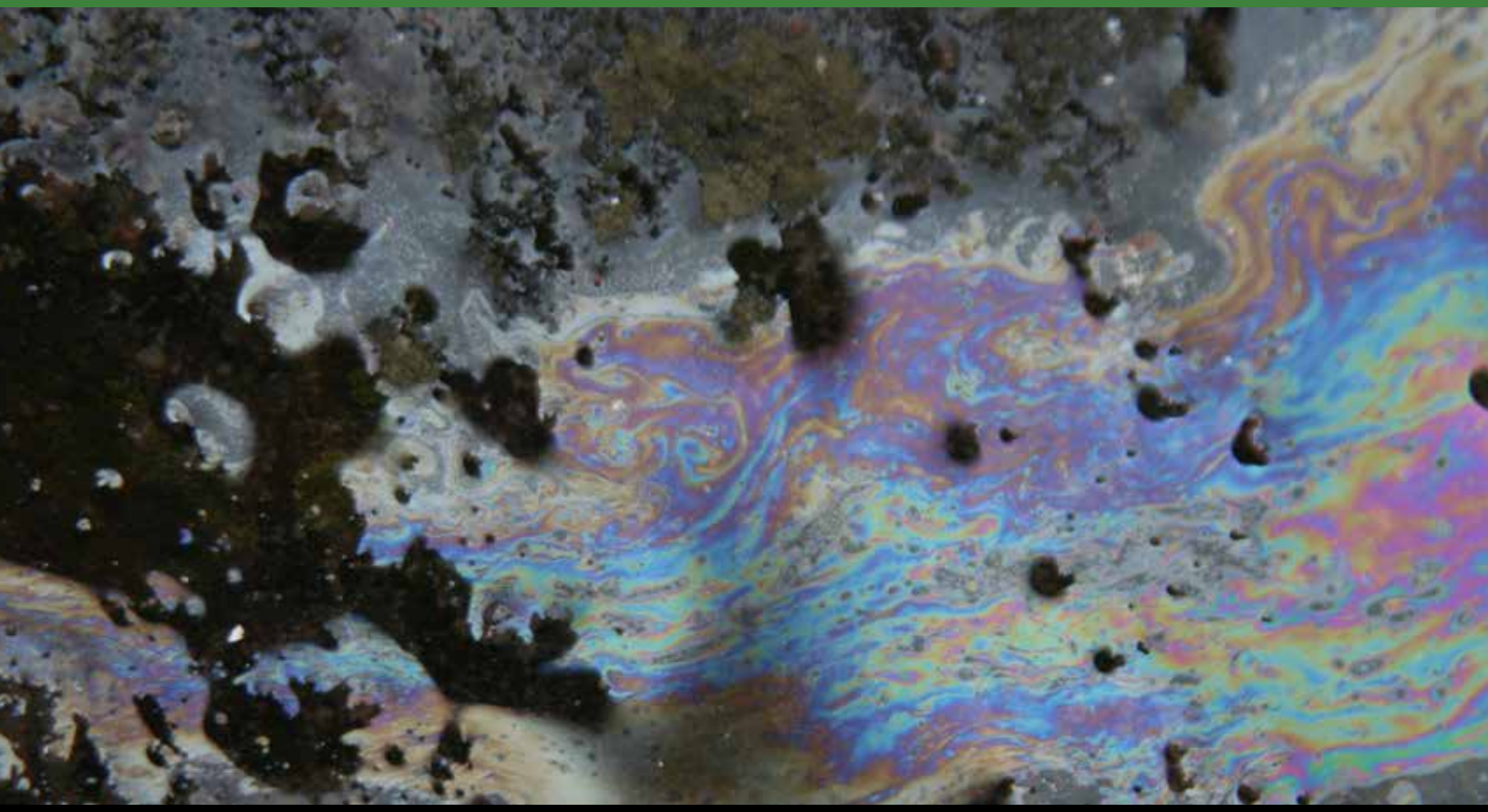
CONCRETE STAIN REMOVER (CSR)

NON-FORMULATED

SCAN FOR MSDS FOR ALL PRODUCTS

PARTNERING WITH NATURE

FOR A CLEANER TOMORROW



Verde Environmental, Inc.
9223 Eastex Freeway
Houston, TX 77093

Office: 713.691.6468
Toll Free: 800.626.6598

www.micro-blaze.com

Version 0522

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

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

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2408539690**
Incident Name	**NAPP2408539690 CTB 90 (CABALLO 23) @ 0**
Incident Type	**Oil Release**
Incident Status	**Remediation Plan Approved**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	CTB 90 (CABALLO 23)
Date Release Discovered	03/15/2024
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil 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	Cause: Normal Operations | Pipeline (Any) | Crude Oil | Released: 16 BBL | Recovered: 1 BBL | Lost: 15 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
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.*

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QUESTIONS (continued)

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 01/27/2025

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QUESTIONS (continued)

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 200 and 300 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 300 and 500 (ft.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 300 and 500 (ft.)
A wetland	Between 300 and 500 (ft.)
A subsurface mine	Between 300 and 500 (ft.)
An (non-karst) unstable area	Between 300 and 500 (ft.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 300 and 500 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the 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 associated 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)	72.1
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	28600
GRO+DRO	(EPA SW-846 Method 8015M)	28800
BTEX	(EPA SW-846 Method 8021B or 8260B)	928
Benzene	(EPA SW-846 Method 8021B or 8260B)	63.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		04/24/2024
On what date will (or did) the final sampling or liner inspection occur		06/13/2024
On what date will (or was) the remediation complete(d)		06/13/2024
What is the estimated surface area (in square feet) that will be reclaimed		2450
What is the estimated volume (in cubic yards) that will be reclaimed		180
What is the estimated surface area (in square feet) that will be remediated		2450
What is the estimated volume (in cubic yards) that will be remediated		180
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
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 (continued)

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	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.)	Yes
(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 efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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: Stuart Hyde Title: Senior Geologist Email: shyde@ensolum.com Date: 01/27/2025
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 (continued)

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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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QUESTIONS (continued)

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**360582**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**07/09/2024**
What was the (estimated) number of samples that were to be gathered	**12**
What was the sampling surface area in square feet	**1800**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 425336
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved with the following conditions; 1. The use of Micro-Blaze for in-situ treatment of impacted soils is approved. The maximum of three (3) applications attempts is authorized. If the third application is unsuccessful, then the responsible party (RP) must dispose of the soils at off-site OCD approved facility. 2. The use of Micro-Blaze for ex-situ treatment is approved. The maximum of three (3) applications attempts is authorized. If the third application is unsuccessful, then the RP must dispose of the soils at off-site OCD approved facility. 3. The RP must complete the treatment (maximum of three) until confirmation samples collected from the vertical and lateral extents report NMOCD Closure Criteria per 19.15.29.12 NMAC has been achieved. 4. RP has 90-days (May 1, 2025) to submit to OCD its appropriate or final remediation closure report.	1/31/2025