ENSOLUM

March 31, 2024

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

Re: Deferral Request Blueberry Hill Fee CTB Incident Number nAPP2403642782 Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Marathon Oil Permian LLC (Marathon), has prepared this *Deferral Request* to document assessment and soil sampling activities at the Blueberry Hill Fee CTB (Site) in Unit G, Section 19, Township 24 South, Range 35 East, in Lea County, New Mexico (Figure 1). The Site (32.20364735° N, 103.402411° W) is associated with oil and gas exploration and production operations on Private Land.

The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water within a lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, Marathon is submitting this *Deferral Request*, describing Site assessment and delineation activities that have occurred and requesting deferral of final remediation for Incident Number nAPP2403642782 until the Site is reconstructed and/or the well pad is abandoned.

BACKGROUND

On February 4, 2024, a recirculating pump packing malfunctioned, resulting in the release of approximately 20 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 20 bbls of released produced water were recovered from within the lined containment. Marathon reported the release to the New Mexico Oil Conservation Division (NMOCD) via web portal on February 5, 2024, and the release was assigned Incident Number nAPP2403642782. A 48-hour advance notice of liner inspection was provided via web portal to the NMOCD on February 9, 2024, and a liner integrity inspection was conducted by Ensolum personnel following fluid recovery. Upon inspection, the liner was determined to be insufficient.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Blueberry Hill Fee CTB

E N S O L U M

Depth to groundwater at the Site is estimated to be 180 feet below ground surface (bgs) based on groundwater depth measurement of a nearby water well. On January 18, 2023, a soil boring (New Mexico Office of the State Engineer (NMOSE file number C-04682 POD1) was drilled nearly 1.21 miles southwest of the Site. Soil boring C-04682 was drilled to a depth of 290 feet bgs. Depth to groundwater was confirmed at 180 feet bgs as indicated on the NMOSE *Point of Diversion Summary* form. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 962 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

SITE ASSESSMENT ACTIVITIES

On February 14, 2024, Ensolum personnel visited the Site to conduct a liner integrity inspection and to complete lateral delineation sampling outside of the lined secondary containment. Four lateral delineation soil samples (SS01 through SS04) were collected at ground surface around each side of the separator containment. The soil samples were field screened for TPH utilizing a PetroFLAG[®] Hydrocarbon Test Kit and chloride using the MOHR method titration. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted in Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix B. Four holes were identified during the liner inspection, and it was determined that further delineation sampling beneath the containment liner would be necessary.

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

DELINEATION ACTIVITIES

Ensolum returned to the Site on February 26, 2024, to conduct delineation activities to assess for the presence or absence of impacts to soil beneath the lined secondary containment. The liner was found to be insufficient during the February 14, 2024, inspection and as such, four boreholes, (BH01 through BH04), were advanced in the general vicinity of the holes in the liner. The boreholes were advanced via hand auger to a terminal depth of 2 feet bgs in boreholes BH01 through BH03 and to a maximum depth

Blueberry Hill Fee CTB

ENSOLUM

of 1.5 feet bgs in borehole BH04. Sols from the boreholes was field screened for TPH and chloride and samples were handled and analyzed as previously described. Field screening results and observations from the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix C. Discrete delineation soil samples were collected at each foot from BH01 through BH03 at 0.5 feet bgs to 2 feet bgs and from BH04 at 0.5 feet to 1.5 feet bgs for laboratory analysis.

Ensolum personnel returned to the Site on March 11, 2024, to recollect lateral delineation soil sample SS01, which exceeded the Site Closure Criteria due to localized surface contamination. Lateral delineation soil sample SS01A was collected at ground surface and submitted for laboratory analysis.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for assessment soil samples (SS01 through SS04), collected around the release extent, indicated all COC concentrations were compliant with Site Closure Criteria except for SS01, which was recollected. Laboratory analytical results for the vertical delineation soil samples collected from borehole BH01 and BH04, indicated TPH and chloride concentrations exceeded the Site Closure Criteria at 0.5 feet bgs, directly beneath the holes in the liner. Boreholes BH02 and BH03 indicated all COC concentrations were compliant with the Closure Criteria at depths ranging from 0.5 feet bgs to 2 feet bgs. Lateral delineation soil sample SS01A was compliant with the Site Closure Criteria at 0.5 feet bgs. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

DEFERRAL REQUEST

Marathon is requesting deferral of final remediation due to the presence of active production equipment and surface pipelines within the lined containment. Impacted soil is limited to the area immediately beneath the lined containment and active production equipment, where remediation would require a major facility deconstruction.

Impacted soil remaining in place beneath the liner, which is delineated vertically by boreholes BH01, collected to a depth of 2 feet bgs and BH04 collected to a depth of 1.5 feet bgs, and laterally by surface soil samples SS01A through SS04, collected at ground surface. A maximum of 294 cubic yards of TPH and chloride impacted soil remains in place beneath the liner assuming a maximum 1-foot depth based on the delineation soil samples listed above. Impacted soil volume estimate includes waste-containing soil volumes to be addressed through reconstruction of the containment or final pad reclamation.

Marathon does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be greater than 180 feet bgs, the release was contained laterally by the lined containment, and the impacted soil remaining in place is limited to the area immediately beneath the liner. The liner has been repaired by Marathon and will restrict future vertical migration of residual impacts and any interactions with humans and/or wildlife.

Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, Marathon requests deferral of final remediation for Incident Number nAPP2403642782 until final reclamation of the well pad or major construction, whichever comes first. Remedial actions completed to date have been protective of human health, the environment, and groundwater and deferment of impacted soil beneath the lined containment appears to be equally protective and warranting deferment. Notifications submitted to the NMOCD are included in Appendix E.

Blueberry Hill Fee CTB

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or agiovengo@ensolum.com.

Sincerely, Ensolum, LLC

Ashléy Giovengo Senior Scientist

Daniel R. Moir, PG Senior Managing Geologist

cc: Isaac Castro, Marathon

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Area of Requested Deferral
- Table 1
 Soil Sample Analytical Results
- Appendix A Well Log and Record
- Appendix B Photographic Log
- Appendix C Lithographic Soil Sampling Logs
- Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix E Email Correspondence



FIGURES

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ENSOLUM Environmental, Engineering and Hydrogeologic Consultants

Area of Requested Deferral Marathon Oil Permian LLC

Blueberry Hill Fee CTB Incident Number: nAPP2403642782 Unit G, Section 19, Township 24S, Range 35E Lea County, New Mexico

3

FIGURE



TABLES

E N S O L U M

	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Blueberry Hill Fee CTB Marathon Oil Permian LLC 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 Soil Samples									
SS01	02/14/2024	0	<0.00201	<0.00402	<50.5	170	<50.5	170	170	17.7
SS01A	3/11/2024	0	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	79.9
SS02	02/14/2024	0	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	8.97
SS03	02/14/2024	0	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	8.96
SS04	02/14/2024	0	<0.00198	< 0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	65.4
BH01	2/26/2024	0.5	<0.00199	< 0.00398	<50.0	110	<50.0	110	110	127
BH01	2/26/2024	1	<0.00202	< 0.00403	<49.9	60.4	<49.9	60.4	60.4	69.5
BH01	2/26/2024	2	<0.00198	< 0.00396	<50.3	<50.0	<50.3	<50.3	<50.3	63.8
BH02	2/26/2024	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	89.3
BH02	2/26/2024	1	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	<49.6	43.8
BH02	2/26/2024	2	<0.00202	<0.00403	<50.4	<49.9	<50.4	<50.4	<50.4	47.2
BH03	2/26/2024	0.5	<0.00200	< 0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	83.6
BH03	2/26/2024	1	<0.00198	<0.00397	<50.1	<50.1	<50.1	<50.1	<50.1	67.7
BH03	2/26/2024	2	<0.00201	<0.00402	<50.5	<49.9	<50.5	<50.5	<50.5	85.2
BH04	2/26/2024	0.5	<0.00200	<0.00400	<50.2	61.8	<50.2	61.8	61.8	839
BH04	2/26/2024	1	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	<50.4	367
BH04	2/26/2024	1.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	198

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

"<": Laboratory Analytical result is less than reporting limit

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.

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



APPENDIX A

Well Log and Record

PAGE 1 OF 2



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

NO	OSE POD NO. (W C04682 POD		.)		WELL TAG ID N 211EC	ю.		OSE FILE NO(C-04682	S).				
OCAL	WELL OWNER M Daniel Baeza	NAME(S)						PHONE (OPTI) 575-390-256					
AND WELL LOCATION	WELL OWNER M 7225 Mocking							CITY Hobbs		STATE NM	88240	ZIP	
AND	WELL LOCATION	1		EGREES 32	minutes 11	SECONDS 24.8324		* ACCURACY	REQUIRED: ONE TEN	TH OF A S	ECOND		
I. GENERAL	(FROM GPS)		TITUDE NGITUDE	103	24	56.3543		A DAMA A DECLUDED BUCK OF					
I. GE	DESCRIPTION I	RELATIN	G WELL LOCATION TO) STREET ADDRE	ESS AND COMM	ON LANDMAR	(S – PL	SS (SECTION, TO	WNSHJIP, RANGE) WH	IERE AVA	ILABLE		
-	LICENSE NO. WD1053	,	NAME OF LICENSED		GARY KEY				NAME OF WELL DR			CE INC	
		_					DE DO	KEY'S DRILLING & PUMP SERVICE,				_	
	DRILLING STAR 12/20/202		DRILLING ENDED 01/19/2023	DEPTH OF COM	IPLETED WELL 290	(FT) B	DRE HO	LE DEPTH (FT) 920	PTH (FT) DEPTH WATER FIRST ENCOUNTERED (FT) 180			,	
	COMPLETED W	ELL IS:	ARTESIAN *add Centralizer info be	o below					WATER LEVEL DATE STATIC MEA PLETED WELL 165FT 1-19-2023				
	DRILLING FLUII	D:	✓ AIR	MUD	ADDIT	IVES - SPECIF	č:						
	DRILLING METH	IOD: 🔽	ROTARY HAM	MER 🗌 CABLE	TOOL 🗌 01	HER - SPECIF	ſ:		CHECK	HERE IF	PITLESS ADA	PTER IS	
	DEPTH (fee	t bgl)	BORE HOLE	CASING M	ATERIAL AN	ND/OR	C	ASING	CASING	CASE	ASING WALL S		
	FROM	то	DIAM (inches)		GRADE ach casing strin ections of scree		CON	NECTION TYPE ling diameter)	INSIDE DIAM. (inches)	THICKNESS (inches)		SIZI (inche	
s n	0	20	16-3/4"	1	2" STEEL				12"	.250			
	-2	160	9-7/8"	P	VC SCH40		SI	PLINE	4-1/2"	S	CH40		
	160	290	9-7/8"	P	VC SCH40		SI	PLINE	4-1/2"	S	CH40	.032	
				LIST ANNUL	AR SEAL MAT	ERIAL AND (RAVE	L PACK SIZE-					
	DEPTH (fee		BORE HOLE DIAM. (inches)			BY INTERVA			AMOUNT (cubic feet)		METHOD OF PLACEMENT		
	FROM 0	TO 20	16-3/4"	*(if using Cent	ralizers for Arte	sian wells- ind NT SLURRY	cate the	spacing below)	13.09		POU		
	0	62	9-7/8"		HYDRATED		CHIPS		22.35		TREM		
+	62	114	9-7/8"			GRAVEL			21.26	-	POU		
	114	290	9-7/8"			LICA SAND			71.98	-	TREM		

442

WELL TAG ID NO.

24

34

25.

PODI

LOCATION Don + Str

	DEPTH (feet bgl)		COLOR AND TYPE OF MATERIAL ENCOUNTERED -		WA	TER	ESTIMATEI YIELD FOR
	FROM	то	THICKNESS (feet)	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZO (attach supplemental sheets to fully describe all units)	NES	BEAF	UNG? / NO)	WATER- BEARING ZONES (gpn
	0	5	5	RED SAND		Y	✔ N	
	5	23	18	CALICHE		Y	🖌 N	
	23	118	95	RED SANDSTONE AND CLAY		Y	✔ N	
	118	157	39	BROWN & RED SANDSTONE		Y	✔ N	
	157	270	113	RED CLAY & SANDSTONE		✓ Y	N	3.00
T	270	290	20	TAN SANDSTONE		Y	🖌 N	
WELL	290	324	34	RED CLAY		Y	🗸 N	
OF	324	410	86	RED CLAY WITH SANDSTONE STREAKS		Y	✔ N	
DO	410	905	495	RED & GRAY SPECKLED SANDSTONE/MUDSTONE		Y	✔ N	
4. HYDROGEOLOGIC LOG	905	920	15	DOLOMITE-RUSTLER FORMATION		Y	✔ N	
00						Y	N	
EOI					-	Y	N	
SOG						Y	N	
INDI						Y	N	
4. H						Y	N	
						Y	N	
						Y	N	
						Y	N	-
						Y	N	
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	METHOD U			DF WATER-BEARING STRATA: BAILER OTHER – SPECIFY:		L ESTIN	MATED (gpm):	3
NOI	WELL TES			CH A COPY OF DATA COLLECTED DURING WELL TESTING, I E, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN O				
	MISCELLA	NEOUS INI		S WELL WAS DRILLED TO 920 AND PLUGGED BACK T IN OF OPERATIONS DATED 1-9-2023. THE WELL THEN LL.				
. TEST; RIG SUPERVIS	PRINT NAM	1E(S) OF D	RILL RIG SUPERV	ISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CO	ONSTRUCT	ΓΙΟΝ Ο	THER TH	IAN LICENSE
è.	CASEY KE THE UNDEL CORRECT F	Y RSIGNED I RECORD Q	HEREBY CERTIFI	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CO ES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BI SCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL DAYS AFTER COMPLETION OF WELL DRILLING:	ELIEF, THE	E FORE	GOING I	S A TRUE AN
	CASEY KE THE UNDEL CORRECT F	Y RSIGNED I RECORD O ERMIT PO	HEREBY CERTIFI E-THE ABOVE DE LDPR WITHIN 30	ES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BI SCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL DAYS AFTER COMPLETION OF WELL DRILLING: GARY KEY	ELIEF, THE	E FORE WITH	GOING I THE ST/ 2023	S A TRUE AN
SIGNATURE 5.	CASEY KE THE UNDEL CORRECT F	Y RSIGNED I RECORD O ERMIT PO	HEREBY CERTIFI E-THE ABOVE DE LDPR WITHIN 30	ES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BI SCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL DAYS AFTER COMPLETION OF WELL DRILLING:	ELIEF, THE	E FORE WITH	GOING I THE ST/	S A TRUE AN
6. SIGNATURE 5.	CASEY KE THE UNDEL CORRECT F	Y RSIGNED I RECORD O EBMIT HO SIGNAT	HEREBY CERTIFI E-THE ABOVE DE LDPR WITHIN 30	ES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BI SCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL DAYS AFTER COMPLETION OF WELL DRILLING: GARY KEY / PRINT SIGNEE NAME	ELIEF, THI L RECORD	E FORE WITH 2/8/	GOING I THE ST/ 2023 DATE	S A TRUE AN



APPENDIX B

Lithologic Soil Sampling Logs

Released to Imaging: 5/14/2024 2:38:00 PM

			Sample Name: BH01	Date: 02/26/2024
			Site Name: Blueberry Hill 3H 4H 6H	
	NSOL		Incident Number: nAPP240364278	
			Job Number: 03A2040018	
LITHO	LOGIC / SOIL SAMPLING LO	G	Logged By: Chad Hamilton	Method: Hand Auger
Coordinates: 32.203464	4, -103.403305		Hole Diameter: 3"	Total Depth: 2'
	ning conducted with HACH Chlorid Ition factor of soil to distilled wate		PetroFLAG for chloride and TPH, res factors included.	spectively. Chloride test
Moisture Content Chloride (ppm) TPH (ppm)	(ft bgs)	ebth USCS/Rock Symbol	Lithologic Des	criptions
D	N BH01 0	0 CCHE	Caliche Pa	ad
D ND	N BH01 0.5	0.5 CCHE		
D ND 34	N BH01 1	1 SW-SM		
		T 200-200	Sand with trace silt - Loose, medium to to very fine grain size, dry, non-plastic uniform, all	, noncohesive, thickly bedded,
D ND	N BH01 2	2 SW-SM		

						Sample Name: BH02	Date: 02/26/2024	
	. NI	C		. U	R.A	Site Name: Blueberry Hill 3H 4H 6	бН СТВ	
						Incident Number: nAPP24036427	/82	
						Job Number: 03A2040018		
LIT	HOLOGIC	/ SOIL S	AMPLING	LOG		Logged By: Chad Hamilton	Method: Hand Auger	
Coordinates: 32.20						Hole Diameter: 3"	Total Depth: 2'	
Comments: Field sc performed with 1:4	-					PetroFLAG for chloride and TPH, r actors included.	espectively. Chloride test	
	TPH (ppm) Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	escriptions	
D	N	BH02	0 1	0	CCHE	Caliche	Pad	
D ND	N	BH02	0.5	0.5	CCHE	Culture		
D ND 4	43 N	BH02	1 _	1	SW-SM	Sand with trace silt - Loose, medium to very fine grain size, dry, non-plasi uniform, a	tic, noncohesive, thickly bedded,	
D ND	N	BH02	2	2	CCHE	Caliche - Mediume density, yellow t grain size, dry, non=plastic, noncoho shar	esive, massive, uniform, alluvial,	

1			Sample Name: BH03	Date: 02/26/2024				
	NSO	LUN	Incident Number: nAPP24036427					
			Job Number: 03A2040018					
LITHO	LOGIC / SOIL SAMPLIN	IG LOG	Logged By: Chad Hamilton	Method: Hand Auger				
Coordinates: 32.20353			Hole Diameter: 3"	Total Depth: 2'				
	ning conducted with HACH ution factor of soil to distille		d PetroFLAG for chloride and TPH, i n factors included.	espectively. Chloride test				
Moisture Content Chloride (ppm) TPH (ppm)	Staining Staining Depth (ft bgs)	(ft bgs) S		escriptions				
D 1,254	N BH03 0	Ш 0 ССН	Caliche	Pad				
D ND	N BH03 0.5	0.5 CCH						
D ND 34	N BH03 1	1 SW-S	M Sand with trace silt - Loose medium	to dark brown in color, medium				
		+	to very fine grain size, dry, non-plas	tic, noncohesive, thickly bedded,				
				alluvial				
	INIBHU3I 2							

LITHC Coordinates: 32.2034 Comments: Field scree performed with 1:4 di			Μ	Sample Name: BH04 Site Name: Blueberry Hill 3H 4H 6 Incident Number: nAPP24036427 Job Number: 03A2040018		
LITHC Coordinates: 32.2034 Comments: Field scree performed with 1:4 di	OLOGIC / SOIL SAMPLIN 24, -103.403464				782	
Coordinates: 32.2034 Comments: Field scree performed with 1:4 di	24, -103.403464	G LOG		Job Number: 03A2040018		
Coordinates: 32.2034 Comments: Field scree performed with 1:4 di	24, -103.403464	G LOG		Job Number: 03A2040018		
Comments: Field scree performed with 1:4 di				Logged By: Chad Hamilton	Method: Hand Auger	
performed with 1:4 di	oning conducted with HACH (Hole Diameter: 3"	Total Depth: 1.5'	
ure ent ide n)	ilution factor of soil to distille			PetroFLAG for chloride and TPH, 1 factors included.	respectively. Chloride test	
Moisture Content Chloride (ppm) TPH (ppm)		Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	escriptions	
D 515	BH04 0	•	CCHE	Caliche	Pad	
D 997	BH04 0.5	1 0.5	CCHE			
D 274 44	BH04 1	<u> </u>	SW-SM	Sand with trace silt - Loose, medium to very fine grain size, dry, non-plas		
	BH04 1.5	1.5	SW-SM	uniform, a	alluvial	
D ND				color, medium to very fine grain size		
		Total De	pth @ 1.	5 ft bgs.		



APPENDIX C

Photographic Log

Released to Imaging: 5/14/2024 2:38:00 PM





Photographic Log Marathon Oil Permian LLC Blueberry Hill Fee CTB Incident Number: nAPP2403642782





Photographic Log Marathon Oil Permian LLC Blueberry Hill Fee CTB Incident Number: nAPP2403642782



Blueberry HILI SH.4H (AH CITE 14 Feb 2024, 11/51/27 AM

Photograph 9 Date: 02/14/2024 Description: Lateral Delineation Sampling View: West Photograph 10 Date: 02/14/2024 Description: Lateral Delineation Sampling View: Northwest







Photographic Log Marathon Oil Permian LLC Blueberry Hill Fee CTB Incident Number: nAPP2403642782







APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation

Received by OCD: 4/19/2024 12:37:23 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Peter Van Patten Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 2/23/2024 4:24:25 PM

JOB DESCRIPTION

BLUEBERRY HILL 3H 4H 6H CTB 03A2040018

JOB NUMBER

890-6199-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information



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

AMER

Generated 2/23/2024 4:24:25 PM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

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Sample Summary	21
Chain of Custody	22
	23

Dilution Factor

Detection Limit (DoD/DOE)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin) Most Probable Number

Method Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Not Calculated

Negative / Absent

Positive / Present Practical Quantitation Limit

Presumptive

Quality Control

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry)

Dil Fac

DL, RA, RE, IN

DL

DLC EDL

LOD

LOQ MCL

MDA

MDC MDL

ML

MPN MQL

NC

ND

NEG

POS

PQL PRES

QC

RER

RPD

TEF

TEQ

TNTC

RL

	Definitions/Glossary	
Client: Ensolu Project/Site: E	Job ID: 890-6 BLUEBERRY HILL 3H 4H 6H CTB SDG: 03A204	
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	Α	
Qualifier	Qualifier Description	
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)	

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Case Narrative

Client: Ensolum Project: BLUEBERRY HILL 3H 4H 6H CTB

Job ID: 890-6199-1

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1 2 3 4 5 6 7 8 9 10 11 12 13

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Job ID: 890-6199-1

Job Narrative 890-6199-1

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 2/15/2024 2:32 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 3.6°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-6199-1), SS02 (890-6199-2), SS03 (890-6199-3) and SS04 (890-6199-4).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-6199-1), SS03 (890-6199-3), SS04 (890-6199-4) and (LCSD 880-73881/2-A). 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

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 and precision for preparation batch 880-73329 and analytical batch 880-73631 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: BLUEBERRY HILL 3H 4H 6H CTB

Client Sample ID: SS01

Date Collected: 02/14/24 11:16 Date Received: 02/15/24 14:32

	rganic Comp	ounds (GC)						
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201	mg/Kg		02/22/24 15:27	02/23/24 09:23	
Toluene	<0.00201	U	0.00201	mg/Kg		02/22/24 15:27	02/23/24 09:23	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/22/24 15:27	02/23/24 09:23	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/22/24 15:27	02/23/24 09:23	
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/22/24 15:27	02/23/24 09:23	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/22/24 15:27	02/23/24 09:23	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	124		70 - 130			02/22/24 15:27	02/23/24 09:23	
1,4-Difluorobenzene (Surr)	139	S1+	70 - 130			02/22/24 15:27	02/23/24 09:23	
Method: TAL SOP Total BTEX - Tot	tal BTEX Calo	ulation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/23/24 09:23	
Method: SW846 8015 NM - Diesel I	Range Organ	ics (DRO) (C	SC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	170		50.5	mg/Kg			02/20/24 11:57	
Method: SW846 8015B NM - Diese	l Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		02/19/24 15:17	02/20/24 11:57	
Diesel Range Organics (Over	170		50.5	mg/Kg		02/19/24 15:17	02/20/24 11:57	
C10-C28)	<50.5	U	50.5	mg/Kg		02/19/24 15:17	02/20/24 11:57	
C10-C28) Oll Range Organics (Over C28-C36)	<50.5 %Recovery		50.5 Limits	mg/Kg		02/19/24 15:17 Prepared	02/20/24 11:57 Analyzed	
C10-C28) Oll Range Organics (Over C28-C36) Surrogate				mg/Kg				Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	%Recovery		Limits	mg/Kg		Prepared	Analyzed	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	%Recovery 124 109	Qualifier	Limits 70 - 130 70 - 130	mg/Kg		Prepared 02/19/24 15:17	Analyzed 02/20/24 11:57	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 124 109 hromatograp	Qualifier	Limits 70 - 130 70 - 130	mg/Kg Unit	D	Prepared 02/19/24 15:17	Analyzed 02/20/24 11:57	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion C Analyte	%Recovery 124 109 hromatograp	Qualifier	Limits 70 - 130 70 - 130		<u>D</u>	Prepared 02/19/24 15:17 02/19/24 15:17	Analyzed 02/20/24 11:57 02/20/24 11:57	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion C Analyte Chloride	<u>%Recovery</u> 124 109 hromatograp Result	Qualifier	 70 - 130 70 - 130 RL	Unit	D	Prepared 02/19/24 15:17 02/19/24 15:17 Prepared	Analyzed 02/20/24 11:57 02/20/24 11:57 Analyzed	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion C Analyte Chloride Chloride Chloride Chloride Chloride Chloride D2/14/24 11:20 ate Collected: 02/15/24 14:32	<u>%Recovery</u> 124 109 hromatograp Result	Qualifier	 70 - 130 70 - 130 RL	Unit	<u>D</u>	Prepared 02/19/24 15:17 02/19/24 15:17 Prepared	Analyzed 02/20/24 11:57 02/20/24 11:57 Analyzed 02/20/24 15:07 nple ID: 890-	Dil Fa Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion C Analyte Chloride Elient Sample ID: SS02 ate Collected: 02/14/24 11:20	<u>%Recovery</u> 124 109 hromatograp Result	Qualifier	 70 - 130 70 - 130 RL	Unit	D	Prepared 02/19/24 15:17 02/19/24 15:17 Prepared	Analyzed 02/20/24 11:57 02/20/24 11:57 Analyzed 02/20/24 15:07 nple ID: 890-	Dil Fa

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 09:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 09:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 09:49	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		02/22/24 15:27	02/23/24 09:49	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 09:49	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		02/22/24 15:27	02/23/24 09:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			02/22/24 15:27	02/23/24 09:49	1

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Job ID: 890-6199-1 SDG: 03A2040018

Lab Sample ID: 890-6199-1 Matrix: Solid

5

Released to Imaging: 5/14/2024 2:38:00 PM

Client Sample ID: SS02

Date Collected: 02/14/24 11:20 Date Received: 02/15/24 14:32

Sample Depth: 0

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

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	87		70 - 130			02/22/24 15:27	02/23/24 09:49	
Method: TAL SOP Total BTEX - T	otal BTEX Calo	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			02/23/24 09:49	
- Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg		·	02/20/24 12:20	
Method: SW846 8015B NM - Dies			· · ·		_			
Analyte		Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		02/19/24 15:17	02/20/24 12:20	
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		02/19/24 15:17	02/20/24 12:20	
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		02/19/24 15:17	02/20/24 12:20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane			70 - 130			02/19/24 15:17	02/20/24 12:20	
o-Terphenyl	98		70 - 130			02/19/24 15:17	02/20/24 12:20	
- Method: EPA 300.0 - Anions, Ion	Chromatogram	hy - Solubl	e					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	8.97		5.04	mg/Kg			02/20/24 15:14	

Client Sample ID: SS03

Date Collected: 02/14/24 11:23 Date Received: 02/15/24 14:32 Sample Depth: 0

Matrix: Solid

Lab Sample ID: 890-6199-3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/22/24 15:27	02/23/24 10:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/22/24 15:27	02/23/24 10:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/22/24 15:27	02/23/24 10:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/22/24 15:27	02/23/24 10:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/22/24 15:27	02/23/24 10:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/22/24 15:27	02/23/24 10:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			02/22/24 15:27	02/23/24 10:16	1
1,4-Difluorobenzene (Surr)	160	S1+	70 - 130			02/22/24 15:27	02/23/24 10:16	1
- Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/23/24 10:16	1
- Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (GC)					
	Desult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quaimer	RL	Unit	U	Flepaleu	Analyzeu	Dirrac

Method: SW846 8015 NM - Diesei R	ange Organ	ics (DRU) (GU	~)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/20/24 12:44	1

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Matrix: Solid

Lab Sample ID: 890-6199-2

5

Client Sample Results

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Client Sample ID: SS03

Date Collected: 02/14/24 11:23 Date Received: 02/15/24 14:32

Sample Depth: 0

Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)				
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		02/19/24 15:17	02/20/24 12:44
(GRO)-C6-C10							
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		02/19/24 15:17	02/20/24 12:44
C10-C28)							
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/19/24 15:17	02/20/24 12:44
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed
1-Chlorooctane	119		70 - 130			02/19/24 15:17	02/20/24 12:44
o-Terphenyl	109		70 - 130			02/19/24 15:17	02/20/24 12:44

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.96	5.03	mg/Kg			02/20/24 15:21	1

Client Sample ID: SS04

Date Collected: 02/14/24 11:28

Date Received: 02/15/24 14:32

Sample Depth: 0

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 10:42	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 10:42	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 10:42	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		02/22/24 15:27	02/23/24 10:42	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/22/24 15:27	02/23/24 10:42	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		02/22/24 15:27	02/23/24 10:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130			02/22/24 15:27	02/23/24 10:42	1
1,4-Difluorobenzene (Surr)	92		70 - 130			02/22/24 15:27	02/23/24 10:42	1
Method: TAL SOP Total BTEX - Analyte		culation Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396		0.00396	mg/Kg			02/23/24 10:42	1
- Method: SW846 8015 NM - Dies	el Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			02/20/24 13:08	1
Method: SW846 8015B NM - Die	sel Range Orga	nics (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		02/19/24 15:17	02/20/24 13:08	1
Diesel Range Organics (Over	<49.7	U	49.7	mg/Kg		02/19/24 15:17	02/20/24 13:08	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		02/19/24 15:17	02/20/24 13:08	1
Surrogate	%Recovery		Limits			Prepared	Analyzed	Dil Fac

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Job ID: 890-6199-1 SDG: 03A2040018

Lab Sample ID: 890-6199-3

Lab Sample ID: 890-6199-4

Matrix: Solid

Dil Fac

1

1

1

1

1

Dil Fac

Matrix: Solid

		Client	Sample Res	sults					
Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4	H 6H CTB						Job ID: 890 SDG: 03A2		2
Client Sample ID: SS04 Date Collected: 02/14/24 11:28						Lab Sa	mple ID: 890- Matri	6199-4 ix: Solid	
Date Received: 02/15/24 14:32 Sample Depth: 0									4
Method: EPA 300.0 - Anions, Ion C Analyte		hy - Soluble Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	5
Chloride	65.4		4.98	mg/Kg			02/20/24 15:28	1	
									8
									9
									13

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Surrogate Summary

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

				Percent Surrogate Reco
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-39343-A-9-E MS	Matrix Spike	96	103	
880-39343-A-9-F MSD	Matrix Spike Duplicate	117	128	
890-6199-1	SS01	124	139 S1+	
890-6199-2	SS02	105	87	
890-6199-3	SS03	118	160 S1+	
890-6199-4	SS04	68 S1-	92	
LCS 880-73881/1-A	Lab Control Sample	108	117	
LCSD 880-73881/2-A	Lab Control Sample Dup	136 S1+	123	
MB 880-73289/5-A	Method Blank	62 S1-	132 S1+	
MB 880-73881/5-A	Method Blank	70	113	

rogate Legent

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-6198-A-1-D MS	Matrix Spike	119	98
890-6198-A-1-E MSD	Matrix Spike Duplicate	117	91
890-6199-1	SS01	124	109
890-6199-2	SS02	114	98
890-6199-3	SS03	119	109
890-6199-4	SS04	109	100
LCS 880-73547/2-A	Lab Control Sample	122	129
LCSD 880-73547/3-A	Lab Control Sample Dup	110	108
MB 880-73547/1-A	Method Blank	130	117

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

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Job ID: 890-6199-1 SDG: 03A2040018

Prep Type: Total/NA

Prep Type: Total/NA
Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73289/5-/ Matrix: Solid Analysis Batch: 73858	4								Client Sa	mple ID: Metho Prep Type: ⁻ Prep Bato	Total/NA
· · · · · · · · · · · · · · · · · · ·	МВ	МВ									
Analyte	Result	Qualifier	RL		Unit		D	Pr	epared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/K	g		02/15	5/24 15:58	02/22/24 18:16	1
Toluene	<0.00200	U	0.00200		mg/K	g		02/15	5/24 15:58	02/22/24 18:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/K	g		02/15	5/24 15:58	02/22/24 18:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/K	g		02/15	5/24 15:58	02/22/24 18:16	1
o-Xylene	<0.00200	U	0.00200		mg/K	g		02/15	5/24 15:58	02/22/24 18:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/K	g		02/15	5/24 15:58	02/22/24 18:16	1
	МВ	МВ									
Surrogate	%Recovery		Limits					Dr	epared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62		70 - 130				-		5/24 15:58	02/22/24 18:16	1
1,4-Difluorobenzene (Surr)		S1+	70 - 130						5/24 15:58	02/22/24 18:16	1
	102	07.	10 - 100					02/10	/24 10.00	02/22/24 10:10	,
Lab Sample ID: MB 880-73881/5-/	4								Client Sa	mple ID: Metho	d Blank
Matrix: Solid										· Prep Type: `	
Analysis Batch: 73858										Prep Batc	
	МВ	MB									
Analyte	Result	Qualifier	RL		Unit		D	Pr	epared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/K	g		02/22	2/24 15:27	02/23/24 08:04	1
Toluene	<0.00200	U	0.00200		mg/K	g		02/22	2/24 15:27	02/23/24 08:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/K	g		02/22	2/24 15:27	02/23/24 08:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/K	g		02/22	2/24 15:27	02/23/24 08:04	1
o-Xylene	<0.00200	U	0.00200		mg/K	g		02/22	2/24 15:27	02/23/24 08:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/K	g		02/22	2/24 15:27	02/23/24 08:04	1
	МВ	МВ									
Surrogate	%Recovery		Limits					Pr	epared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	- 70		70 - 130				-		2/24 15:27	02/23/24 08:04	1
1,4-Difluorobenzene (Surr)	113		70 - 130						2/24 15:27	02/23/24 08:04	1
Lab Sample ID: LCS 880-73881/1	- A						Cli	ient	Sample	ID: Lab Control	Sample
Matrix: Solid										Prep Type:	Total/NA
Analysis Batch: 73858										Prep Batc	h: 73881
			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits	
Benzene			0.100	0.09462		mg/Kg			95	70 - 130	
Toluene			0.100	0.09802		mg/Kg			98	70 - 130	
Ethylbenzene			0.100	0.08353		mg/Kg			84	70 - 130	
m-Xylene & p-Xylene			0.200	0.1861		mg/Kg			93	70 - 130	
o-Xylene			0.100	0.08806		mg/Kg			88	70 - 130	
	LCS LCS	6									
Surrogate	%Recovery Qua		Limits								
4-Bromofluorobenzene (Surr)	108		70 - 130								
1,4-Difluorobenzene (Surr)	117		70 - 130								
Lab Sample ID: LCSD 880-73881/	2-A					Cli	ent S	Sam	ple ID: L	ab Control Sam	ple Dup
Matrix: Solid										Prep Type:	Total/NA
Analysis Batch: 73858										Prep Batc	h: 73881
			Snike	LCSD	LCSD					%Rec	RPD

Matrix: Solid							Prep	туре: то	tai/NA
Analysis Batch: 73858							Prep	Batch:	73881
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09832		mg/Kg		98	70 - 130	4	35

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Job ID: 890-6199-1 SDG: 03A2040018

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB Job ID: 890-6199-1 SDG: 03A2040018

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

Matrix: Solid	′3881/2-A					Cile	in Jan		Lab Contro		
										Type: To	
Analysis Batch: 73858			• "							Batch:	
			Spike		LCSD		_		%Rec		RPD
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Toluene			0.100	0.1095		mg/Kg		110	70 - 130	11	3
Ethylbenzene			0.100	0.1098		mg/Kg		110	70 - 130	27	3
m-Xylene & p-Xylene			0.200	0.2145		mg/Kg		107	70 - 130	14	3
o-Xylene			0.100	0.09264		mg/Kg		93	70 - 130	5	3
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	123		70 - 130								
	A-9-E MS							Client	Sample ID		
Lab Sample ID: 880-39343-4 Matrix: Solid Analysis Batch: 73858	А-9-Е MS							Client	Prep T	Type: To	tal/N/
Matrix: Solid		Sample	Spike	MS	MS			Client	Prep T		tal/N/
Matrix: Solid Analysis Batch: 73858	Sample	Sample Qualifier	Spike Added		MS Qualifier	Unit	D	Client %Rec	Prep T Prep	Type: To	tal/N/
Matrix: Solid Analysis Batch: 73858 Analyte	Sample	Qualifier	•			- <mark>Unit</mark> mg/Kg	D		Prep T Prep %Rec	Type: To	tal/N/
Matrix: Solid Analysis Batch: 73858 Analyte	Sample Result	Qualifier	Added	Result			D	%Rec	Prep T Prep %Rec Limits	Type: To	tal/NA
Matrix: Solid Analysis Batch: 73858 Analyte Benzene	Sample 	Qualifier U U	Added	Result 0.1129		mg/Kg	D	%Rec	Prep T Prep %Rec Limits 70 - 130	Type: To	tal/NA
Matrix: Solid Analysis Batch: 73858 Analyte Benzene Toluene	Sample Result <0.00200 <0.00200	Qualifier U U U	Added 0.0996 0.0996	Result 0.1129 0.09076		mg/Kg mg/Kg	<u>D</u>	%Rec 113 91	Prep T Prep %Rec Limits 70 - 130 70 - 130	Type: To	tal/NA
Matrix: Solid Analysis Batch: 73858 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Sample Result <0.00200 <0.00200 <0.00200	Qualifier U U U U U	Added 0.0996 0.0996 0.0996	Result 0.1129 0.09076 0.1035		mg/Kg mg/Kg mg/Kg	<u>D</u>	%Rec 113 91 104	Prep T Prep %Rec Limits 70 - 130 70 - 130 70 - 130	Type: To	tal/N/
Matrix: Solid Analysis Batch: 73858 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Sample Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00399	Qualifier U U U U U U	Added 0.0996 0.0996 0.0996 0.199	Result 0.1129 0.09076 0.1035 0.2095		mg/Kg mg/Kg mg/Kg mg/Kg	<u> </u>	%Rec 113 91 104 105	Prep T Prep %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: To	tal/NA
Matrix: Solid Analysis Batch: 73858 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	Sample Result <0.00200	Qualifier U U U U U U MS	Added 0.0996 0.0996 0.0996 0.199	Result 0.1129 0.09076 0.1035 0.2095		mg/Kg mg/Kg mg/Kg mg/Kg	D	%Rec 113 91 104 105	Prep T Prep %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: To	tal/N/
Matrix: Solid Analysis Batch: 73858 Analyte Benzene Toluene Ethylbenzene	Sample Result <0.00200 <0.00200 <0.00200 <0.00399 <0.00200 MS	Qualifier U U U U U U MS	Added 0.0996 0.0996 0.0996 0.199 0.0996	Result 0.1129 0.09076 0.1035 0.2095		mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	%Rec 113 91 104 105	Prep T Prep %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Type: To	tal/NA

Lab Sample ID: 880-39343-A-9-F MSD Matrix: Solid Analysis Batch: 73858

1,4-Difluorobenzene (Surr)

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prep Batch: 73881

Analysis Datch. 13030									гіер	Datch.	73001
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.101	0.1058		mg/Kg		105	70 - 130	7	35
Toluene	<0.00200	U	0.101	0.09862		mg/Kg		98	70 - 130	8	35
Ethylbenzene	<0.00200	U	0.101	0.09871		mg/Kg		98	70 - 130	5	35
m-Xylene & p-Xylene	<0.00399	U	0.202	0.2151		mg/Kg		107	70 - 130	3	35
o-Xylene	<0.00200	U	0.101	0.1037		mg/Kg		103	70 - 130	12	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)			70 - 130								

70 - 130

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

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Lab Sample ID: MB 880-73547/1-A Matrix: Solid Analysis Batch: 73598	мв	МВ		Client Sample ID: Meth Prep Type: Prep Bate				
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/19/24 15:17	02/20/24 08:02	1

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(GRO)-C6-C10

Diesel Range Organics (Over

QC Sample Results

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

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

Lab Sample ID: MB 880-73547/	1-A								Client Sa	ample ID: N		
Matrix: Solid											Type: To	
Analysis Batch: 73598										Prep	Batch:	73547
		MB MB										
Analyte	Re:	sult Qualifier	RL		Unit		D	P	repared	Analyze	ed	Dil Fac
Diesel Range Organics (Over C10-C28)	<5	50.0 U	50.0		mg/K	g	-	02/1	19/24 15:17	02/20/24 0	J8:02	1
Oll Range Organics (Over C28-C36)		50.0 U	50.0		mg/K	g		02/1	19/24 15:17	02/20/24 0	J8:02	1
		MB MB						_			-	
Surrogate		Very Qualifier							Prepared	Analyz		Dil Fac
1-Chlorooctane		130 117	70 - 130 70 - 130						19/24 15:17			1
p-Terphenyl		117	70 - 130					02/1	19/24 15:17	02/20/24 (08:02	1
Lab Sample ID: LCS 880-73547	7/2-A						c	lient	sample	ID: Lab Co	ontrol S	ample
Matrix: Solid									•		Туре: То	
Analysis Batch: 73598											Batch:	
			Spike	LCS	LCS					%Rec		
Analyte			Added		Qualifier	Unit		D	%Rec	Limits		
Gasoline Range Organics			1000	1030		mg/Kg			103	70 - 130		
(GRO)-C6-C10						-						
Diesel Range Organics (Over			1000	1035		mg/Kg			104	70 - 130		
C10-C28)												
	LCS	LCS										
Surrogate		Qualifier	Limits									
1-Chlorooctane	122		70 - 130									
o-Terphenyl	129		70 - 130									
Lab Sample ID: LCSD 880-7354	47/3-A					Clic	ent	t Sam	iple ID: L	ab Contro	J Samp	le Dup
Matrix: Solid										Prep T	Туре: То	otal/NA
Analysis Batch: 73598											Batch:	
-			Spike	LCSD	LCSD					%Rec		RPD
Analyte	_		Added	Result	Qualifier	Unit	_	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	955.9		mg/Kg			96	70 - 130	7	20
(GRO)-C6-C10												
Diesel Range Organics (Over			1000	950.5		mg/Kg			95	70 - 130	9	20
C10-C28)												
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	110		70 - 130									
o-Terphenyl	108		70 - 130									
Lab Sample ID: 890-6198-A-1-D) MS								Client S	Sample ID:		
Matrix: Solid											Туре: То	
Analysis Batch: 73598											Batch:	73547
	Sample S	-	Spike		MS					%Rec		
Analyte	Result		Added		Qualifier	Unit		D	%Rec	Limits		
Gasoline Range Organics	<50.3 l	U	1010	1085		mg/Kg			106	70 - 130		

C10-C28)			
	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	98		70 - 130

60.4

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Job ID: 890-6199-1

SDG: 03A2040018

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1010

1058

mg/Kg

99

70 - 130

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB Job ID: 890-6199-1 SDG: 03A2040018

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

Lab Sample ID: 890-6198-A-1 Matrix: Solid): Matrix Sp Prep 1	Гуре: То	otal/N/
Analysis Batch: 73598										Batch:	
,	Sample	Sample	Spike	MSD	MSD				%Rec		RPI
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Gasoline Range Organics	<50.3		1010	1102		mg/Kg		107	70 - 130	2	2
(GRO)-C6-C10											
Diesel Range Organics (Over C10-C28)	60.4		1010	997.3		mg/Kg		93	70 - 130	6	2
	MSD	MSD									
Surrogate	%Recovery		Limits								
1-Chlorooctane	117		70 - 130								
o-Terphenyl	91		70 - 130								
lethod: 300.0 - Anions, lo Lab Sample ID: MB 880-7332 Matrix: Solid Analysis Batch: 73631								Client S	Sample ID: Prep	Method Type: S	
		MB MB									
Analyte		esult Qualifier		RL	Unit		D P	repared	Analyz		Dil Fa
Chloride	<	<5.00 U		5.00	mg/K	g			02/20/24	13:04	
Matrix: Solid	29/2-A						Client	Sample	ID: Lab Co Prep	Type: S	
Matrix: Solid Analysis Batch: 73631	29/2-A		Spike Added		LCS Qualifier	Unit	D	%Rec			
Matrix: Solid Analysis Batch: 73631 ^{Analyte}	29/2-A		-			Unit mg/Kg		·	Prep %Rec		
Matrix: Solid Analysis Batch: 73631 Analyte Chloride			Added	Result		mg/Kg	<u>D</u>	%Rec 104	Prep %Rec Limits 90 - 110	Type: S	Solub
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73		·	Added	Result		mg/Kg	<u>D</u>	%Rec 104	Prep %Rec Limits 90 - 110	Type: S	Solub
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid			Added	Result		mg/Kg	<u>D</u>	%Rec 104	Prep %Rec Limits 90 - 110	Type: S	le Du
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid			Added 250	Result 259.4	Qualifier	mg/Kg	<u>D</u>	%Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep	Type: S	le Du
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631			Added 250 Spike	Result 259.4 LCSD	Qualifier	mg/Kg Clie	D_	%Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Type: S	le Du Solubi
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte			Added 250 Spike Added	Result 259.4 LCSD Result	Qualifier	mg/Kg Clie Unit	<u>D</u>	%Rec 104 nple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits	Type: S	le Du Solub RP Lim
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte			Added 250 Spike	Result 259.4 LCSD	Qualifier	mg/Kg Clie	D_	%Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Type: S	le Du Solub RP Lim
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte Chloride	329/3-A		Added 250 Spike Added	Result 259.4 LCSD Result	Qualifier	mg/Kg Clie Unit	D_	%Rec 104 nple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110	Type: S ol Samp Type: S <u>RPD</u> 0	le Du Solub RP Lim 2
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M	329/3-A		Added 250 Spike Added	Result 259.4 LCSD Result	Qualifier	mg/Kg Clie Unit	D_	%Rec 104 nple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sat	Type: S ol Samp Type: S <u></u> 0 mple ID	le Du Solub RP Lim 2 : SS0
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid	329/3-A		Added 250 Spike Added	Result 259.4 LCSD Result	Qualifier	mg/Kg Clie Unit	D_	%Rec 104 nple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sat	Type: S ol Samp Type: S <u>RPD</u> 0	le Du Solubi RP Lim 2 : SS0
Lab Sample ID: LCS 880-7332 Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-733 Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analysis Batch: 73631	329/3-A		Added 250 Spike Added	Result 259.4 LCSD Result	Qualifier	mg/Kg Clie Unit	D_	%Rec 104 nple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sat	Type: S ol Samp Type: S <u></u> 0 mple ID	le Du Solubi RP Lim 2 : SS0
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid	329/3-A Sample	Sample Qualifier	Added 250 Spike Added 250	Result 259.4 LCSD Result 258.9	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit	D_	%Rec 104 nple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep	Type: S ol Samp Type: S <u></u> 0 mple ID	le Du Solubi RP Lim 2 : SS0
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analysis Batch: 73631 Analyte	329/3-A Sample	Qualifier	Added 250 Spike Added 250 Spike	Result 259.4 LCSD Result 258.9	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	%Rec 104 aple ID: %Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep %Rec	Type: S ol Samp Type: S <u></u> 0 mple ID	le Du Solubi RP Lim 2 : SS0
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73: Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analysis Batch: 73631 Analyte Chloride	329/3-A IS Sample Result 65.4	Qualifier	Added 250 Spike Added 250 Spike Added	Result 259.4 LCSD Result 258.9 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	%Rec 104 uple ID: %Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep %Rec Limits 90 - 110	Type: S OI Samp Type: S RPD 0 mple ID Type: S	le Du Solubi RP Lim 2 Solubi
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M	329/3-A IS Sample Result 65.4	Qualifier	Added 250 Spike Added 250 Spike Added	Result 259.4 LCSD Result 258.9 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	%Rec 104 uple ID: %Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep %Rec Limits 90 - 110	Type: S ol Samp Type: S RPD 0 mple ID Type: S	le Du Solub RP Lin 2 Solub Solub
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid	329/3-A IS Sample Result 65.4	Qualifier	Added 250 Spike Added 250 Spike Added	Result 259.4 LCSD Result 258.9 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	%Rec 104 uple ID: %Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep %Rec Limits 90 - 110	Type: S OI Samp Type: S RPD 0 mple ID Type: S	le Du Solub RP Lin 2 Solub Solub
Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: LCSD 880-73 Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid	329/3-A Sample Result 65.4	Qualifier F1	Added 250 Spike Added 250 Spike Added 249	Result 259.4 LCSD Result 258.9 MS Result 307.4	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Clie Unit mg/Kg	D	%Rec 104 uple ID: %Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep %Rec Limits 90 - 110 Client Sau Prep	Type: S ol Samp Type: S RPD 0 mple ID Type: S	le Du Solub RP Lim 2 : SS0 Solub
Matrix: Solid Analysis Batch: 73631 Chloride Lab Sample ID: LCSD 880-73: Matrix: Solid Analysis Batch: 73631 Analyte Chloride Lab Sample ID: 890-6199-4 M Matrix: Solid Analysis Batch: 73631 Analyte Chloride	329/3-A Sample Result 65.4 SD Sample	Qualifier	Added 250 Spike Added 250 Spike Added	Result 259.4 LCSD Result 258.9 MS Result 307.4	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	%Rec 104 uple ID: %Rec 104	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sau Prep %Rec Limits 90 - 110	Type: S ol Samp Type: S RPD 0 mple ID Type: S	le Du Solubl RP Lim 2 : SS0 Solubl

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Matrix Spike

Matrix Spike Duplicate

Job ID: 890-6199-1 SDG: 03A2040018

GC VOA

Prep Batch: 73289

Top Batom To200					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73289/5-A	Method Blank	Total/NA	Solid	5035	
Analysis Batch: 73858					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-1	SS01	Total/NA	Solid	8021B	73881
890-6199-2	SS02	Total/NA	Solid	8021B	73881
890-6199-3	SS03	Total/NA	Solid	8021B	73881
890-6199-4	SS04	Total/NA	Solid	8021B	73881
MB 880-73289/5-A	Method Blank	Total/NA	Solid	8021B	73289
MB 880-73881/5-A	Method Blank	Total/NA	Solid	8021B	73881
LCS 880-73881/1-A	Lab Control Sample	Total/NA	Solid	8021B	73881
LCSD 880-73881/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73881

Total/NA

Total/NA

Solid

Solid

8021B

8021B

Prep Batch: 73881

880-39343-A-9-E MS

880-39343-A-9-F MSD

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-1	SS01	Total/NA	Solid	5035	
890-6199-2	SS02	Total/NA	Solid	5035	
890-6199-3	SS03	Total/NA	Solid	5035	
890-6199-4	SS04	Total/NA	Solid	5035	
MB 880-73881/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73881/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73881/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-39343-A-9-E MS	Matrix Spike	Total/NA	Solid	5035	
880-39343-A-9-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 73968

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6199-1	SS01	Total/NA	Solid	Total BTEX	
890-6199-2	SS02	Total/NA	Solid	Total BTEX	
890-6199-3	SS03	Total/NA	Solid	Total BTEX	
890-6199-4	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73547

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6199-1	SS01	Total/NA	Solid	8015NM Prep	
890-6199-2	SS02	Total/NA	Solid	8015NM Prep	
890-6199-3	SS03	Total/NA	Solid	8015NM Prep	
890-6199-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-73547/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73547/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73547/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6198-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6198-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	
Analysis Batch: 73598					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-1	SS01	Total/NA	Solid	8015B NM	73547

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73881

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

GC Semi VOA (Continued)

Analysis Batch: 73598 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-2	SS02	Total/NA	Solid	8015B NM	73547
890-6199-3	SS03	Total/NA	Solid	8015B NM	73547
890-6199-4	SS04	Total/NA	Solid	8015B NM	73547
MB 880-73547/1-A	Method Blank	Total/NA	Solid	8015B NM	73547
LCS 880-73547/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73547
LCSD 880-73547/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73547
890-6198-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	73547
890-6198-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	73547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-1	SS01	Total/NA	Solid	8015 NM	
890-6199-2	SS02	Total/NA	Solid	8015 NM	
890-6199-3	SS03	Total/NA	Solid	8015 NM	
890-6199-4	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 73329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-1	SS01	Soluble	Solid	DI Leach	
890-6199-2	SS02	Soluble	Solid	DI Leach	
890-6199-3	SS03	Soluble	Solid	DI Leach	
890-6199-4	SS04	Soluble	Solid	DI Leach	
MB 880-73329/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73329/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73329/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6199-4 MS	SS04	Soluble	Solid	DI Leach	
890-6199-4 MSD	SS04	Soluble	Solid	DI Leach	

Analysis Batch: 73631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6199-1	SS01	Soluble	Solid	300.0	73329
890-6199-2	SS02	Soluble	Solid	300.0	73329
890-6199-3	SS03	Soluble	Solid	300.0	73329
890-6199-4	SS04	Soluble	Solid	300.0	73329
MB 880-73329/1-A	Method Blank	Soluble	Solid	300.0	73329
LCS 880-73329/2-A	Lab Control Sample	Soluble	Solid	300.0	73329
LCSD 880-73329/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73329
890-6199-4 MS	SS04	Soluble	Solid	300.0	73329
890-6199-4 MSD	SS04	Soluble	Solid	300.0	73329

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Job ID: 890-6199-1 SDG: 03A2040018

Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Job ID: 890-6199-1 SDG: 03A2040018

Lab Sample ID: 890-6199-1 Matrix: Solid

Date Collected: 02/14/24 11:16 Date Received: 02/15/24 14:32

Client Sample ID: SS01

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73881	02/22/24 15:27	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73858	02/23/24 09:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73968	02/23/24 09:23	AJ	EET MID
Total/NA	Analysis	8015 NM		1			73760	02/20/24 11:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73547	02/19/24 15:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73598	02/20/24 11:57	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73329	02/16/24 09:30	SA	EET MID
Soluble	Analysis	300.0		1			73631	02/20/24 15:07	СН	EET MID

Client Sample ID: SS02

Date Collected: 02/14/24 11:20

Date Received: 02/15/24 14:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	73881	02/22/24 15:27	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73858	02/23/24 09:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73968	02/23/24 09:49	AJ	EET MID
Total/NA	Analysis	8015 NM		1			73760	02/20/24 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	73547	02/19/24 15:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73598	02/20/24 12:20	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73329	02/16/24 09:30	SA	EET MID
Soluble	Analysis	300.0		1			73631	02/20/24 15:14	СН	EET MID

Client Sample ID: SS03

Date Collected: 02/14/24 11:23 Date Received: 02/15/24 14:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73881	02/22/24 15:27	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73858	02/23/24 10:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73968	02/23/24 10:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			73760	02/20/24 12:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73547	02/19/24 15:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73598	02/20/24 12:44	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73329	02/16/24 09:30	SA	EET MID
Soluble	Analysis	300.0		1			73631	02/20/24 15:21	СН	EET MID

Client Sample ID: SS04 Date Collected: 02/14/24 11:28 Date Received: 02/15/24 14:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73881	02/22/24 15:27	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73858	02/23/24 10:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73968	02/23/24 10:42	AJ	EET MID

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Matrix: Solid

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Lab Sample ID: 890-6199-2 Matrix: Solid

Lab Sample ID: 890-6199-3

Lab Sample ID: 890-6199-4

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Г	MID	
Г	MID	
Г	MID	

Matrix: Solid

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Client Sample ID: SS04 Date Collected: 02/14/24 11:28

Date Received: 02/15/24 14:32

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73760	02/20/24 13:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73547	02/19/24 15:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73598	02/20/24 13:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73329	02/16/24 09:30	SA	EET MID
Soluble	Analysis	300.0		1			73631	02/20/24 15:28	СН	EET MID

Laboratory References:

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

Job ID: 890-6199-1 SDG: 03A2040018

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Lab Sample ID: 890-6199-4

Matrix: Solid

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum Project/Site: BLUEBERRY HILL 3H 4H 6H CTB

Laboratory: Eurofins Midland

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

Authority	Progra	ım	Identification Number	Expiration Date
Texas	NELAF)	T104704400-23-26	06-30-24
The following analytes	are included in this report but	t the laboratory is not certif	ied by the governing authority. This lis	t mav include analvtes
• •	oes not offer certification.			
• •		Matrix	Analyte	
for which the agency d	oes not offer certification.			

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Job ID: 890-6199-1 SDG: 03A2040018

Job ID: 890-6199-1 SDG: 03A2040018

Method	Method Description	Protocol	Laboratory		
8021B	Volatile Organic Compounds (GC) SW846				
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID		
3015 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		
OI Leach	Deionized Water Leaching Procedure	ASTM	EET MID		
	STM International Environmental Protection Agency				
SW846 =	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Ed	ition, November 1986 And Its Updates.			
TAL SOP	= TestAmerica Laboratories, Standard Operating Procedure				
Laboratory R					
EET MID	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440				

Job ID: 890-6199-1
SDG: 03A2040018

		Sample Sun	nmary		
Client: Ensolum Project/Site: BL	ו UEBERRY HILL 3H 4H 6H CTB		-		Job ID: 890-6199-1 SDG: 03A2040018
ab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
90-6199-1	SS01	Solid	02/14/24 11:16	02/15/24 14:32	
90-6199-2	SS02	Solid	02/14/24 11:20	02/15/24 14:32	0
90-6199-3	SS03	Solid	02/14/24 11:23	02/15/24 14:32	
90-6199-4	SS04	Solid	02/14/24 11:28	02/15/24 14:32	0

🔅 euro	ofins	E	viron	nment Te	sting		Midland EL Pa	d, TX (4 aso, TX	32) 704 (915) 5	-5440, 85-344	San An 3, Lubb	tonio, T. ock, TX	214) 902 ((210) 5 (806) 79 (575) 98	509-3334 14-1296				w		Order I		Page	of	,
Project Manager:	Ashlev	Gioveng	0			Bill to: (if	differen	t)	Isaac	Castro	о О								We	ork Ord	er Com	ments	1	
Company Name:	Ensolu		<u> </u>			Compan	,		Marat	hon O	il Com	bany				Pro	gram: L	IST/PS	ТПР		Brownfields 🗌 RRC 🗌 Superfund 🗌			
Address:		lational P	arks H	lwy		Address				S. Tid	well Ro	ad					e of Pr					_	_	-
City, State ZIP:		ad, NM 8				City, Sta	te ZIP:		Carls	bad, I	NM 88	220					-							
Phone:		8-0055			Email:	agiover		nsolur	n.com	, chai	milton	Denso	lum.co	m		Deli	verable	s: EDD		AD	aPT 🗆] Oth	ner:	
	1	erry Hill 3	4446	HCTB		Around								NALYS	IS RE	QUES	т					Preser	vative Code	s
Project Name: Project Number:	03A20		1110		Routine	Rush	1	Pres. Code				1	Т	I.							No	ne: NO	DI Water	: H ₂ O
Project Location:	1	647, -103	3 4024	11	Due Date:			Goue						HALLAN DR	. 		10100 10101		1		Co	ol: Cool	MeOH: M	
Sampler's Name:		Hamilton	5.4024		TAT starts th	e day rece	ived by	1										H				L: HC	HNO3: H	
Cost Center #:	CL.24.				the lab, if rec			Parameters A: 300.0)														50 ₄ : H ₂	NaOH: N	a
SAMPLE RECE	IPT	Temp Bl	ank:	Yes No	Wet Ice:	Yes			(0)				890-6	199 Cha				ł					DIC	
Samples Received	Intact:	Yes	No	Thermometer	er ID:	TIVO			: 300							usiday						HSO₄: NA ₂S₂O₃: Na		
Cooler Custody Sea		Yes No	14	Correction F		0.2		E P A									+ -						NaOH: Zn	
Sample Custody Se	als:	Yes No	(N/A	Temperature Corrected T		3.0			DES (2)	21)												rbic Acid: SAP	C
Fotal Containers: Sample Ide	ntificatio	on	Matrix	Date	Time Sampled	Depth	Grab/	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)											Samp	le Comment	s
SS	01		Soil	2/14/2024	11:16	0		1	x	X	X										_			
SS				2/14/2024	11:20	0		1	х	X	X													
SS			Soil	2/14/2024	11:23	-0		1	X	X	X													
SS			Soil	2/14/2024	11:28	0		1	X	X	X				_									
1											-													
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										<u> </u>	<u></u>						Ma Ma	1 NIC 14	1	Ag SiO	No C	r TI Sa	11 V 7n	
Total 200.7 / 6		200.8 / 60			RCRA 13	PPM Te	exas 1	1 AL	Sb As	s Ba	Be B	Cd C	a Cr (re PC	Nie			V Se .	Ha: 16	31/24	5.1 / 747	0 / 7471	
Circle Method(s)					TCLP / S			_											me and					
lotice: Signature of this f service. Eurofins Xe f Eurofins Xenco. A m																					ol ated.			
Relinquished b					d by: (Signa					/Time				hed by:						oy: (Sigr			Date/Time	9
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Job Number: 890-6199-1 SDG Number: 03A2040018

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 6199 List Number: 1 Creator: Lopez, Abraham

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	

Job Number: 890-6199-1 SDG Number: 03A2040018

List Source: Eurofins Midland

List Creation: 02/19/24 08:27 AM

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 6199 List Number: 2 Creator: Rodriguez, Leticia

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	N/A	

Eurofins Carlsbad Released to Imaging: 5/14/2024 2:38:00 PM

Received by OCD: 4/19/2024 12:37:23 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ashley Ager Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 3/5/2024 1:39:00 PM

JOB DESCRIPTION

Blueberry Hill 3H 4H 6H CTB 03A2040018

JOB NUMBER

890-6279-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information

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

AMER

Generated 3/5/2024 1:39:00 PM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Laboratory Job ID: 890-6279-1 SDG: 03A2040018

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Method Summary	25
Sample Summary	26
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-	28

Client: Ensolu	m	Job ID: 890-6279-1	
	lueberry Hill 3H 4H 6H CTB	SDG: 03A2040018	
Qualifiers			3
GC VOA Qualifier	Qualifier Description		
S1-	Surrogate recovery exceeds control limits, low biased.		
U	Indicates the analyte was analyzed for but not detected.		5
GC Semi VOA	N		
Qualifier	Qualifier Description		
*1	LCS/LCSD RPD exceeds control limits.		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			8
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		9
Glossary			40
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		4
DER	Duplicate Error Ratio (normalized absolute difference)		1:
Dil Fac	Dilution Factor		
DL	Detection Limit (DoD/DOE)		
DL, RA, RE, IN DLC	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present Practical Quantitation Limit

Presumptive

Quality Control

Method Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

EDL LOD

LOQ

MCL

MDA

MDC

MDL

MPN

MQL

NC

ND

NEG

POS

PQL PRES

QC

RER

RPD

TEF

TEQ TNTC

RL

ML

Job ID: 890-6279-1

Case Narrative

Job Narrative

890-6279-1

Client: Ensolum Project: Blueberry Hill 3H 4H 6H CTB

quality control (QC) is further explained in narrative comments.

Eurofins Carlsbad 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

- 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 2/28/2024 4:02 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 4.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH 01 - 0.5' (890-6279-1), BH 01 - 1' (890-6279-2), BH 02 - 0.5' (890-6279-3), BH 02 - 1' (890-6279-4), BH 03 - 0.5' (890-6279-5), BH 03 - 1' (890-6279-6), BH 04 - 0.5' (890-6279-7) and BH 04 - 1' (890-6279-8).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74523 and 880-74618 and analytical batch 880-74553 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH 03 - 1' (890-6279-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-74553 recovered above the upper control limit for Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-74553/20).

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: Surrogate recovery for the following samples were outside control limits: BH 02 - 0.5' (890-6279-3), BH 02 - 1' (890-6279-4), BH 04 - 0.5' (890-6279-7), BH 04 - 1' (890-6279-8), (LCS 880-74529/2-A), (LCSD 880-74529/3-A) and (890-6269-A-1-C). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-74529 and analytical batch 880-74542 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-74529 and analytical batch 880-74542 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-74542 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-74542/47).

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

HPLC/IC

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

Eurofins Carlsbad

Job ID: 890-6279-1

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Job ID: 890-6279-1 SDG: 03A2040018

Lab Sample ID: 890-6279-1

Client Sample ID: BH 01 - 0.5'

Date Collected: 02/26/24 09:42 Date Received: 02/28/24 16:02

Sample Depth: 0.5'

Client: Ensolum

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 01:38	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 01:38	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 01:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/04/24 11:27	03/05/24 01:38	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 01:38	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/04/24 11:27	03/05/24 01:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			03/04/24 11:27	03/05/24 01:38	1
1,4-Difluorobenzene (Surr)	87		70 - 130			03/04/24 11:27	03/05/24 01:38	1
Method: TAL SOP Total BTEX - T	otal BTEX Cal	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/05/24 01:38	1
Method: SW846 8015 NM - Diese	Range Organ	ice (DRO) ((30)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	110		50.0	mg/Kg			03/03/24 23:27	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Method: SW846 8015B NM - Dies Analyte		nics (DRO) Qualifier	(GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier		Unit mg/Kg	<u>D</u>	Prepared 03/03/24 00:31	Analyzed 03/03/24 23:27	Dil Fac
	Result	Qualifier	RL		<u> </u>			1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0	Qualifier U *1	RL 50.0	mg/Kg	<u> </u>	03/03/24 00:31	03/03/24 23:27	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	Qualifier U *1	RL 50.0	mg/Kg	<u> </u>	03/03/24 00:31 03/03/24 00:31	03/03/24 23:27 03/03/24 23:27	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 110 <50.0	Qualifier U *1	RL 50.0 50.0 50.0	mg/Kg	<u>D</u>	03/03/24 00:31 03/03/24 00:31 03/03/24 00:31	03/03/24 23:27 03/03/24 23:27 03/03/24 23:27 03/03/24 23:27	1

Method: EPA 300.0 - Anions, Ion C	hromatography - So	luble					
Analyte	Result Qualifie	r RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127	5.01	mg/Kg			03/05/24 00:46	1

Client Sample ID: BH 01 - 1' Date Collected: 02/26/24 09:46 Date Received: 02/28/24 16:02

Sample Depth: 1'

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/24 11:27	03/05/24 02:04	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/24 11:27	03/05/24 02:04	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/24 11:27	03/05/24 02:04	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/04/24 11:27	03/05/24 02:04	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/24 11:27	03/05/24 02:04	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/04/24 11:27	03/05/24 02:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			03/04/24 11:27	03/05/24 02:04	1

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Lab Sample ID: 890-6279-2

Matrix: Solid

Matrix: Solid

Client Sample Results

Job ID: 890-6279-1 SDG: 03A2040018

Matrix: Solid

Dil Fac

Dil Fac

Dil Fac

Dil Fac

1

Matrix: Solid

Lab Sample ID: 890-6279-2

Analyzed

03/05/24 02:04

Analyzed

03/05/24 02:04

Analyzed

03/03/24 23:48

Analyzed

03/03/24 23:48

Lab Sample ID: 890-6279-3

11:27

Client Sample ID: BH 01 - 1'

Date Collected: 02/26/24 09:46

Date Received: 02/28/24 16:02

Client: Ensolum

Sample	Depth:	1'

Surrogate	%Recovery	Qualifier	Limits			Prepared
1,4-Difluorobenzene (Surr)	87		70 - 130		-	03/04/24 11:2
Method: TAL SOP Total BTE	X - Total BTEX Cald	culation				
Analyte	Result	Qualifier	RL	Unit	D	Prepared
Total BTEX	<0.00403	U	0.00403	mg/Kg		
	iesel Range Organ	ics (DRO) (GC)			
	Result	Qualifier	RL	Unit	D	Prepared
Analyte	Result					

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL Unit <49.9 U *1 49.9 Gasoline Range Organics mg/Kg

1-Chlorooctane o-Terphenyl	113 120	70 - 130 70 - 130		03/03/24 00:31 03/03/24 00:31	03/03/24 23:48 03/03/24 23:48	1 1
Surrogate	%Recovery			Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9 L	J 49.9	mg/Kg	03/03/24 00:31	03/03/24 23:48	1
Diesel Range Organics (Over C10-C28)	60.4	49.9	mg/Kg	03/03/24 00:31	03/03/24 23:48	1
(GRO)-C6-C10			0.0			

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.5	4.99	mg/Kg			03/05/24 01:03	1

Client Sample ID: BH 02 - 0.5'

Date Collected: 02/26/24 10:30 Date Received: 02/28/24 16:02 Sample Depth: 0.5'

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00201 U 0.00201 mg/Kg 03/04/24 11:27 03/05/24 02:29 Toluene <0.00201 U 0.00201 03/04/24 11:27 03/05/24 02.29 mg/Kg 1 Ethylbenzene <0.00201 U 0.00201 mg/Kg 03/04/24 11:27 03/05/24 02:29 03/04/24 11:27 03/05/24 02:29 m-Xylene & p-Xylene <0.00402 U 0.00402 mg/Kg 1 o-Xylene <0.00201 U 0.00201 mg/Kg 03/04/24 11:27 03/05/24 02:29 Xylenes, Total <0.00402 U 0.00402 mg/Kg 03/04/24 11:27 03/05/24 02:29 1 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analvzed 70 - 130 03/04/24 11:27 4-Bromofluorobenzene (Surr) 114 03/05/24 02:29 1 1,4-Difluorobenzene (Surr) 103 70 - 130 03/04/24 11:27 03/05/24 02:29 1 Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL D Dil Fac Unit Prepared Analyzed Total BTEX <0.00402 Ū 0.00402 03/05/24 02:29 mg/Kg 1 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac <49.8 U Total TPH 49.8 03/04/24 00:08

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red

D

Prepared

03/03/24 00:31

mg/Kg

Released to Imaging: 5/14/2024 2:38:00 PM

Job ID: 890-6279-1 SDG: 03A2040018

Lab Sample ID: 890-6279-3

Analyzed

Lab Sample ID: 890-6279-4

Matrix: Solid

Client Sample ID: BH 02 - 0.5'

Date	Collected:	02/26/24	10:30
Date	Received:	02/28/24	16:02

Sample Depth: 0.5'

Client: Ensolum

Method: SW846 8015B NM - Diesel Ran	ge Organics (DRO) (GC)	
Analyte	Result Qualifier	RL

<49.8	U *1	49.8	mg/Kg	03/03/24 00:31	03/04/24 00:08	1
<49.8	U	49.8	mg/Kg	03/03/24 00:31	03/04/24 00:08	1
<49.8	U	49.8	mg/Kg	03/03/24 00:31	03/04/24 00:08	1
			0 0			
%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
140	S1+	70 - 130		03/03/24 00:31	03/04/24 00:08	1
151	S1+	70 - 130		03/03/24 00:31	03/04/24 00:08	1
	<49.8 <49.8 <u>%Recovery</u> 140	<49.8 U *1 <49.8 U <49.8 U 	<49.8 U 49.8 <49.8 U 49.8 	 <49.8 U <49.8 U <49.8 U <49.8 U <49.8 mg/Kg 		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.3	 4.97	mg/Kg			03/05/24 01:08	1

Client Sample ID: BH 02 - 1'

Date Collected: 02/26/24 10:32 Date Received: 02/28/24 16:02

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 02:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 02:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 02:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/04/24 11:27	03/05/24 02:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 02:55	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/04/24 11:27	03/05/24 02:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			03/04/24 11:27	03/05/24 02:55	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/04/24 11:27	03/05/24 02:55	1
1,4-Difluorobenzene (Surr) Method: TAL SOP Total BTEX Analyte	- Total BTEX Calo	culation Qualifier	70 - 130 RL	Unit	D	03/04/24 11:27 Prepared	03/05/24 02:55 Analyzed	1 Dil Fac
Method: TAL SOP Total BTEX	- Total BTEX Calo	Qualifier		Unit mg/Kg	<u>D</u>			1 Dil Fac 1
Method: TAL SOP Total BTEX Analyte	- Total BTEX Calc Result <0.00401	Qualifier U	RL 0.00401		D		Analyzed	1 1
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc Result <0.00401 esel Range Organ	Qualifier U	RL 0.00401		<u>D</u>		Analyzed	1 Dil Fac 1 Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die	- Total BTEX Calc Result <0.00401 esel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00401	mg/Kg		Prepared	Analyzed 03/05/24 02:55	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00401 esel Range Organ Result <49.6	Qualifier U ics (DRO) (1 Qualifier U	RL 0.00401 GC) RL 49.6	mg/Kg Unit		Prepared	Analyzed 03/05/24 02:55 Analyzed	1
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00401 esel Range Organ Result <49.6 iesel Range Orga	Qualifier U ics (DRO) (1 Qualifier U	RL 0.00401 GC) RL 49.6	mg/Kg Unit		Prepared	Analyzed 03/05/24 02:55 Analyzed	1

Diesel Range Organics (Over	<49.6	U	49.6	mg/Kg	03/03/24 00:31	03/04/24 00:29	1
C10-C28) Oll Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg	03/03/24 00:31	03/04/24 00:29	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Surrogate 1-Chlorooctane		Qualifier S1+	Limits		Prepared 03/03/24 00:31	Analyzed 03/04/24 00:29	Dil Fac

Matrix: Solid

Dil Fac

5

Unit

D

Prepared

		Clien	t Sample Re	sults				
Client: Ensolum			-				Job ID: 890	-6279-1
Project/Site: Blueberry Hill 3H 4H 6H 0	СТВ						SDG: 03A2	2040018
Client Sample ID: BH 02 - 1' Date Collected: 02/26/24 10:32 Date Received: 02/28/24 16:02 Sample Depth: 1'						Lab Sar	nple ID: 890- Matri	6279-4 x: Solic
Method: EPA 300.0 - Anions, Ion Ch	nromatograp	ohy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	43.8		4.97	mg/Kg			03/05/24 01:14	
Client Sample ID: BH 03 - 0.5' Date Collected: 02/26/24 11:22 Date Received: 02/28/24 16:02 Sample Depth: 0.5'						Lab San	nple ID: 890- Matri	6279-{ x: Solic
Method: SW846 8021B - Volatile Or		ounds (GC) Qualifier	RL	Unit	D	Bronorod	Applyzed	Dil Fa
Analyte Benzene	<0.00200		0.00200	mg/Kg		Prepared 03/04/24 11:27	Analyzed 03/05/24 03:20	
Toluene	<0.00200		0.00200	mg/Kg		03/04/24 11:27	03/05/24 03:20	
Ethylbenzene	<0.00200		0.00200	mg/Kg		03/04/24 11:27	03/05/24 03:20	
m-Xylene & p-Xylene	<0.00200		0.00399	mg/Kg		03/04/24 11:27	03/05/24 03:20	
o-Xylene	<0.00200		0.00200	mg/Kg		03/04/24 11:27	03/05/24 03:20	
Xylenes, Total	< 0.00399		0.00399	mg/Kg		03/04/24 11:27	03/05/24 03:20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	107		70 - 130			03/04/24 11:27	03/05/24 03:20	
1,4-Difluorobenzene (Surr) -	98		70 - 130			03/04/24 11:27	03/05/24 03:20	
- Method: TAL SOP Total BTEX - Tota	al BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/05/24 03:20	,
Method: SW846 8015 NM - Diesel R	ange Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.3	U	50.3	mg/Kg			03/04/24 00:50	1
Method: SW846 8015B NM - Diesel			(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1	50.3	mg/Kg		03/03/24 00:31	03/04/24 00:50	
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		03/03/24 00:31	03/04/24 00:50	
Oll Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		03/03/24 00:31	03/04/24 00:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	119		70 - 130			03/03/24 00:31	03/04/24 00:50	
o-Terphenyl	126		70 - 130			03/03/24 00:31	03/04/24 00:50	1
Method: EPA 300.0 - Anions, Ion Ch				1114	-	Deserved	Anol:	D" F
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

mg/Kg

5.03

83.6

Eurofins Carlsbad

03/05/24 01:19

Chloride

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Job ID: 890-6279-1 SDG: 03A2040018

Matrix: Solid

5

Lab Sample ID: 890-6279-6

Client Sample ID: BH 03 - 1'

Date Collected: 02/26/24 11:24 Date Received: 02/28/24 16:02

Sample Depth: 1'

Client: Ensolum

6:02

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 03:46	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 03:46	
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 03:46	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		03/04/24 11:27	03/05/24 03:46	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 03:46	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		03/04/24 11:27	03/05/24 03:46	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130			03/04/24 11:27	03/05/24 03:46	1
1,4-Difluorobenzene (Surr)	88		70 - 130			03/04/24 11:27	03/05/24 03:46	î
Method: TAL SOP Total BTEX - 1								
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			03/05/24 03:46	
			GC)					
Method: SW846 8015 NM - Diese								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH		Qualifier		Unit mg/Kg	<u> </u>	Prepared	Analyzed 03/04/24 01:11	
Analyte	Result <50.1	Qualifier U	RL 50.1		<u> </u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <50.1 sel Range Orga Result	Qualifier U anics (DRO) Qualifier	RL 50.1		D	Prepared		1
Analyte Total TPH	Result <50.1	Qualifier U anics (DRO) Qualifier	(GC)	mg/Kg			03/04/24 01:11	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.1 sel Range Orga Result	Qualifier U Qualifier Qualifier U *1	RL 50.1 (GC) RL	mg/Kg Unit		Prepared	03/04/24 01:11 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result Sel Range Orga Result <	Qualifier U Qualifier Qualifier U *1 U	RL 50.1 (GC) RL 50.1	mg/Kg Unit mg/Kg		Prepared 03/03/24 00:31	03/04/24 01:11 Analyzed 03/04/24 01:11	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.1	Qualifier U Qualifier U *1 U U	RL 50.1 (GC) RL 50.1 50.1	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/03/24 00:31 03/03/24 00:31	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.1	Qualifier U Qualifier U *1 U U	RL 50.1 (GC) RL 50.1 50.1 50.1 50.1	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.1	Qualifier U Qualifier U *1 U U	RL 50.1 (GC) RL 50.1 50.1 50.1 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane p-Terphenyl	Result <50.1	Qualifier U Qualifier U *1 U U Qualifier	RL 50.1 (GC) RL 50.1 50.1 50.1 50.1 50.1 70.1 70.130 70.130	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11	1 Dil Fac 1 1 1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion	Result <50.1	Qualifier U Qualifier U *1 U U Qualifier	RL 50.1 (GC) RL 50.1 <td>mg/Kg Unit mg/Kg mg/Kg</td> <td></td> <td>Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31</td> <td>03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11</td> <td>Dil Fac</td>	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane p-Terphenyl Method: EPA 300.0 - Anions, Ion Analyte	Result <50.1	Qualifier U Qualifier U*1 U Qualifier O Qualifier	RL 50.1 (GC) RL 50.1 <td>mg/Kg Unit mg/Kg mg/Kg mg/Kg</td> <td> D</td> <td>Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31 03/03/24 00:31</td> <td>03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11</td> <td>Dil Fac</td>	mg/Kg Unit mg/Kg mg/Kg mg/Kg	D	Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31 03/03/24 00:31	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.1	Qualifier U Qualifier U*1 U Qualifier O Qualifier	RL 50.1 (GC) RL 50.1 <td>mg/Kg Unit mg/Kg mg/Kg mg/Kg</td> <td> D</td> <td>Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31 03/03/24 00:31 Prepared</td> <td>03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed Analyzed</td> <td>Dil Fac</td>	mg/Kg Unit mg/Kg mg/Kg mg/Kg	D	Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31 03/03/24 00:31 Prepared	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) DII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane p-Terphenyl Method: EPA 300.0 - Anions, Ion Analyte Chloride	Result <50.1	Qualifier U Qualifier U*1 U Qualifier O Qualifier	RL 50.1 (GC) RL 50.1 <td>mg/Kg Unit mg/Kg mg/Kg mg/Kg</td> <td> D</td> <td>Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31 03/03/24 00:31 Prepared</td> <td>03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/05/24 01:36 nple ID: 890-</td> <td>Dil Fac</td>	mg/Kg Unit mg/Kg mg/Kg mg/Kg	D	Prepared 03/03/24 00:31 03/03/24 00:31 03/03/24 00:31 Prepared 03/03/24 00:31 03/03/24 00:31 Prepared	03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/04/24 01:11 03/04/24 01:11 03/04/24 01:11 Analyzed 03/05/24 01:36 nple ID: 890-	Dil Fac

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 04:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 04:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 04:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/04/24 11:27	03/05/24 04:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 04:11	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/04/24 11:27	03/05/24 04:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			03/04/24 11:27	03/05/24 04:11	1

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Client Sample Results

Job ID: 890-6279-1 SDG: 03A2040018

Lab Sample ID: 890-6279-7

Client Sample ID: BH 04 - 0.5'

Date Collected: 02/26/24 11:30 Date Received: 02/28/24 16:02

Sample Depth: 0.5'

Client: Ensolum

epui.	0.5						

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	89		70 - 130			03/04/24 11:27	03/05/24 04:11	
Method: TAL SOP Total BTEX - T	otal BTEX Calo	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00400	U	0.00400	mg/Kg			03/05/24 04:11	
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	61.8		50.2	mg/Kg			03/04/24 01:32	
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.2	U *1	50.2	mg/Kg		03/03/24 00:31	03/04/24 01:32	
Diesel Range Organics (Over C10-C28)	61.8		50.2	mg/Kg		03/03/24 00:31	03/04/24 01:32	
Oll Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		03/03/24 00:31	03/04/24 01:32	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	141	S1+	70 - 130			03/03/24 00:31	03/04/24 01:32	
o-Terphenyl	151	S1+	70 - 130			03/03/24 00:31	03/04/24 01:32	
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	839		5.05	mg/Kg			03/05/24 01:41	

Client Sample ID: BH 04 - 1'

Date Collected: 02/26/24 11:38 Date Received: 02/28/24 16:02 Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 04:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 04:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 04:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/04/24 11:27	03/05/24 04:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/04/24 11:27	03/05/24 04:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/04/24 11:27	03/05/24 04:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			03/04/24 11:27	03/05/24 04:37	1
1,4-Difluorobenzene (Surr)	94		70 - 130			03/04/24 11:27	03/05/24 04:37	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/05/24 04:37	1
- Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/04/24 01:53	1

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Matrix: Solid

Matrix: Solid

Client Sample Results

RL

50.4

50.4

50.4

RL

5.02

Limits

70 - 130

70 - 130

Unit

mg/Kg

mg/Kg

mg/Kg

Unit

mg/Kg

D

D

Prepared

03/03/24 00:31

03/03/24 00:31

03/03/24 00:31

Prepared

03/03/24 00:31

03/03/24 00:31

Prepared

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

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

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

<50.4 U *1

<50.4 U

<50.4 U

%Recovery Qualifier

150 S1+

Result Qualifier

126

367

Client Sample ID: BH 04 - 1'

Date Collected: 02/26/24 11:38 Date Received: 02/28/24 16:02

Sample Depth: 1'

Gasoline Range Organics

Diesel Range Organics (Over

Oll Range Organics (Over C28-C36)

Analyte

C10-C28)

Surrogate 1-Chlorooctane

o-Terphenyl

Analyte

Chloride

(GRO)-C6-C10

Lab Sample ID: 890-6279-8

Analyzed

03/04/24 01:53

03/04/24 01:53

03/04/24 01:53

Analyzed

03/04/24 01:53

03/04/24 01:53

Analyzed 03/05/24 01:47

Matrix: Solid

Dil Fac

1

1

1

1

1

Dil Fac

Dil Fac

Job ID: 890-6279-1

SDG: 03A2040018

	5	

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Rologod	to	Imaging.	5/11	12021	2.28.00	DM
Keleasea	10	Imaging:	3/14	/2024	2:30:00	r M

narv

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Job ID: 890-6279-1 SDG: 03A2040018

Prep Type: Total/NA

Prep Type: Total/NA

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-6279-1	BH 01 - 0.5'	95	87	
390-6279-1 MS	BH 01 - 0.5'	108	89	
890-6279-1 MSD	BH 01 - 0.5'	115	84	
890-6279-2	BH 01 - 1'	92	87	
890-6279-3	BH 02 - 0.5'	114	103	
890-6279-4	BH 02 - 1'	104	98	
390-6279-5	BH 03 - 0.5'	107	98	
890-6279-6	BH 03 - 1'	62 S1-	88	
390-6279-7	BH 04 - 0.5'	93	89	
390-6279-8	BH 04 - 1'	102	94	
_CS 880-74618/1-A	Lab Control Sample	114	112	
_CSD 880-74618/2-A	Lab Control Sample Dup	114	112	
MB 880-74523/5-A	Method Blank	62 S1-	87	
MB 880-74618/5-A	Method Blank	62 S1-	88	
Surrogate Legend				
BFB = 4-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (Surr)			

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

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limit
		1CO1	OTPH1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
0-6269-A-1-D MS	Matrix Spike	113	112	
0-6269-A-1-E MSD	Matrix Spike Duplicate	101	100	
)-6279-1	BH 01 - 0.5'	109	119	
0-6279-2	BH 01 - 1'	113	120	
-6279-3	BH 02 - 0.5'	140 S1+	151 S1+	
-6279-4	BH 02 - 1'	135 S1+	148 S1+	
6279-5	BH 03 - 0.5'	119	126	
6279-6	BH 03 - 1'	117	124	
6279-7	BH 04 - 0.5'	141 S1+	151 S1+	
6279-8	BH 04 - 1'	126	150 S1+	
880-74529/2-A	Lab Control Sample	107	138 S1+	
D 880-74529/3-A	Lab Control Sample Dup	112	138 S1+	
880-74529/1-A	Method Blank	145 S1+	156 S1+	

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

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Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7452	23/5-A								Client Sa	mple ID: Meth	
Matrix: Solid										Prep Type:	
Analysis Batch: 74553										Prep Bate	ch: 74523
		MB					_	_	_		
Analyte		Qualifier	RL		Unit		<u>D</u>		repared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200		mg/K	-			2/24 11:17	03/04/24 11:55	1
	<0.00200		0.00200		mg/K	-			2/24 11:17	03/04/24 11:55	1
Ethylbenzene	<0.00200		0.00200		mg/K				2/24 11:17	03/04/24 11:55	1
m-Xylene & p-Xylene	<0.00400		0.00400		mg/K	-			2/24 11:17	03/04/24 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/K	g		03/0	2/24 11:17	03/04/24 11:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/K	g		03/0	2/24 11:17	03/04/24 11:55	1
	МВ	МВ									
Surrogate	%Recovery		Limits					Р	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62		70 - 130						2/24 11:17	03/04/24 11:55	1
1,4-Difluorobenzene (Surr)	87		70 - 130						2/24 11:17	03/04/24 11:55	1
	07		101100					00,0		00,0 //21 11.00	,
Lab Sample ID: MB 880-7461	8/5-A								Client Sa	mple ID: Meth	od Blank
Matrix: Solid										Prep Type:	
Analysis Batch: 74553										Prep Bate	
	MB	МВ									
Analyte	Result	Qualifier	RL		Unit		D	Р	repared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/K	g	_	03/0	4/24 11:27	03/05/24 01:13	1
Toluene	<0.00200	U	0.00200		mg/K	-		03/0	4/24 11:27	03/05/24 01:13	1
Ethylbenzene	<0.00200		0.00200		mg/K	-			4/24 11:27	03/05/24 01:13	1
m-Xylene & p-Xylene	<0.00400		0.00400		mg/K				4/24 11:27	03/05/24 01:13	
o-Xylene	< 0.00200		0.00200		mg/K	-			4/24 11:27	03/05/24 01:13	1
Xylenes, Total	< 0.00400		0.00400		mg/K	-			4/24 11:27	03/05/24 01:13	1
		0	0.00100		ing/it	9		00/0		00/00/2101.10	
	МВ	МВ									
Surrogate	%Recovery		Limits					P	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130					03/0	04/24 11:27	03/05/24 01:13	1
1,4-Difluorobenzene (Surr)	88		70 - 130					03/0	4/24 11:27	03/05/24 01:13	1
	10/1						_		•		
Lab Sample ID: LCS 880-746	18/1-A						C	lient	Sample	ID: Lab Contro	
Matrix: Solid										Prep Type:	
Analysis Batch: 74553										Prep Bate	n: 74618
			Spike	LCS				_		%Rec	
Analyte			Added		Qualifier	Unit		_ <u>D</u>	%Rec	Limits	
Benzene			0.100	0.09004		mg/Kg			90	70 - 130	
Toluene			0.100	0.08524		mg/Kg			85	70 - 130	
Ethylbenzene			0.100	0.1028		mg/Kg			103	70 - 130	
m-Xylene & p-Xylene			0.200	0.2045		mg/Kg			102	70 - 130	
o-Xylene			0.100	0.1079		mg/Kg			108	70 - 130	
	LCS LCS										
Surrogate	%Recovery Qua		Limits								
4-Bromofluorobenzene (Surr)			70 - 130								
1,4-Difluorobenzene (Surr)	112		70 - 130								
	112										
Lab Sample ID: LCSD 880-74	618/2-A					Cli	ient	Sam	ple ID: L	ab Control Sar	nple Dup
Matrix: Solid									-	Prep Type:	
Analysis Batch: 74553										Prep Bate	
			Spike	LCSD	LCSD					%Rec	RPD
Analyte			Added		Qualifier	Unit		D	%Rec	Limits RF	

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5

Job ID: 890-6279-1 SDG: 03A2040018

Benzene

0.09711

mg/Kg

97

70 - 130

0.100

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6279-1 SDG: 03A2040018

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

Lab Sample ID: LCSD 880-74618	8/ 2-A					Clie	nt Sam	ple ID: I	ab Contro		
Matrix: Solid										ype: To	
Analysis Batch: 74553			• "							Batch:	
			Spike		LCSD		_	~ -	%Rec		RPD
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Toluene			0.100	0.09538		mg/Kg		95	70 - 130	11	35
Ethylbenzene			0.100	0.1092		mg/Kg		109	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2171		mg/Kg		109	70 - 130	6	3
o-Xylene			0.100	0.1147		mg/Kg		115	70 - 130	6	3
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	114		70 - 130								
1,4-Difluorobenzene (Surr)	112		70 - 130								
Lab Sample ID: 890-6279-1 MS								Clien	t Sample II		
Matrix: Solid										ype: To	
Analysis Batch: 74553										Batch:	74618
		Sample	Spike		MS		_		%Rec		
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Benzene	<0.00199		0.101	0.07748		mg/Kg		77	70 - 130		
Toluene	<0.00199		0.101	0.07923		mg/Kg		79	70 - 130		
Ethylbenzene	<0.00199		0.101	0.08771		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1743		mg/Kg		86	70 - 130		
o-Xylene	<0.00199	U	0.101	0.09036		mg/Kg		90	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	108		70 - 130								
1,4-Difluorobenzene (Surr)	89		70 - 130								
Lab Sample ID: 900 6270 4 MCD								Clier	t Sample !!	י 10 מי	
Lab Sample ID: 890-6279-1 MSD Matrix: Solid								Clien	t Sample II		
										ype: To	
Analysis Batch: 74553	0	0	0 11							Batch:	
	•	Sample	Spike	MSD	MSD				%Rec		RPD

	Sample	Sample	Opike	NIGD	MOD				/artec		NP D
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.08960		mg/Kg		89	70 - 130	15	35
Toluene	<0.00199	U	0.100	0.09376		mg/Kg		93	70 - 130	17	35
Ethylbenzene	<0.00199	U	0.100	0.1021		mg/Kg		102	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.2047		mg/Kg		102	70 - 130	16	35
o-Xylene	<0.00199	U	0.100	0.1045		mg/Kg		104	70 - 130	15	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								

70 - 130

70 - 130

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

115

84

Lab Sample ID: MB 880-74529/1-A Matrix: Solid Analysis Batch: 74542	MB	МВ				Client Sa	mple ID: Metho Prep Type: T Prep Batcl	Total/NA
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/03/24 00:31	03/03/24 20:56	1

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4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

Method: 8015B NM

Lab Sample ID: MB 880-74529/1-	A								CI	ient Sa	ample ID: Me		
Matrix: Solid											Prep Typ		
Analysis Batch: 74542											Prep B	atch:	74529
	_	MB						_	_				
Analyte			Qualifier			Unit		<u>D</u>	· · · ·	ared	Analyzed		Dil Fac
Diesel Range Organics (Over C10-C28)	<	\$0.0	U	50.0		mg/Kg	9		03/03/2	4 00:31	03/03/24 20:	56	1
Oll Range Organics (Over C28-C36)	<	\$0.0		50.0		mg/Kg	9		03/03/2	4 00:31	03/03/24 20:	56	1
			МВ										
Surrogate	%Reco	-		Limits					·	ared	Analyzed		Dil Fac
1-Chlorooctane		145	S1+	70 - 130					03/03/2	24 00:31	03/03/24 20:	56	1
p-Terphenyl		156	S1+	70 - 130					03/03/2	4 00:31	03/03/24 20:	56	1
Lab Sample ID: LCS 880-74529/2	2-A							С	lient Sa	ample	ID: Lab Con		
Matrix: Solid											Prep Typ		
Analysis Batch: 74542											Prep B	atch:	74529
				Spike	LCS	LCS					%Rec		
Analyte				Added		Qualifier	Unit		<u>D</u> %	%Rec	Limits		
Gasoline Range Organics				1000	877.9		mg/Kg			88	70 - 130		
(GRO)-C6-C10					640 0					~ 1			
Diesel Range Organics (Over				1000	910.2		mg/Kg			91	70 - 130		
C10-C28)													
	LCS	LCS											
Surrogate	%Recovery	Qual	lifier	Limits									
1-Chlorooctane	107			70 - 130									
o-Terphenyl	138	S1+		70 - 130									
Lab Sample ID: LCSD 880-74529	/ 3-A						Cli	ent	Sampl	e ID: L	ab Control S	Sample	e Dup
Matrix: Solid											Prep Typ	be: Tot	tal/NA
Analysis Batch: 74542											Prep B	atch:	74529
				Spike	LCSD	LCSD					%Rec		RPD
Analyte				Added	Result	Qualifier	Unit		<u>D</u> %	6Rec	Limits	RPD	Limit
Gasoline Range Organics				1000	1192	*1	mg/Kg			119	70 - 130	30	20
(GRO)-C6-C10													
Diesel Range Organics (Over				1000	939.0		mg/Kg			94	70 - 130	3	20
C10-C28)													
	LCSD	LCS	D										
Surrogate	%Recovery	Qual	lifier	Limits									
1-Chlorooctane	112			70 - 130									
o-Terphenyl	(00	S1+		70 - 130									

Lab Sample ID: 890-6269-A-1-D MS Matrix: Solid

Analysis Batch: 74542									Pre	p Batch:	74529	
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	1000	1081		mg/Kg		108	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.7	U	1000	1020		mg/Kg		97	70 - 130			

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	112		70 - 130

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

Eurofins Carlsbad

Job ID: 890-6279-1

SDG: 03A2040018

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6279-1 SDG: 03A2040018

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

Matrix: Solid	-1-E MSD					Ŭ			: Matrix S Pren 1	Гуре: То	
Analysis Batch: 74542										Batch:	
Analysis Baten. 14042	Sample	Sample	Spike	MSD	MSD				%Rec	Baten.	RP
Analyte	-	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Gasoline Range Organics	<49.7		1000	920.6		mg/Kg		92	70 - 130	16	2
(GRO)-C6-C10											_
Diesel Range Organics (Over	<49.7	U	1000	916.8		mg/Kg		87	70 - 130	11	2
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	100		70 - 130								
lethod: 300.0 - Anions, Lab Sample ID: MB 880-744 Matrix: Solid Analysis Batch: 74634		ography						Client S	ample ID: Prep	Method Type: S	
		MB MB									
Analyte	R	esult Qualifier		RL	Unit		D P	repared	Analyz	zed	Dil Fa
Chloride	<	5.00 U		5.00	mg/K	g .			03/05/24	00:29	
Analysis Batch: 74634											
			Spike Added		LCS Qualifier	Unit	р	%Rec	%Rec		
nalyte			Spike Added 250		LCS Qualifier	Unit mg/Kg	<u>D</u>	%Rec 99	%Rec Limits 90 - 110		
Analyte Chloride Lab Sample ID: LCSD 880-7			Added	Result		mg/Kg		99	Limits 90 - 110 Lab Contro		
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid	 4410/3-A		Added	Result		mg/Kg		99	Limits 90 - 110 Lab Contro	ol Sampl Type: S	
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid	 '4410/3-A		Added	Result 247.3	Qualifier	mg/Kg		99	Limits 90 - 110 Lab Contro Prep		olub
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634	 4410/3-A		Added 250 Spike	Result 247.3 LCSD	Qualifier	mg/Kg Clie	ent Sam	99 -	Limits 90 - 110 Lab Contro Prep %Rec	Type: S	olub Ri
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte	 '4410/3-A		Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie		99 aple ID: I %Rec	Limits 90 - 110 Lab Contro Prep %Rec Limits	Type: S	olub Ri Lir
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte			Added 250 Spike	Result 247.3 LCSD	Qualifier	mg/Kg Clie	ent Sam	99 -	Limits 90 - 110 Lab Contro Prep %Rec	Type: S	olub Ri Lir
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride			Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	ent Sam	99 aple ID: I %Rec 99	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110	Type: S	olub Ri Lir
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1			Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	ent Sam	99 aple ID: I %Rec 99	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110	RPD 0 D: BH 0' 0	olub RI Lir 1 - 0.
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1			Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	ent Sam	99 aple ID: I %Rec 99	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110	Type: S	olub Rf Lin
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1	 MS		Added 250 Spike Added 250	Result 247.3 LCSD Result 247.8	Qualifier LCSD Qualifier	mg/Kg Clie	ent Sam	99 aple ID: I %Rec 99	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 at Sample II Prep	RPD 0 D: BH 0' 0	olub Rf Lin
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analysis Batch: 74634	— — — — — — — — — — — — — — — — — — —	Sample Qualifier	Added 250 Spike Added 250 Spike	Result 247.3 LCSD Result 247.8	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	99 nple ID: I <u>%Rec</u> 99 Clien	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II Prep %Rec	RPD 0 D: BH 0' 0	olub Rf Lin
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1 Matrix: Solid Analysis Batch: 74634 Analyte	— — — — — — — — — — — — — — — — — — —	Sample Qualifier	Added 250 Spike Added 250	Result 247.3 LCSD Result 247.8	Qualifier LCSD Qualifier	mg/Kg Clie	ent Sam	99 aple ID: I %Rec 99	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 at Sample II Prep	RPD 0 D: BH 0' 0	olub Ri Lir
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6279-1 Matrix: Solid Analysis Batch: 74634 Analyte	MS Sample Result	-	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	99 pple ID: I %Rec 99 Clien %Rec	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II Prep %Rec Limits	RPD 0 D: BH 0' 0	olub Rf Lin
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1 I	MS Sample Result 127	-	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	99 ple ID: I %Rec 99 Clien %Rec 93	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II %Rec Limits 90 - 110	RPD 0 D: BH 0' Type: S	olub RF Lin 1 - 0. olub
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1 I	MS Sample Result 127	-	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	99 ple ID: I %Rec 99 Clien %Rec 93	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II %Rec Limits 90 - 110	RPD 0 D: BH 0' Type: S	olub RI Lir 1 - 0. olub
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid	MS Sample Result 127	-	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	99 ple ID: I %Rec 99 Clien %Rec 93	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II %Rec Limits 90 - 110	RPD 0 D: BH 0' Type: S	olub RF Lin 1 - 0. olub
Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analyte Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid	MS Sample <u>Result</u> 127 MSD	-	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result 358.9	Qualifier LCSD Qualifier MS	mg/Kg Clie Unit mg/Kg	D	99 ple ID: I %Rec 99 Clien %Rec 93	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II %Rec Limits 90 - 110	RPD 0 D: BH 0' Type: S	olub RF
Analysis Batch: 74634 Analyte Chloride Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6279-1 I Matrix: Solid Analysis Batch: 74634 Analysis Batch: 74634	MS Sample Result 127 MSD Sample	Qualifier	Added 250 Spike Added 250 Spike Added 251	Result 247.3 LCSD Result 247.8 MS Result 358.9	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Clie Unit mg/Kg	D	99 ple ID: I %Rec 99 Clien %Rec 93	Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 tt Sample II Prep %Rec Limits 90 - 110 tt Sample II Prep	RPD 0 D: BH 0' Type: S	olub RR Lin 1 - 0. olub

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6279-1 SDG: 03A2040018

GC VOA

Prep Batch: 74523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-74523/5-A	Method Blank	Total/NA	Solid	5035	
nalysis Batch: 74553					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Total/NA	Solid	8021B	74618
890-6279-2	BH 01 - 1'	Total/NA	Solid	8021B	74618
890-6279-3	BH 02 - 0.5'	Total/NA	Solid	8021B	7461
390-6279-4	BH 02 - 1'	Total/NA	Solid	8021B	7461
390-6279-5	BH 03 - 0.5'	Total/NA	Solid	8021B	7461
390-6279-6	BH 03 - 1'	Total/NA	Solid	8021B	7461
390-6279-7	BH 04 - 0.5'	Total/NA	Solid	8021B	7461
390-6279-8	BH 04 - 1'	Total/NA	Solid	8021B	7461
MB 880-74523/5-A	Method Blank	Total/NA	Solid	8021B	7452
MB 880-74618/5-A	Method Blank	Total/NA	Solid	8021B	7461
LCS 880-74618/1-A	Lab Control Sample	Total/NA	Solid	8021B	7461
_CSD 880-74618/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7461
390-6279-1 MS	BH 01 - 0.5'	Total/NA	Solid	8021B	7461
890-6279-1 MSD	BH 01 - 0.5'	Total/NA	Solid	8021B	7461

Prep Batch: 74618

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Total/NA	Solid	5035	
890-6279-2	BH 01 - 1'	Total/NA	Solid	5035	
890-6279-3	BH 02 - 0.5'	Total/NA	Solid	5035	
890-6279-4	BH 02 - 1'	Total/NA	Solid	5035	
890-6279-5	BH 03 - 0.5'	Total/NA	Solid	5035	
890-6279-6	BH 03 - 1'	Total/NA	Solid	5035	
890-6279-7	BH 04 - 0.5'	Total/NA	Solid	5035	
890-6279-8	BH 04 - 1'	Total/NA	Solid	5035	
MB 880-74618/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74618/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74618/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6279-1 MS	BH 01 - 0.5'	Total/NA	Solid	5035	
890-6279-1 MSD	BH 01 - 0.5'	Total/NA	Solid	5035	

Analysis Batch: 74824

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Total/NA	Solid	Total BTEX	
890-6279-2	BH 01 - 1'	Total/NA	Solid	Total BTEX	
890-6279-3	BH 02 - 0.5'	Total/NA	Solid	Total BTEX	
890-6279-4	BH 02 - 1'	Total/NA	Solid	Total BTEX	
890-6279-5	BH 03 - 0.5'	Total/NA	Solid	Total BTEX	
890-6279-6	BH 03 - 1'	Total/NA	Solid	Total BTEX	
890-6279-7	BH 04 - 0.5'	Total/NA	Solid	Total BTEX	
890-6279-8	BH 04 - 1'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 74529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Total/NA	Solid	8015NM Prep	

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Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

GC Semi VOA (Continued)

Prep Batch: 74529 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6279-2	BH 01 - 1'	Total/NA	Solid	8015NM Prep	
890-6279-3	BH 02 - 0.5'	Total/NA	Solid	8015NM Prep	
890-6279-4	BH 02 - 1'	Total/NA	Solid	8015NM Prep	
890-6279-5	BH 03 - 0.5'	Total/NA	Solid	8015NM Prep	
890-6279-6	BH 03 - 1'	Total/NA	Solid	8015NM Prep	
890-6279-7	BH 04 - 0.5'	Total/NA	Solid	8015NM Prep	
890-6279-8	BH 04 - 1'	Total/NA	Solid	8015NM Prep	
MB 880-74529/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74529/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74529/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6269-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6269-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Total/NA	Solid	8015B NM	74529
890-6279-2	BH 01 - 1'	Total/NA	Solid	8015B NM	74529
890-6279-3	BH 02 - 0.5'	Total/NA	Solid	8015B NM	74529
890-6279-4	BH 02 - 1'	Total/NA	Solid	8015B NM	74529
890-6279-5	BH 03 - 0.5'	Total/NA	Solid	8015B NM	74529
890-6279-6	BH 03 - 1'	Total/NA	Solid	8015B NM	74529
890-6279-7	BH 04 - 0.5'	Total/NA	Solid	8015B NM	74529
890-6279-8	BH 04 - 1'	Total/NA	Solid	8015B NM	74529
MB 880-74529/1-A	Method Blank	Total/NA	Solid	8015B NM	74529
LCS 880-74529/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74529
LCSD 880-74529/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74529
890-6269-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	74529
890-6269-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	74529

Analysis Batch: 74706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Total/NA	Solid	8015 NM	
890-6279-2	BH 01 - 1'	Total/NA	Solid	8015 NM	
890-6279-3	BH 02 - 0.5'	Total/NA	Solid	8015 NM	
890-6279-4	BH 02 - 1'	Total/NA	Solid	8015 NM	
890-6279-5	BH 03 - 0.5'	Total/NA	Solid	8015 NM	
890-6279-6	BH 03 - 1'	Total/NA	Solid	8015 NM	
890-6279-7	BH 04 - 0.5'	Total/NA	Solid	8015 NM	
890-6279-8	BH 04 - 1'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 74410

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6279-1	BH 01 - 0.5'	Soluble	Solid	DI Leach	
890-6279-2	BH 01 - 1'	Soluble	Solid	DI Leach	
890-6279-3	BH 02 - 0.5'	Soluble	Solid	DI Leach	
890-6279-4	BH 02 - 1'	Soluble	Solid	DI Leach	
890-6279-5	BH 03 - 0.5'	Soluble	Solid	DI Leach	
890-6279-6	BH 03 - 1'	Soluble	Solid	DI Leach	
890-6279-7	BH 04 - 0.5'	Soluble	Solid	DI Leach	

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Job ID: 890-6279-1

SDG: 03A2040018

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

HPLC/IC (Continued)

Leach Batch: 74410 (Continued)

each Batch: 74410 (C	ontinued)				
_ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
90-6279-8	BH 04 - 1'	Soluble	Solid	DI Leach	
1B 880-74410/1-A	Method Blank	Soluble	Solid	DI Leach	
CS 880-74410/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
CSD 880-74410/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
90-6279-1 MS	BH 01 - 0.5'	Soluble	Solid	DI Leach	
90-6279-1 MSD	BH 01 - 0.5'	Soluble	Solid	DI Leach	
alysis Batch: 74634					
-h O-mula ID		Dura Taura	N a d u i u	Madh a d	Dura Datah

Analysis Batch: 74634

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
890-6279-1	BH 01 - 0.5'	Soluble	Solid	300.0	74410	9
890-6279-2	BH 01 - 1'	Soluble	Solid	300.0	74410	
890-6279-3	BH 02 - 0.5'	Soluble	Solid	300.0	74410	
890-6279-4	BH 02 - 1'	Soluble	Solid	300.0	74410	
890-6279-5	BH 03 - 0.5'	Soluble	Solid	300.0	74410	
890-6279-6	BH 03 - 1'	Soluble	Solid	300.0	74410	
890-6279-7	BH 04 - 0.5'	Soluble	Solid	300.0	74410	
890-6279-8	BH 04 - 1'	Soluble	Solid	300.0	74410	
MB 880-74410/1-A	Method Blank	Soluble	Solid	300.0	74410	
LCS 880-74410/2-A	Lab Control Sample	Soluble	Solid	300.0	74410	
LCSD 880-74410/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74410	
890-6279-1 MS	BH 01 - 0.5'	Soluble	Solid	300.0	74410	
890-6279-1 MSD	BH 01 - 0.5'	Soluble	Solid	300.0	74410	

Job ID: 890-6279-1 SDG: 03A2040018

Client Sample ID: BH 01 - 0.5'

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Job ID: 890-6279-1 SDG: 03A2040018

Lab Sample ID: 890-6279-1 Matrix: Solid

Date Collected: 02/26/24 09:42 Date Received: 02/28/24 16:02

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 01:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 01:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/03/24 23:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74529	03/03/24 00:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 23:27	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 00:46	СН	EET MID

Lab Sample ID: 890-6279-2

Lab Sample ID: 890-6279-3

Lab Sample ID: 890-6279-4

Matrix: Solid

Matrix: Solid

Date Received: 02/28/24 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 02:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 02:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/03/24 23:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	74529	03/03/24 00:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/03/24 23:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:03	СН	EET MID

Client Sample ID: BH 02 - 0.5'

Date Collected: 02/26/24 10:30 Date Received: 02/28/24 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 02:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/04/24 00:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74529	03/03/24 00:31	ТКС	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/04/24 00:08	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:08	СН	EET MID

Client Sample ID: BH 02 - 1' Date Collected: 02/26/24 10:32 Date Received: 02/28/24 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 02:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 02:55	SM	EET MID

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Matrix: Solid

Client Sample ID: BH 01 - 1' Date Collected: 02/26/24 09:46

Released to Imaging: 5/14/2024 2:38:00 PM

Job ID: 890-6279-1 SDG: 03A2040018

Lab Sample ID: 890-6279-4 Matrix: Solid

Lab Sample ID: 890-6279-5

Date Collected: 02/26/24 10:32 Date Received: 02/28/24 16:02

Client Sample ID: BH 02 - 1'

Client: Ensolum

Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74706	03/04/24 00:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74529	03/03/24 00:31	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/04/24 00:29	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:14	СН	EET MID

Client Sample ID: BH 03 - 0.5' Date Collected: 02/26/24 11:22

Date Received: 02/28/24 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 03:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 03:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/04/24 00:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	74529	03/03/24 00:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/04/24 00:50	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:19	СН	EET MID

Client Sample ID: BH 03 - 1'

Date Collected: 02/26/24 11:24 Date Received: 02/28/24 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 03:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 03:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/04/24 01:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74529	03/03/24 00:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/04/24 01:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:36	СН	EET MID

Client Sample ID: BH 04 - 0.5'

Date Collected: 02/26/24 11:30 Date Received: 02/28/24 16:02

Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 04:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 04:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/04/24 01:32	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74529	03/03/24 00:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/04/24 01:32	SM	EET MID

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Lab Sample ID: 890-6279-6

Lab Sample ID: 890-6279-7

Matrix: Solid

Matrix: Solid

Matrix: Solid
Client Sample ID: BH 04 - 0.5'

Lab Chronicle

Job ID: 890-6279-1 SDG: 03A2040018

Lab Sample ID: 890-6279-7

Lab Sample ID: 890-6279-8

Date Collected: 02/26/24 11:30 Date Received: 02/28/24 16:02

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:41	СН	EET MID

Client Sample ID: BH 04 - 1'

Date Collected: 02/26/24 11:38 Date Received: 02/28/24 16:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 04:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74824	03/05/24 04:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			74706	03/04/24 01:53	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74529	03/03/24 00:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74542	03/04/24 01:53	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:47	СН	EET MID

Laboratory References:

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

Matrix: Solid

Matrix: Solid

Accreditation/Certification Summary

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

Laboratory: Eurofins Midland

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

Authority			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 cortif	ied by the governing authority. This lis	t may include analytes
• •	pes not offer certification.		ice by the governing detronty. This is	t may moldee analytes
• •		Matrix	Analyte	
for which the agency de	bes not offer certification.	-		

Job ID: 890-6279-1 SDG: 03A2040018

Method Summary

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6279-1 SDG: 03A2040018

021B Volatile Organic Compounds (GC) otal BTEX Total BTEX Calculation 015 NM Diesel Range Organics (DRO) (GC) 015B NM Diesel Range Organics (DRO) (GC) 00.0 Anions, Ion Chromatography 035 Closed System Purge and Trap 015NM Prep Microextraction Il Leach Deionized Water Leaching Procedure Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986	SW846	
015 NM Diesel Range Organics (DRO) (GC) 015B NM Diesel Range Organics (DRO) (GC) 00.0 Anions, Ion Chromatography 035 Closed System Purge and Trap 015NM Prep Microextraction 01 Leach Deionized Water Leaching Procedure Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency		EET MID
015B NM Diesel Range Organics (DRO) (GC) 00.0 Anions, Ion Chromatography 035 Closed System Purge and Trap 015NM Prep Microextraction 01 Leach Deionized Water Leaching Procedure Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency	TAL SOP	EET MID
00.0 Anions, Ion Chromatography 035 Closed System Purge and Trap 015NM Prep Microextraction Il Leach Deionized Water Leaching Procedure Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency	SW846	EET MID
035 Closed System Purge and Trap 015NM Prep Microextraction Il Leach Deionized Water Leaching Procedure Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency	SW846	EET MID
015NM Prep Microextraction II Leach Deionized Water Leaching Procedure Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency	EPA	EET MID
Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency	SW846	EET MID
Protocol References: ASTM = ASTM International EPA = US Environmental Protection Agency	SW846	EET MID
ASTM = ASTM International EPA = US Environmental Protection Agency	ASTM	EET MID
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986		
	6 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		

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Sample Summary

Job ID: 890-6279-1
SDG: 03A2040018

ab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
90-6279-1	BH 01 - 0.5'	Solid	02/26/24 09:42	02/28/24 16:02	0.5'	
90-6279-2	BH 01 - 1'	Solid	02/26/24 09:46	02/28/24 16:02	1'	
90-6279-3	BH 02 - 0.5'	Solid	02/26/24 10:30	02/28/24 16:02	0.5'	
90-6279-4	BH 02 - 1'	Solid	02/26/24 10:32	02/28/24 16:02	1'	
90-6279-5	BH 03 - 0.5'	Solid	02/26/24 11:22	02/28/24 16:02	0.5'	
90-6279-6	BH 03 - 1'	Solid	02/26/24 11:24	02/28/24 16:02	1'	
90-6279-7 90-6279-8	BH 04 - 0.5' BH 04 - 1'	Solid Solid	02/26/24 11:30 02/26/24 11:38	02/28/24 16:02 02/28/24 16:02	0.5'	

PM

12:37:23

9/2024

4/1

OCD:

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eceived

Chain of Custody **eurofins** Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 **Environment** Testing Work Order No: Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Xenco EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 of Page / www.xenco.com Work Order Comments Ashley Giovengo Bill to: (if different) Isaac Castro **Project Manager:** Program: UST/PST 🗍 PRP 🗍 Brownfields 🗌 RRC 🗍 Superfund 🗍 Marathon Oil Company Ensolum LLC Company Name: Company Name: State of Project: Address: 4111 S. Tidwell Road 3122 National Parks Hwy Address: Reporting: Level II _ Level III _ PST/UST _ TRRP _ Level IV Carlsbad, NM 88220 City, State ZIP: Carlsbad, NM 88220 City. State ZIP: Deliverables: EDD ADaPT Other: Email: agiovengo@ensolum.com, chamilton@ensolum.com Phone: 505-988-0055 **Preservative Codes** ANALYSIS REQUEST Blueberry Hill 3H 4H 6H CTB **Turn Around** Project Name: Pres DI Water: H₂O None: NO 03A2040018 Routine Rush Project Number: Code MeOH: Me Cool: Cool Due Date: 32.203647, -103.402411 Project Location: HCL: HC HNO3: HN Chad Hamilton, Omar Hamdy Sampler's Name: TAT starts the day received by NaOH: Na H2S04: H2 the lab, if received by 4:30pm Cost Center #: CL.24.00483 Parameters H₃PO₄: HP SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No CHLORIDES (EPA: 300.0) 890-6279 Chain of Custody NaHSO4: NABIS Yes/ No Thermometer ID: Samples Received Intact: MMCO Na2S2O3: NaSO3 N/A Correction Factor: Cooler Custody Seals: Yes No 0 Zn Acetate+NaOH: Zn Yes No N/A Temperature Reading: 50 Sample Custody Seals: NaOH+Ascorbic Acid: SAPC BTEX (8021) 4.8 TPH (8015) Corrected Temperature Total Containers: Grab/ # of Date Time Sample Comments Sample Identification Matrix Depth Sampled Sampled Comp Cont S х Х Х 0.5' BH01 - 0.5' 2/26/2024 9:42 1 S 1' Х X Х BH01 - 1' 2/26/2024 9:46 1 s 10:30 0.6 2/26/2024 × BH02 - 0.5' S 2/26/2024 1' Х Х Х BH02 - 1' 10:32 1 Х Х Х S 1 2/26/2024 11:22 0.5 BH03 - 0.5' Х Х Х S 2/26/2024 11:24 1' 1 BH03 - 1' Х Х Х S 0.5 2/26/2024 11:30 1 BH04 - 0.5' х Х Х S BH04 - 1' 2/26/2024 11:38 11 1 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr TI Sn U V Zn Total 200.7 / 6010 200.8 / 6020; TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471 Circle Method(s) and Metal(s) to be analyzed Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Date/Time Received by: (Signature) Date/Time Relinquished by: (Signature) Relinquished by: (Signature) Received by: (Signature) 228/24 2/602 Revised Date: 08/25/2020 Rev. 2020.2

Job Number: 890-6279-1 SDG Number: 03A2040018

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 6279 List Number: 1 Creator: Bruns, Shannon

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	

Job Number: 890-6279-1 SDG Number: 03A2040018

List Source: Eurofins Midland

List Creation: 03/01/24 12:29 PM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 6279 List Number: 2 Creator: Rodriguez, Leticia

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	True	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Received by OCD: 4/19/2024 12:37:23 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ashley Ager Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 3/5/2024 1:39:00 PM

JOB DESCRIPTION

Blueberry Hill 3H 4H 6H CTB 03A2040018

JOB NUMBER

890-6280-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information

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

AMER

Generated 3/5/2024 1:39:00 PM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

SDG: 03A2040018

Laboratory Job ID: 890-6280-1

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DL, RA, RE, IN

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

MQL NC

ND

NEG

POS

PQL

QC

RL RPD

TEF

TEQ

TNTC

RER

PRES

ML MPN

	Definitions/Glossary		
Client: Ensolum		Job ID: 890-6280-1	
Project/Site: Bit	ieberry Hill 3H 4H 6H CTB	SDG: 03A2040018	
Qualifiers			
GC VOA Qualifier	Qualifier Description		ī
S1-	Qualifier Description Surrogate recovery exceeds control limits, low biased.		
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VOA Qualifier	Qualifier Description		
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)		4
Dil Fac	Dilution Factor		
DL	Detection Limit (DoD/DOE)		

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit Minimum Level (Dioxin)

Most Probable Number Method Quantitation Limit

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

Case Narrative

Client: Ensolum Project: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6280-1

Job ID: 890-6280-1

Eurofins Carlsbad

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Job Narrative 890-6280-1

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 2/28/2024 4:35 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 4.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH01-2 (890-6280-1), BH02-2 (890-6280-2), BH03-2 (890-6280-3) and BH04-1.5 (890-6280-4).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74523 and 880-74618 and analytical batch 880-74553 was outside the control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-74553 recovered above the upper control limit for Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-74553/20).

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

GC Semi VOA

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 and precision for preparation batch 880-74410 and analytical batch 880-74634 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Page 85 of 111

Job ID: 890-6280-1 SDG: 03A2040018

Lab Sample ID: 890-6280-1

Client Sample ID: BH01-2 Date Collected: 02/26/24 09:53

Client: Ensolum

Date Received: 02/28/24 16:35

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 05:02	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 05:02	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 05:02	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/04/24 11:27	03/05/24 05:02	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/04/24 11:27	03/05/24 05:02	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/04/24 11:27	03/05/24 05:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			03/04/24 11:27	03/05/24 05:02	1
1,4-Difluorobenzene (Surr)	97		70 - 130			03/04/24 11:27	03/05/24 05:02	1
Method: TAL SOP Total BTE								
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			03/05/24 05:02	1
Method: SW846 8015 NM - Di	• •				_			
Analyte Total TPH	Result <50.3	Qualifier	RL 50.3	Unit mg/Kg	D	Prepared	Analyzed 03/04/24 04:40	Dil Fac
Method: SW846 8015B NM - I Analyte	Result	Qualifier		Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	Result <50.3			Unit mg/Kg		03/03/24 00:24	03/04/24 04:40	
(GRO)-C6-C10	-00.0	0	00.0	mg/rtg		00/00/24 00.24	00/04/24 04.40	
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		03/03/24 00:24	03/04/24 04:40	1
Oll Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		03/03/24 00:24	03/04/24 04:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			03/03/24 00:24	03/04/24 04:40	1
o-Terphenyl	100		70 - 130			03/03/24 00:24	03/04/24 04:40	1
Method: EPA 300.0 - Anions,					_	. .		
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.8		4.99	mg/Kg			03/05/24 01:52	1
lient Sample ID: BH02-2						Lab Sar	nple ID: 890-	
ate Collected: 02/26/24 10:38 ate Received: 02/28/24 16:35							Matri	x: Solid
Method: SW846 8021B - Vola	tile Organic Comp	ounds (GC)						
Method: SW846 8021B - Vola Analyte	•	ounds (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

ĸg Toluene 03/04/24 11:27 <0.00202 U 0.00202 mg/Kg 03/05/24 05:27 1 Ethylbenzene <0.00202 U 0.00202 mg/Kg 03/04/24 11:27 03/05/24 05:27 1 m-Xylene & p-Xylene <0.00403 U 0.00403 mg/Kg 03/04/24 11:27 03/05/24 05:27 1 o-Xylene <0.00202 U 0.00202 mg/Kg 03/04/24 11:27 03/05/24 05:27 1 Xylenes, Total <0.00403 U 0.00403 03/04/24 11:27 03/05/24 05:27 mg/Kg 1 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 4-Bromofluorobenzene (Surr) 113 70 - 130 03/04/24 11:27 03/05/24 05:27 1 1,4-Difluorobenzene (Surr) 98 70 - 130 03/04/24 11:27 03/05/24 05:27 1

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Matrix: Solid

Job ID: 890-6280-1 SDG: 03A2040018

Matrix: Solid

5

Lab Sample ID: 890-6280-2

Client Sample ID: BH02-2

Client: Ensolum

Date Collected: 02/26/24 10:38 Date Received: 02/28/24 16:35

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			03/05/24 05:27	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			03/04/24 05:01	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.4	U	50.4	mg/Kg		03/03/24 00:24	03/04/24 05:01	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.4	U	50.4	mg/Kg		03/03/24 00:24	03/04/24 05:01	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		03/03/24 00:24	03/04/24 05:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			03/03/24 00:24	03/04/24 05:01	1
o-Terphenyl	94		70 - 130			03/03/24 00:24	03/04/24 05:01	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.2		4.96	mg/Kg			03/05/24 01:58	1

Client Sample ID: BH03-2

Date Collected: 02/26/24 11:27 Date Received: 02/28/24 16:35

_ab Sample ID: 890-6280-3 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/04/24 11:27	03/05/24 07:14	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/04/24 11:27	03/05/24 07:14	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/04/24 11:27	03/05/24 07:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/04/24 11:27	03/05/24 07:14	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/04/24 11:27	03/05/24 07:14	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/04/24 11:27	03/05/24 07:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			03/04/24 11:27	03/05/24 07:14	1
1,4-Difluorobenzene (Surr)	81		70 - 130			03/04/24 11:27	03/05/24 07:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00402 U 0.00402 03/05/24 07:14 mg/Kg 1 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Analyzed Dil Fac Prepared Total TPH <50.5 U 03/04/24 05:23 50.5 mg/Kg 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.5	U	50.5	mg/Kg		03/03/24 00:24	03/04/24 05:23	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.5	U	50.5	mg/Kg		03/03/24 00:24	03/04/24 05:23	1
C10-C28)								

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Released to Imaging: 5/14/2024 2:38:00 PM

Job ID: 890-6280-1 SDG: 03A2040018

Lab Sample ID: 890-6280-3

Client Sample ID: BH03-2 Date Collected: 02/26/24 11:27

Client: Ensolum

Date Received: 02/28/24 16:35

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		03/03/24 00:24	03/04/24 05:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			03/03/24 00:24	03/04/24 05:23	1
o-Terphenyl	105		70 - 130			03/03/24 00:24	03/04/24 05:23	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.2	F1	5.04	mg/Kg			03/05/24 02:03	1

Date Collected: 02/26/24 11:40

Date Received: 02/28/24 16:35

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 07:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 07:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 07:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/04/24 11:27	03/05/24 07:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/24 11:27	03/05/24 07:41	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/04/24 11:27	03/05/24 07:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			03/04/24 11:27	03/05/24 07:41	1
1,4-Difluorobenzene (Surr)	84		70 - 130			03/04/24 11:27	03/05/24 07:41	1

Method:	TAL SO	P Total	BTEX	- Total	BTEX	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/05/24 07:41	1

	Method: SW846 8015 NM - Diesel F	Range Organi	ics (DRO) (G	C)					
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total TPH	<50.0	U	50.0	mg/Kg			03/04/24 05:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		03/03/24 00:24	03/04/24 05:44	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		03/03/24 00:24	03/04/24 05:44	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/03/24 00:24	03/04/24 05:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			03/03/24 00:24	03/04/24 05:44	1
o-Terphenyl	95		70 - 130			03/03/24 00:24	03/04/24 05:44	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	ohy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	198		4.98	mg/Kg			03/05/24 02:20	1

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Matrix: Solid

Matrix: Solid

5

Job ID: 890-6280-1 SDG: 03A2040018

Prep Type: Total/NA

Project/Site: Blueberry Hill 3H 4H 6H CTB Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

_				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		ł
890-6279-A-1-E MS	Matrix Spike	108	89		
890-6279-A-1-F MSD	Matrix Spike Duplicate	115	84		
890-6280-1	BH01-2	109	97		
890-6280-2	BH02-2	113	98		
890-6280-3	BH03-2	98	81		
890-6280-4	BH04-1.5	100	84		
LCS 880-74618/1-A	Lab Control Sample	114	112		
LCSD 880-74618/2-A	Lab Control Sample Dup	114	112		
MB 880-74523/5-A	Method Blank	62 S1-	87		
MB 880-74618/5-A	Method Blank	62 S1-	88		
Surrogate Legend					

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

				Percent Surroga
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-6280-1	BH01-2	113	100	
890-6280-2	BH02-2	107	94	
890-6280-3	BH03-2	120	105	
890-6280-4	BH04-1.5	107	95	
890-6285-A-39-D MS	Matrix Spike	119	96	
890-6285-A-39-E MSD	Matrix Spike Duplicate	118	97	
LCS 880-74527/2-A	Lab Control Sample	83	71	
LCSD 880-74527/3-A	Lab Control Sample Dup	97	84	
MB 880-74527/1-A	Method Blank	107	97	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Prep Type: Total/NA

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

Method: 8021B - Volatile Organic Compounds (GC)

 Lab Sample ID: MB 880-74523/5-A									Client Sa	mple ID: Meth	od Blank
Matrix: Solid										Prep Type:	
Analysis Batch: 74553										Prep Bat	
		NB MB									
Analyte	Res	ult Qualifier	RL		Unit		D	Pi	repared	Analyzed	Dil Fac
Benzene	<0.002	00 U	0.00200	,	mg/K	g	_		2/24 11:17	03/04/24 11:55	1
Toluene	<0.002	00 U	0.00200)	mg/K	-		03/0	2/24 11:17	03/04/24 11:55	1
Ethylbenzene	<0.002		0.00200)	mg/K	-		03/0	2/24 11:17	03/04/24 11:55	1
m-Xylene & p-Xylene	<0.004		0.00400		mg/K				2/24 11:17	03/04/24 11:55	
o-Xylene	< 0.002		0.00200		mg/K				2/24 11:17	03/04/24 11:55	1
Xylenes, Total	< 0.004		0.00400		mg/K	-			2/24 11:17	03/04/24 11:55	1
	-0.001		0.00100		iiig/ii	.9		00,0		00/01/2111.00	
	I	MB MB									
Surrogate	%Recov	ery Qualifier	Limits					Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		62 S1-	70 - 130	-				03/0	2/24 11:17	03/04/24 11:55	1
1,4-Difluorobenzene (Surr)		87	70 - 130					03/0	2/24 11:17	03/04/24 11:55	1
Lab Sample ID: MB 880-74618/5-A									Client Sa	mple ID: Meth	od Blank
Matrix: Solid										Prep Type:	Total/NA
Analysis Batch: 74553										Prep Bate	ch: 74618
	1	NB MB									
Analyte	Res	ult Qualifier	RL		Unit		D	Pi	repared	Analyzed	Dil Fac
Benzene	<0.002	00 U	0.00200		mg/K	g	_	03/04	4/24 11:27	03/05/24 01:13	1
Toluene	<0.002	00 U	0.00200)	mg/K	g		03/04	4/24 11:27	03/05/24 01:13	1
Ethylbenzene	<0.002	00 U	0.00200)	mg/K	g		03/04	4/24 11:27	03/05/24 01:13	1
m-Xylene & p-Xylene	<0.004	00 U	0.00400		mg/K	g		03/04	4/24 11:27	03/05/24 01:13	1
o-Xylene	<0.002		0.00200		mg/K	-			4/24 11:27	03/05/24 01:13	1
Xylenes, Total	< 0.004		0.00400		mg/K	-			4/24 11:27	03/05/24 01:13	1
, , , , , , , , , , , , , , , , , , ,					5	5					
	I	MB MB									
Surrogate	%Recov	-	Limits	_				PI	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		62 S1-	70 - 130					03/0	4/24 11:27	03/05/24 01:13	1
1,4-Difluorobenzene (Surr)		88	70 - 130					03/0	4/24 11:27	03/05/24 01:13	1
Γ	_										
Lab Sample ID: LCS 880-74618/1-/	A						C	Client	Sample	D: Lab Contro	
Matrix: Solid										Prep Type:	
Analysis Batch: 74553										Prep Bate	ch: 74618
			Spike	LCS	LCS					%Rec	
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits	
Benzene			0.100	0.09004		mg/Kg			90	70 - 130	
Toluene			0.100	0.08524		mg/Kg			85	70 - 130	
Ethylbenzene			0.100	0.1028		mg/Kg			103	70 - 130	
m-Xylene & p-Xylene			0.200	0.2045		mg/Kg			102	70 - 130	
o-Xylene			0.100	0.1079		mg/Kg			108	70 - 130	
	100 1	00									
	LCS L										
	6Recovery	lualifier	Limits								
4-Bromofluorobenzene (Surr)	114		70 - 130								
1,4-Difluorobenzene (Surr)	112		70 - 130								
						0				ah Control Co	
Lab Sample ID: LCSD 880-74618/2	-A					CI	ent	Sam	pie iD: L	ab Control Sa	
Matrix: Solid										Prep Type:	
Analysis Batch: 74553											ch: 74618
			0		1005						
Analyte			Spike Added		LCSD Qualifier	Unit		D	%Rec	%Rec Limits R	RPD PD Limit

5

7

Job ID: 890-6280-1 SDG: 03A2040018

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Benzene

0.09711

mg/Kg

97

70 - 130

0.100

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6280-1 SDG: 03A2040018

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

<0.00199 U

<0.00199 U

<0.00398 U

<0.00199 U

108

89

115

84

%Recovery

MS MS very Qualifier

Lab Sample ID: LCSD 880-74	4618/2-A					Clie	nt Sam	ple ID:	Lab Contro	I Sampl	e Dup
Matrix: Solid									Prep 1	Type: To	tal/NA
Analysis Batch: 74553									Prep	Batch:	74618
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene			0.100	0.09538		mg/Kg		95	70 - 130	11	35
Ethylbenzene			0.100	0.1092		mg/Kg		109	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2171		mg/Kg		109	70 - 130	6	35
o-Xylene			0.100	0.1147		mg/Kg		115	70 - 130	6	35
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	114		70 - 130								
1,4-Difluorobenzene (Surr)	112		70 - 130								
- Lab Sample ID: 890-6279-A-	1-E MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid									Prep 1	Type: To	tal/NA
Analysis Batch: 74553									Prep	Batch:	74618
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	< 0.00199	U	0.101	0.07748		mg/Kg		77	70 - 130		

0.101

0.101

0.202

0.101

Limits

70 - 130

70 - 130

70 - 130

70 - 130

0.07923

0.08771

0.1743

0.09036

Matrix: Solid
Analysis Batch: 74553

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-6279-A-1-F MSD

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Toluene

o-Xylene

Surrogate

Ethylbenzene

m-Xylene & p-Xylene

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prep Batch: 74618

Analysis Batch. 14000									i i cp	Duton.	14010
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00199	U	0.100	0.08960		mg/Kg		89	70 - 130	15	35
Toluene	<0.00199	U	0.100	0.09376		mg/Kg		93	70 - 130	17	35
Ethylbenzene	<0.00199	U	0.100	0.1021		mg/Kg		102	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.2047		mg/Kg		102	70 - 130	16	35
o-Xylene	<0.00199	U	0.100	0.1045		mg/Kg		104	70 - 130	15	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								

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

Lab Sample ID: MB 880-74527/1-A Matrix: Solid Analysis Batch: 74540	МВ	МВ				Client Sa	mple ID: Metho Prep Type: ⊺ Prep Batcł	Total/NA
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		03/03/24 00:24	03/03/24 20:56	1
(GRO)-C6-C10								

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3/5/2024

70 - 130

70 - 130

70 - 130

70 - 130

79

87

86

90

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

Method: 8015B N

Client Sample ID: Method Prep Type: To Prep Batch: MB MB Result Qualifier RL Unit D Prepared Analyzed <50.0 U 50.0 mg/Kg 03/03/24 00:24 03/03/24 20:56 0	
MB MB Result Qualifier RL Unit D Prepared Analyzed	stal/NA
MB MB Result Qualifier RL Unit D Prepared Analyzed	
<50.0 U 50.0 mg/Kg 03/03/24.00:24 03/03/24.20:56	Dil Fac
	1
<50.0 U 50.0 mg/Kg 03/03/24 00:24 03/03/24 20:56	1
MB MB	
%Recovery Qualifier Limits Prepared Analyzed	Dil Fac
<u>107</u> 70 - 130 03/03/24 00:24 03/03/24 20:56	1
97 70 - 130 03/03/24 00:24 03/03/24 20:56	1
Client Sample ID: Lab Control S	ample
Ргер Туре: То	otal/NA
Prep Batch:	74527
Spike LCS LCS %Rec	
Added Result Qualifier Unit D %Rec Limits	
1000 761.7 mg/Kg 76 70 - 130	
1000 1023 mg/Kg 102 70 - 130	
LCS LCS	
covery Qualifier Limits	
83 70 - 130	
71 70 - 130	
Officer Densels ID, Lick Densels D	
Client Sample ID: Lab Control Samp	
Prep Type: To	
Prep Batch:	
Spike LCSD LCSD %Rec	RPD
Added Result Qualifier Unit D %Rec Limits RPD 1000 805.8 mg/Kg B 81 70 - 130 6	
1000 805.8 mg/Kg 81 70 - 130 6	20
1000 1218 mg/Kg 122 70 - 130 17	20
LCSD LCSD	
covery Qualifier Limits 97 70 - 130	
84 70 - 130	

Analysis Batch: 74540									Prep	Batch: 74527
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	906.2		mg/Kg		86	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1062		mg/Kg		102	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 _ 130
o-Terphenyl	96		70 - 130

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Prep Type: Total/NA

Job ID: 890-6280-1

SDG: 03A2040018

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

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

Matrix: Solid									Prep	Type: To	tal/NA
Analysis Batch: 74540										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1000	923.7		mg/Kg		88	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.6	U	1000	1070		mg/Kg		103	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	97		70 - 130								
lethod: 300.0 - Anions, lo Lab Sample ID: MB 880-74410 Matrix: Solid Analysis Batch: 74634		ography						Client	Sample ID: Prep	Method Type: S	
		MB MB									
Analyte		esult Qualifier		RL	Unit		D	Prepared	Analy		Dil Fa
Chloride	<	5.00 U		5.00	mg/K	g			03/05/24	00:29	
Lab Sample ID: LCS 880-7441	0/2-A							it Gumph	e ID: Lab C		ampi
Matrix: Solid	U/Z-A		0.11	1.00				it outlings	Prep	Type: S	
Matrix: Solid Analysis Batch: 74634	0/2-A		Spike		LCS	Unit		-	Prep %Rec		
Matrix: Solid Analysis Batch: 74634 ^{Analyte}			Spike Added 250		LCS Qualifier	Unit mg/Kg	<u>D</u>	<u>%Rec</u> 99	Prep		
Matrix: Solid Analysis Batch: 74634 Analyte Chloride			Added	Result		mg/Kg	D	%Rec 99	Prep %Rec Limits 90 - 110	Type: S	olubi
Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: LCSD 880-744			Added	Result		mg/Kg	D	%Rec 99	Prep %Rec Limits 90 - 110	Type: S	olubl
Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid			Added	Result		mg/Kg	D	%Rec 99	Prep %Rec Limits 90 - 110	Type: S	olubl
Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid			Added 250	Result 247.3	Qualifier	mg/Kg	D	%Rec 99	Prep %Rec Limits 90 - 110 Lab Contro Prep	Type: S	olubi le Du olubi
Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634			Added 250 Spike	Result 247.3 LCSD	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID:	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Type: S	olubi le Du olubi RP
Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Analyte			Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID: %Rec	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits	Type: S	olubi le Duj olubi RPi Lim
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Analyte			Added 250 Spike	Result 247.3 LCSD	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID:	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec	Type: S	olubi le Duj olubi RPi Lim
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Analyte Chloride	10/3-A		Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID: %Rec 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits	ol Sampl Type: S Type: S <u>RPD</u> 0	olubi le Du olubi RP Lim 2
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6280-3 MS	10/3-A		Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID: %Rec 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam	ol Sampl Type: S Type: S <u></u> ple ID: B	le Du olubi olubi RP Lim 2 3H03-
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid	10/3-A		Added 250 Spike Added	Result 247.3 LCSD Result	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID: %Rec 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam	ol Sampl Type: S Type: S <u>RPD</u> 0	le Du olubi olubi <u>Lim</u> 2 3H03-3
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid	10/3-A		Added 250 Spike Added	Result 247.3 LCSD Result 247.8	Qualifier	mg/Kg Clie	D	%Rec 99 mple ID: %Rec 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam	ol Sampl Type: S Type: S <u></u> ple ID: B	olubl le Duj olubl RPI Lim 2 3H03-3
Lab Sample ID: LCS 880-7441 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid Analysis Batch: 74634 Analysis Batch: 74634	910/3-A 6 5 Sample	Sample Qualifier	Added 250 Spike Added 250	Result 247.3 LCSD Result 247.8	Qualifier LCSD Qualifier	mg/Kg Clie	D	%Rec 99 mple ID: %Rec 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam Prep	ol Sampl Type: S Type: S <u></u> ple ID: B	olubl le Duj olubl RPI Lim 2 3H03-3
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid Analysis Batch: 74634 Analyte	910/3-A 6 5 Sample	Qualifier	Added 250 Spike Added 250 Spike	Result 247.3 LCSD Result 247.8	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Clie Unit mg/Kg	D	<u>%Rec</u> 99 mple ID: <u>%Rec</u> 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam Prep %Rec	ol Sampl Type: S Type: S <u></u> ple ID: B	le Du olubi olubi RP Lim 2 3H03-
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid Analysis Batch: 74634 Analyte Chloride	910/3-A S Sample <u>Result</u> 85.2	Qualifier	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Clie Unit mg/Kg	D	<u>%Rec</u> 99 mple ID: <u>%Rec</u> 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam Prep %Rec Limits 90 - 110	ol Sampl Type: S Type: S <u>RPD</u> 0 ple ID: B Type: S 	ele Du olubi RP Lim 2 8H03- 0lubi
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid	910/3-A S Sample <u>Result</u> 85.2	Qualifier	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Clie Unit mg/Kg	D	<u>%Rec</u> 99 mple ID: <u>%Rec</u> 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam Prep %Rec Limits 90 - 110	Type: S DI Sampl Type: S <u>RPD</u> 0 ple ID: B Type: S	ele Du olubi RP Lim 2 8H03- 0lubi
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid Analysis Batch: 74634 Analyte Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid	910/3-A S Sample <u>Result</u> 85.2	Qualifier F1	Added 250 Spike Added 250 Spike Added	Result 247.3 LCSD Result 247.8 MS Result 365.4	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Clie Unit mg/Kg	D	<u>%Rec</u> 99 mple ID: <u>%Rec</u> 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam Prep %Rec Limits 90 - 110	ol Sampl Type: S Type: S <u>RPD</u> 0 ple ID: B Type: S 	olubi le Du olubi RP Lim 2 BH03- olubi
Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: LCSD 880-744 Matrix: Solid Analysis Batch: 74634 Chloride Lab Sample ID: 890-6280-3 MS Matrix: Solid Analysis Batch: 74634	Sample Result 85.2 SD Sample	Qualifier F1	Added 250 Spike Added 250 Spike Added 252	Result 247.3 LCSD Result 247.8 MS Result 365.4	Qualifier LCSD Qualifier MS Qualifier F1	mg/Kg Clie Unit mg/Kg	D	<u>%Rec</u> 99 mple ID: <u>%Rec</u> 99	Prep %Rec Limits 90 - 110 Lab Contro Prep %Rec Limits 90 - 110 Client Sam Prep %Rec Limits 90 - 110 Client Sam Prep	ol Sampl Type: S Type: S <u>RPD</u> 0 ple ID: B Type: S 	elubi elubi olubi Lim 2 8H03-3 olubi

QC Association Summary

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6280-1

SDG: 03A2040018

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GC VOA

Prep Batch: 74523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-74523/5-A	Method Blank	Total/NA	Solid	5035	
nalysis Batch: 74553					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Total/NA	Solid	8021B	74618
890-6280-2	BH02-2	Total/NA	Solid	8021B	74618
890-6280-3	BH03-2	Total/NA	Solid	8021B	74618
890-6280-4	BH04-1.5	Total/NA	Solid	8021B	74618
MB 880-74523/5-A	Method Blank	Total/NA	Solid	8021B	74523
MB 880-74618/5-A	Method Blank	Total/NA	Solid	8021B	74618
LCS 880-74618/1-A	Lab Control Sample	Total/NA	Solid	8021B	74618
_CSD 880-74618/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74618
390-6279-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	74618
390-6279-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	74618

Prep Batch: 74618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Total/NA	Solid	5035	
890-6280-2	BH02-2	Total/NA	Solid	5035	
890-6280-3	BH03-2	Total/NA	Solid	5035	
890-6280-4	BH04-1.5	Total/NA	Solid	5035	
MB 880-74618/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74618/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74618/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6279-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-6279-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 74825

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Total/NA	Solid	Total BTEX	
890-6280-2	BH02-2	Total/NA	Solid	Total BTEX	
890-6280-3	BH03-2	Total/NA	Solid	Total BTEX	
890-6280-4	BH04-1.5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 74527

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Total/NA	Solid	8015NM Prep	
890-6280-2	BH02-2	Total/NA	Solid	8015NM Prep	
890-6280-3	BH03-2	Total/NA	Solid	8015NM Prep	
890-6280-4	BH04-1.5	Total/NA	Solid	8015NM Prep	
MB 880-74527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6285-A-39-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6285-A-39-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	
Analysis Batch: 74540					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Total/NA	Solid	8015B NM	74527

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QC Association Summary

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

GC Semi VOA (Continued)

Analysis Batch: 74540 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6280-2	BH02-2	Total/NA	Solid	8015B NM	74527
890-6280-3	BH03-2	Total/NA	Solid	8015B NM	74527
890-6280-4	BH04-1.5	Total/NA	Solid	8015B NM	74527
MB 880-74527/1-A	Method Blank	Total/NA	Solid	8015B NM	74527
LCS 880-74527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74527
LCSD 880-74527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74527
890-6285-A-39-D MS	Matrix Spike	Total/NA	Solid	8015B NM	74527
890-6285-A-39-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	74527

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Total/NA	Solid	8015 NM	
890-6280-2	BH02-2	Total/NA	Solid	8015 NM	
890-6280-3	BH03-2	Total/NA	Solid	8015 NM	
890-6280-4	BH04-1.5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 74410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Soluble	Solid	DI Leach	
890-6280-2	BH02-2	Soluble	Solid	DI Leach	
890-6280-3	BH03-2	Soluble	Solid	DI Leach	
890-6280-4	BH04-1.5	Soluble	Solid	DI Leach	
MB 880-74410/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74410/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74410/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6280-3 MS	BH03-2	Soluble	Solid	DI Leach	
890-6280-3 MSD	BH03-2	Soluble	Solid	DI Leach	

Analysis Batch: 74634

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-6280-1	BH01-2	Soluble	Solid	300.0	74410
890-6280-2	BH02-2	Soluble	Solid	300.0	74410
890-6280-3	BH03-2	Soluble	Solid	300.0	74410
890-6280-4	BH04-1.5	Soluble	Solid	300.0	74410
MB 880-74410/1-A	Method Blank	Soluble	Solid	300.0	74410
LCS 880-74410/2-A	Lab Control Sample	Soluble	Solid	300.0	74410
LCSD 880-74410/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74410
890-6280-3 MS	BH03-2	Soluble	Solid	300.0	74410
890-6280-3 MSD	BH03-2	Soluble	Solid	300.0	74410

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Job ID: 890-6280-1 SDG: 03A2040018

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Job ID: 890-6280-1 SDG: 03A2040018

Lab Sample ID: 890-6280-1 Matrix: Solid

Date Collected: 02/26/24 09:53 Date Received: 02/28/24 16:35

Client Sample ID: BH01-2

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 05:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74825	03/05/24 05:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			74684	03/04/24 04:40	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 04:40	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:52	СН	EET MID

Lab Sample ID: 890-6280-2

Lab Sample ID: 890-6280-3

Lab Sample ID: 890-6280-4

Matrix: Solid

Matrix: Solid

Date Collected: 02/26/24 10:38 Date Received: 02/28/24 16:35

Client Sample ID: BH02-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 05:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74825	03/05/24 05:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			74684	03/04/24 05:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 05:01	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 01:58	СН	EET MID

Client Sample ID: BH03-2 Date Collected: 02/26/24 11:27

Date Received: 02/28/24 16:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 07:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74825	03/05/24 07:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			74684	03/04/24 05:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74527	03/03/24 00:24	ТКС	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 05:23	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 02:03	CH	EET MID

Client Sample ID: BH04-1.5 Date Collected: 02/26/24 11:40 Date Received: 02/28/24 16:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	74618	03/04/24 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74553	03/05/24 07:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74825	03/05/24 07:41	SM	EET MID

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Matrix: Solid

Released to Imaging: 5/14/2024 2:38:00 PM

Job ID: 890-6280-1 SDG: 03A2040018

Matrix: Solid

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Lab Sample ID: 890-6280-4

Client Sample ID: BH04-1.5

Date Collected: 02/26/24 11:40 Date Received: 02/28/24 16:35

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			74684	03/04/24 05:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74527	03/03/24 00:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74540	03/04/24 05:44	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74410	03/01/24 11:27	SMC	EET MID
Soluble	Analysis	300.0		1			74634	03/05/24 02:20	СН	EET MID

Laboratory References:

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

Eurofins Carlsbad

Released to Imaging: 5/14/2024 2:38:00 PM

Accreditation/Certification Summary

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB

Laboratory: Eurofins Midland

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

uthority	Program		Identification Number	Expiration Date
exas	NELAP		T104704400-23-26	06-30-24
T I (II) I (· · · · · · · · · · · · · · · · · · ·	
for which the agency de	bes not offer certification.	,	ied by the governing authority. This lis	t may include analytes
• •		Matrix	Analyte	t may include analytes
for which the agency de	bes not offer certification.	,		t may include analytes

Job ID: 890-6280-1

SDG: 03A2040018

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Eurofins Carlsbad

Method Summary

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6280-1 SDG: 03A2040018

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
	Environmental Protection Agency	a November 1086 And Its Undates	
SW846 = '	'Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Editio	n, November 1986 And Its Updates.	
TAL SOP :	 TestAmerica Laboratories, Standard Operating Procedure 		
Laboratory Re	eferences:		
EET MID =	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Client: Ensolum Project/Site: Blueberry Hill 3H 4H 6H CTB Job ID: 890-6280-1 SDG: 03A2040018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6280-1	BH01-2	Solid	02/26/24 09:53	02/28/24 16:35
390-6280-2	BH02-2	Solid	02/26/24 10:38	02/28/24 16:35
890-6280-3	BH03-2	Solid	02/26/24 11:27	02/28/24 16:35
890-6280-4	BH04-1.5	Solid	02/26/24 11:40	02/28/24 16:35

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PM

4/19/2024 12:37:23

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p)

eceived

Chain of Custody **eurofins** Houston, TX (281) 240-4200, Dailas, TX (214) 902-0300 **Environment Testing** Work Order No: Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Xenco EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 Page___i www.xenco.com of Work Order Comments Isaac Castro Bill to: (if different) Ashley Giovengo Project Manager: Program: UST/PST | PRP Brownfields RRC Superfund Company Name: Ensolum LLC Company Name: Marathon Oil Company State of Project: 4111 S. Tidwell Road Address: 3122 National Parks Hwy Address: Reporting: Level II __ Level III __ PST/UST __ TRRP __ Level IV City, State ZIP: Carlsbad, NM 88220 Carlsbad, NM 88220 City, State ZIP: ADaPT Deliverables: EDD Other: Email: agiovengo@ensolum.com, chamilton@ensolum.com Phone: 505-988-0055 **Preservative Codes** ANALYSIS REQUEST Project Name: Blueberry Hill 3H 4H 6H CTB **Turn Around** Pres. DI Water: H₂O None: NO Rush ☑ Routine **Project Number:** 03A2040018 Code Cool: Cool MeOH: Me 32.203647, -103.402411 Due Date: Project Location: HCL: HC HNO1: HN Chad Hamilton, Omar Hamdy Sampler's Name TAT starts the day received by NaOH: Na H2S04: H2 the lab, if received by 4:30pm CL.24.00483 Cost Center #: Parameters H₃PO₄: HP Yes No SAMPLE RECEIPT Yes No Temp Blank: Wet Ice: CHLORIDES (EPA: 300.0) NaHSO4: NABIS Samples Received Intact: Yes INO Thermometer ID: TNMOOD Na2S2O3: NaSO3 Yes No N/A Correction Factor: Cooler Custody Seals: -0.7 Zn Acetate+NaOH: Zn 5.0 Temperature Reading: Yes Nor N/A Sample Custody Seals: BTEX (8021) NaOH+Ascorbic Acid: SAPC 4.8 TPH (8015) Corrected Temperature: **Total Containers:** Grab/ # of Date Time Sample Comments Matrix Depth Sample Identification Cont Sampled Sampled Comp Х S 2/26/2024 2' Х Х 9:53 1 BH01 - 2' S 2' х Х Х 2/26/2024 1 10:38 BH02 - 2' S BH03 - 2' 2/26/2024 11:27 X X S 2' 1 Х Х Х 2/26/2024 11:40 BH04 - 1.5' 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr TI Sn U V Zn Total 200.7 / 6010 200.8 / 6020: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471 Circle Method(s) and Metal(s) to be analyzed Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated Received by: (Signature) Date/Time Relinguished by: (Signature) Date/Time Received by: (Signature) Relinquished by: (Signature) 2/602 28/24 Revised Date: 08/25/2020 Rev. 2020.2

14

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 6280 List Number: 1 Creator: Lopez, Abraham

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	

Job Number: 890-6280-1 SDG Number: 03A2040018

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 6280 List Number: 2 Creator: Rodriguez, Leticia

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	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

14

Job Number: 890-6280-1 SDG Number: 03A2040018

List Source: Eurofins Midland List Creation: 03/01/24 12:23 PM



APPENDIX E

Email Correspondence

From:	OCDOnline@state.nm.us
To:	Castro, Isaac (MRO)
Subject:	[External] The Oil Conservation Division (OCD) has accepted the application, Application ID: 313213
Date:	Friday, February 9, 2024 4:41:02 PM

To whom it may concern (c/o Isaac Castro for MARATHON OIL PERMIAN LLC),

The OCD has received the submitted *Notification for Liner Inspection for a Release* (C-141L), for incident ID (n#) nAPP2403642782.

The liner inspection is expected to take place:

When: 02/14/2024 @ 09:00 **Where:** G-19-24S-35E 0 FNL 0 FEL (32.20364735,-103.402411)

Additional Information: separator containment. Contact Ashley Giovengo 575-988-0055.

Additional Instructions: G-19-24S-35E (32.20364735, - 103.402411)

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, liner inspection pursuant to 19.15.29.11.A(5)(a) NMAC is required. 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 liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection 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

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

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District III

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

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

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QUESTIONS

Action 335341

Operator: OGRID: MARATHON OIL PERMIAN LLC 372098 990 Town & Country Blvd. Action Number Houston, TX 77024 335341 Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

QUESTIONS Proroquisitos

Incident ID (n#)	nAPP2403642782
Incident Name	NAPP2403642782 BLUEBERRY HILL FEE CTB @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Facility	[fAPP2126036762] BLUEBERRY HILL FEE 346 TB

Location of Release Source

Please answer all the questions in this group.	
Site Name	BLUEBERRY HILL FEE CTB
Date Release Discovered	02/04/2024
Surface Owner	Private

Incident Details

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

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission Crude Oil Released (bbls) Details Not answered. Cause: Equipment Failure | Gasket | Produced Water | Released: 20 BBL | Recovered: 20 Produced Water Released (bbls) Details BBL | Lost: 0 BBL Is the concentration of chloride in the produced water >10,000 mg/l Yes

Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Release occurred inside lined secondary containment. All liquids were recovered, and liner will be pressure washed.

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

QUESTIONS, Page 2

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Action 335341

QUESTIONS (continued)

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	335341
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Nature and Volume of Release (continued)	
No, according to supplied volumes this does not appear to be a "gas only" report.	
No	
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 o 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.		
Subsection A of 19, 15,29,11 NMAC), please prepare and attach an 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: Isaac Castro Email: icastro@marathonoil.com Date: 02/09/2024	

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

QUESTIONS (continued)

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	335341
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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	NM OSE iWaters Database Search	
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 500 and 1000 (ft.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)	
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	Greater than 5 (mi.)	
Any other fresh water well or spring	Greater than 5 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
A wetland	Between ½ and 1 (mi.)	
A subsurface mine	Greater than 5 (mi.)	
An (non-karst) unstable area	Greater than 5 (mi.)	
Categorize the risk of this well / site being in a karst geology	Low	
A 100-year floodplain	Greater than 5 (mi.)	
Did the release impact areas not on an exploration, development, production, or storage site	No	

Remediation Plan

Please answer all the question	ons that apply or are indicated. This information must be provided t	to the appropriate district office no later than 90 days after the release discovery date.
Requesting a remediat	tion plan approval with this submission	Yes
Attach a comprehensive repo	rt demonstrating the lateral and vertical extents of soil contamination	on associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.
Have the lateral and ve	ertical extents of contamination been fully delineated	Yes
Was this release entire	ely contained within a lined containment area	No
Soil Contamination Samp	oling: (Provide the highest observable value for each, in n	nilligrams per kilograms.)
Chloride	(EPA 300.0 or SM4500 CI B)	839
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	170
GRO+DRO	(EPA SW-846 Method 8015M)	170
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
	11 NMAC unless the site characterization report includes completed d timelines for beginning and completing the remediation.	ed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
On what estimated dat	e will the remediation commence	02/01/2070
On what date will (or di	id) the final sampling or liner inspection occur	02/14/2024
On what date will (or w	vas) the remediation complete(d)	02/01/2070
What is the estimated s	surface area (in square feet) that will be reclaimed	7945.1
What is the estimated v	volume (in cubic yards) that will be reclaimed	294
What is the estimated s	surface area (in square feet) that will be remediated	7945.1
What is the estimated	volume (in cubic yards) that will be remediated	294
These estimated dates and m	easurements are recognized to be the best guess or calculation at t	the time of submission and may (be) change(d) over time as more remediation efforts are completed.
The OCD recognizes that pro	posed 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

QUESTIONS, Page 3

Action 335341

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

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

QUESTIONS, Page 4

Action 335341

QUESTIONS (continued)				
Operator:	OGRID:			
MARATHON OIL PERMIAN LLC	372098			
990 Town & Country Blvd.	Action Number:			
Houston, TX 77024	335341			
	Action Type:			
	[C-141] Deferral Request C-141 (C-141-v-Deferral)			

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.)	Yes
Which OCD approved facility will be used for off-site disposal	OWL LANDFILL JAL [fJEG1635837366]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed ef which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	showledge and understand that pursuant to OCD rules and regulations all operators are required uses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface it does not relieve the operator of responsibility for compliance with any other federal, state, or Name: Isaac Castro
I hereby agree and sign off to the above statement	Email: icastro@marathonoil.com Date: 04/19/2024

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

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QUESTIONS, Page 5

Action 335341

QUESTIONS (continued)

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	335341
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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	Yes			
Have the lateral and vertical extents of contamination been fully delineated	Yes			
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes			
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Secondary containment, separators, heater treater, VRT, production lines, air compressor, VRU, supply scrubber, sales scrubber, etc.			
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	Not answered.			
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	294			
	ately under or around production equipment such as production tanks, wellheads and pipelines where may be deferred with division written approval until the equipment is removed during other operations, or when			
Enter the facility ID (f#) on which this deferral should be granted	BLUEBERRY HILL FEE 346 TB [fAPP2126036762]			
Enter the well API (30-) on which this deferral should be granted	Not answered.			
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True			
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed eff which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,			
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: Isaac Castro Email: icastro@marathonoil.com			

Date: 04/19/2024

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

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

QUESTIONS, Page 6

Action 335341

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 QUESTIONS (continued)

 Operator:
 MARATHON OIL PERMIAN LLC
 372098

 990 Town & Country Blvd.
 Action Number:
 335341

 Houston, TX 77024
 Action Type:
 [C-141] Deferral Request C-141 (C-141-v-Deferral)

 QUESTIONS

 Sampling Event Information

Last sampling notification (C-141N) recorded

{Unavailable.}

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

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

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CONDITIONS

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	335341
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Deferral approved. Remediation Due date will be left open until the site has a major facility deconstruction takes place.	5/14/2024