



January 7, 2025

New Mexico Oil Conservation Division

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

Re: 2024 Annual Groundwater Monitoring Report

Cottonwood Recycling Facility
Eddy County, New Mexico
DKL Energy – Cottonwood, LLC
Permit: 2RF-128
NMOCD Incident No: nAPP2405840050

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of DKL Energy – Cottonwood, LLC (DKL), presents this *2024 Annual Groundwater Monitoring Report* to the New Mexico Oil Conservation Division (NMOCD) to document groundwater monitoring activities conducted at the Cottonwood Recycling Facility (Site) during the year of 2024. The Site is located within Unit N, Section 20, Township 26 South, Range 26 East, in Eddy County, New Mexico (Figure 1). There are currently four monitoring wells onsite, which are gauged for groundwater elevations and sampled quarterly. This report presents the results of the 2024 quarterly monitoring events.

SITE BACKGROUND

The Site is a produced water recycling facility permitted by the NMOCD under permit 2RF-128 (Permit). The Site was initially permitted to 3Bear Energy, LLC (3Bear) and is currently operated by DKL after they acquired the asset. The Site is located in at 32.0210483° N, 104.31879°W on privately owned land. In August 2018, four monitoring wells (MW-1 through MW-4) were installed as proposed in the Permit (Figure 2). Records regarding the historical quarterly sampling events are documented in previous groundwater reports submitted to the NMOCD.

GROUNDWATER SAMPLING ACTIVITIES

The sampling notifications for the 2024 sampling events were submitted under nAPP2405840050 (Attachment A). Although this is an incident number, it was assigned to facilitate electronic sampling notifications to the NMOCD. The groundwater samples are not collected in response to an incident, but as part of monitoring requirements under permit number 2RF-128.

On the following days, Ensolum personnel measured groundwater levels and collected samples from all four monitoring wells, MW-1 through MW-4.

- First Quarter – March 26, 2024
- Second Quarter – June 25, 2024
- Third Quarter – September 10, 2024
- Fourth Quarter – December 4, 2024

Static groundwater-level monitoring included recording depth-to-groundwater using an oil/water interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with distilled water prior to each measurement to prevent cross-contamination.

Groundwater from monitoring well MW-1 was purged and sampled using low-flow method. An environmental bladder pump was submerged near the middle of the water column, and groundwater was pumped at a low flow rate using new disposable tubing until the parameters stabilized. Ensolum monitored groundwater quality parameters, including temperature, pH, and electrical conductivity, during the purging process utilizing an Aqua TROLL® 500 multiparameter probe. A duplicate sample (DUP-1) was collected from MW-1 during all quarterly monitoring events for laboratory quality assurance and quality control.

Because of low water volume in the wells, groundwater from monitoring wells MW-2 through MW-4 was purged and sampled using disposable bailers to minimize cross contamination. Groundwater was purged from each monitoring well prior to sample collection by removing three casing volumes of water or until the monitoring well purged dry. Water quality parameters were monitored for stabilization.

Following well purging, groundwater samples were placed directly into laboratory-provided containers and labeled with the date and time of collection, well designation, project name, sample collector's name, and parameters to be analyzed. Containers were immediately sealed and packed on ice to preserve samples. Samples were submitted to Eurofins Laboratory (Eurofins) in Carlsbad, New Mexico, for analysis of the following parameters:

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United State Environmental Protection Agency (EPA) Method 8021B;
- Total Petroleum Hydrocarbons (TPH) – gasoline range organics (GRO), TPH – diesel range organics (DRO), and TPH - oil range organics (ORO) following EPA Method 8015 and 8015B; and
- Chloride following EPA Method 300.0.

Proper chain-of-custody procedures were followed documenting the date and time sampled, sample number, type of sample, sample collector's name, preservative used, analyses required, and sample collector's signature.

Monitoring well MW-2 did not adequately recharge to obtain sufficient volume for full laboratory analysis in the third and fourth quarters. Analysis of chloride was omitted during the third quarter and analysis of TPH was omitted during the fourth quarter. Monitoring well MW-3 was dry in the second quarter and no samples were collected.

GROUNDWATER MONITORING RESULTS

Measured depths-to-groundwater and calculated groundwater elevations are presented in Table 1. The inferred groundwater flow direction is to the north-northwest, as indicated on the groundwater potentiometric surface maps presented in Figures 3 through 6.

The groundwater analytical results were compared to the New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards for BTEX and chloride as presented in Title 20, Chapter 6, Part 2, Section 3103 (20.6.2.3103) of the New Mexico Administrative Code (NMAC). There are no standards for TPH. The laboratory analytical results indicate no dissolved BTEX or TPH constituents were detected above the laboratory reporting limit in groundwater samples collected from MW-2, MW-3, and the duplicate sample. Groundwater from monitoring well MW-1 contained a total xylenes concentration of 0.000788 milligrams per liter (mg/L) in the

first quarter and contained a TPH-DRO concentration of 1.65 mg/L in the fourth quarter. Groundwater from monitoring well MW-4 contained a benzene concentration of 0.000561 mg/L in the first quarter and 0.000600 mg/L in the third quarter.

Chloride concentrations for all samples collected from MW-2 and MW-3 were below the NMWQCC standard. The chloride concentration in MW-1 exceeded the NMWQCC standard in the first quarter with a concentration of 313 mg/L, but all other quarterly samples contained less than 250 mg/L. Chloride concentrations in the duplicate samples were consistent with concentrations detected in the MW-1, ranging from 192 mg/L to 280 mg/L. Chloride concentrations in MW-4 exceeded the NMWQCC standard with concentrations ranging from 16,000 mg/L to 20,200 mg/L. These results are similar to previous analytical results. Analytical results are summarized in Table 2 with complete laboratory analytical reports attached as Attachment B.

CONCLUSIONS

The groundwater elevations measured during 2024 appear to be stable, with similar gradient and flow direction as previous sampling events. Laboratory analytical results indicate groundwater collected from monitoring wells MW-1 and MW-4 contain concentrations of chloride that exceed the NMWQCC groundwater standard in at least one quarter. Chloride concentrations are within range of historical sampling results, and MW-4 has contained elevated chloride concentrations throughout the life of the facility. DKL will continue quarterly monitoring during the year 2025.

Ensolum appreciates the opportunity to provide this annual report to the NMOCD. Please contact either of the undersigned with any questions.

Sincerely,

Ensolum, LLC



Tracy Hillard
Project Manager



Ashley Ager, M.S., P.G. (State of Louisiana)
Principal

cc: Jason Boothe, DKL

Attachments:

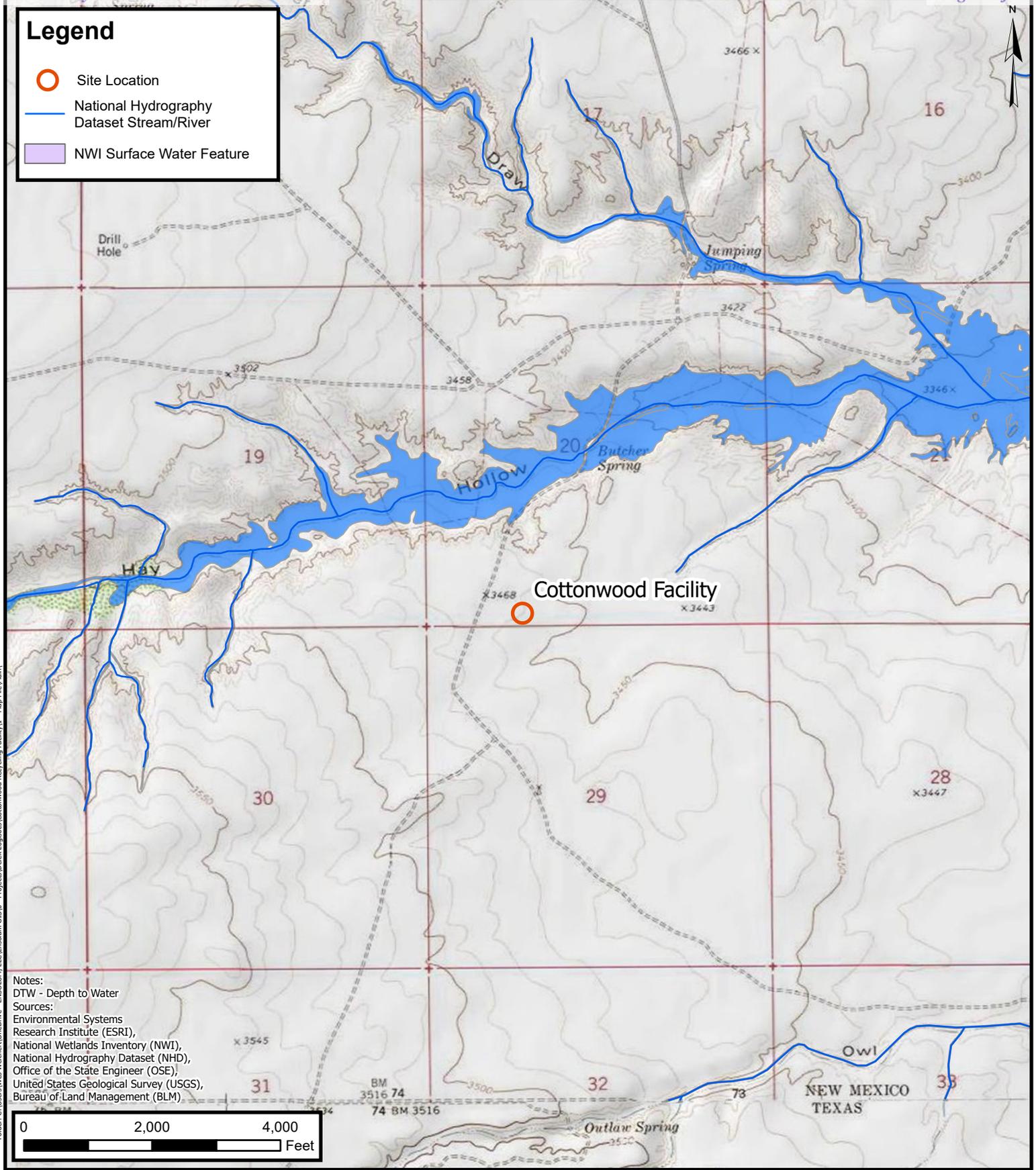
Figure 1: Site Location Map
Figure 2: Site Map
Figure 3: Groundwater Potentiometric Surface Map – March 2024
Figure 4: Groundwater Potentiometric Surface Map – June 2024
Figure 5: Groundwater Potentiometric Surface Map – September 2024
Figure 6: Groundwater Potentiometric Surface Map – December 2024

Table 1: Groundwater Elevations
Table 2: Groundwater Analytical Results

Attachment A: NMOCD Notifications
Attachment B: Laboratory Analytical Report



FIGURES



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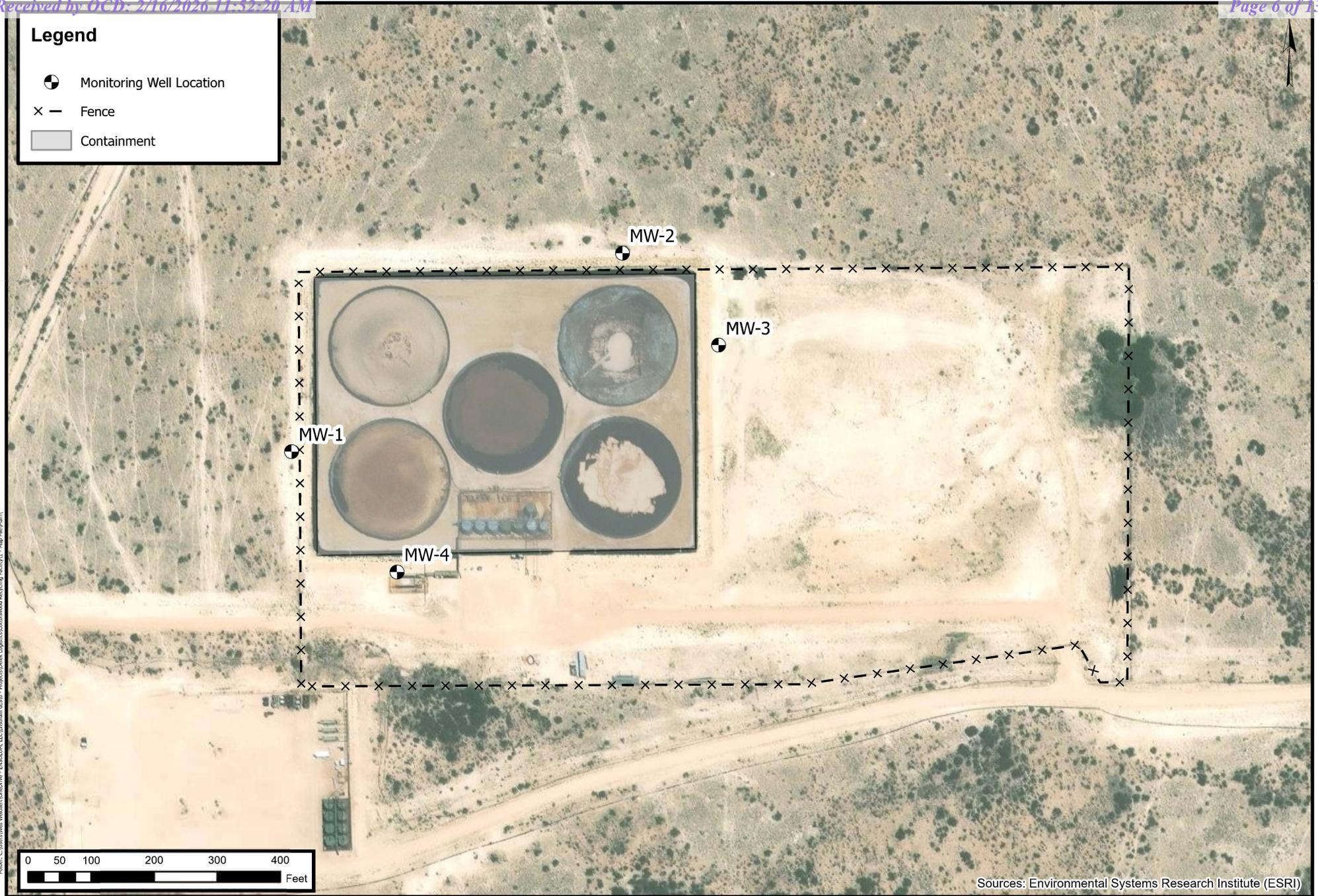


Site Location Map
 DKL Energy - Cottonwood, LLC
 Cottonwood Recycling Facility
 32.0210483, -104.31879
 Unit N, Sec 20, T26S, R26E
 Eddy County, New Mexico, United States

FIGURE
1

Legend

-  Monitoring Well Location
-  Fence
-  Containment



Folder: C:\Users\Wes\OneDrive - ENSOLUM, LLC\Documents\GIS - Projects\DKL Logistics\Cottonwood Recycling Facility\1 - Map (10/16/2015)

Sources: Environmental Systems Research Institute (ESRI)

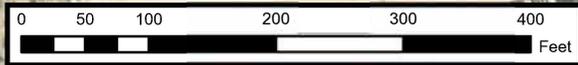
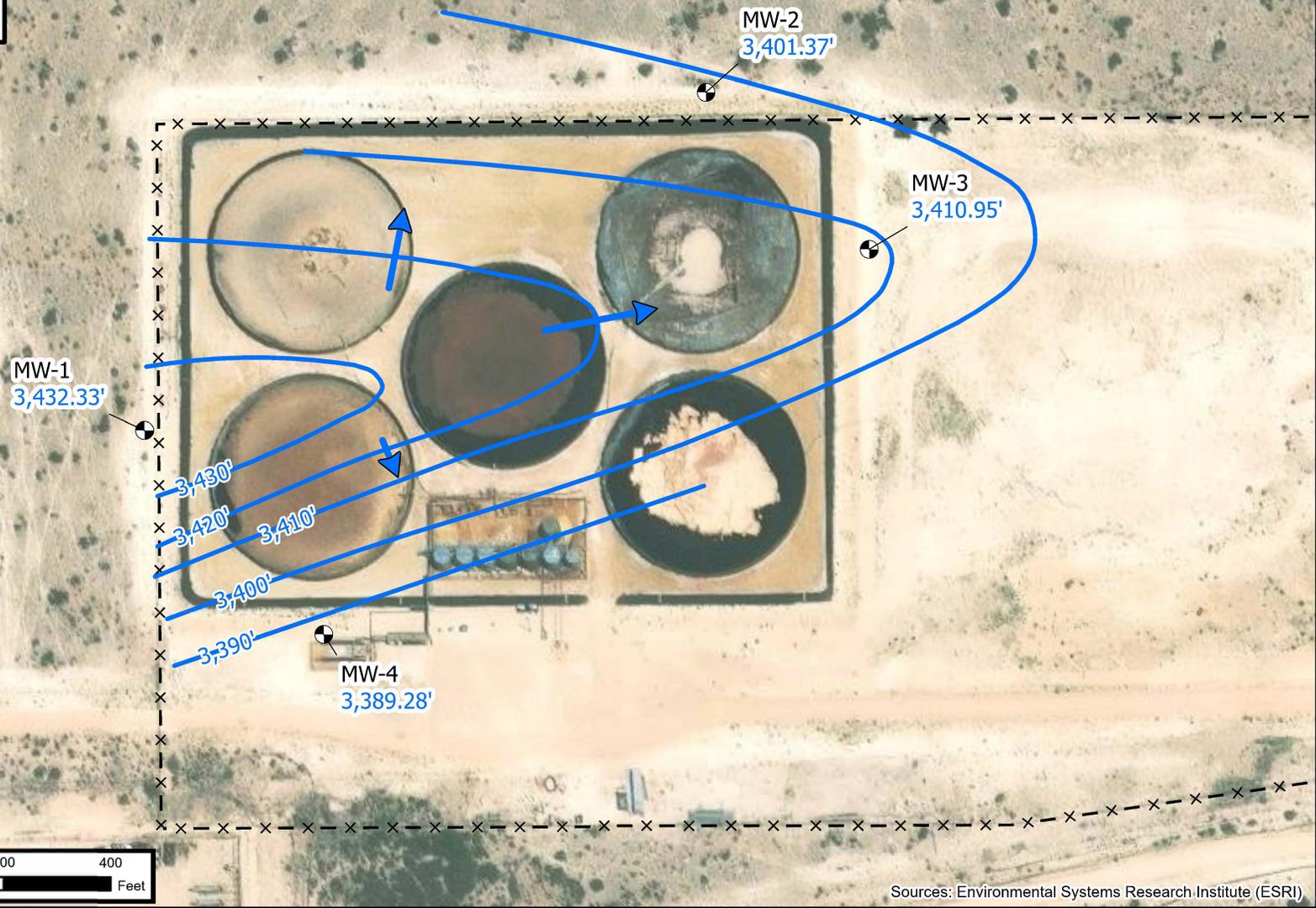


Site Map
 DKL Energy - Cottonwood, LLC
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 Eddy County, New Mexico, United States

FIGURE
2

Legend

-  Monitoring Well Location
-  Fence
-  Groundwater Potentiometric Surface Elevation Contour (March 26, 2024)
-  Groundwater Flow Direction



Sources: Environmental Systems Research Institute (ESRI)



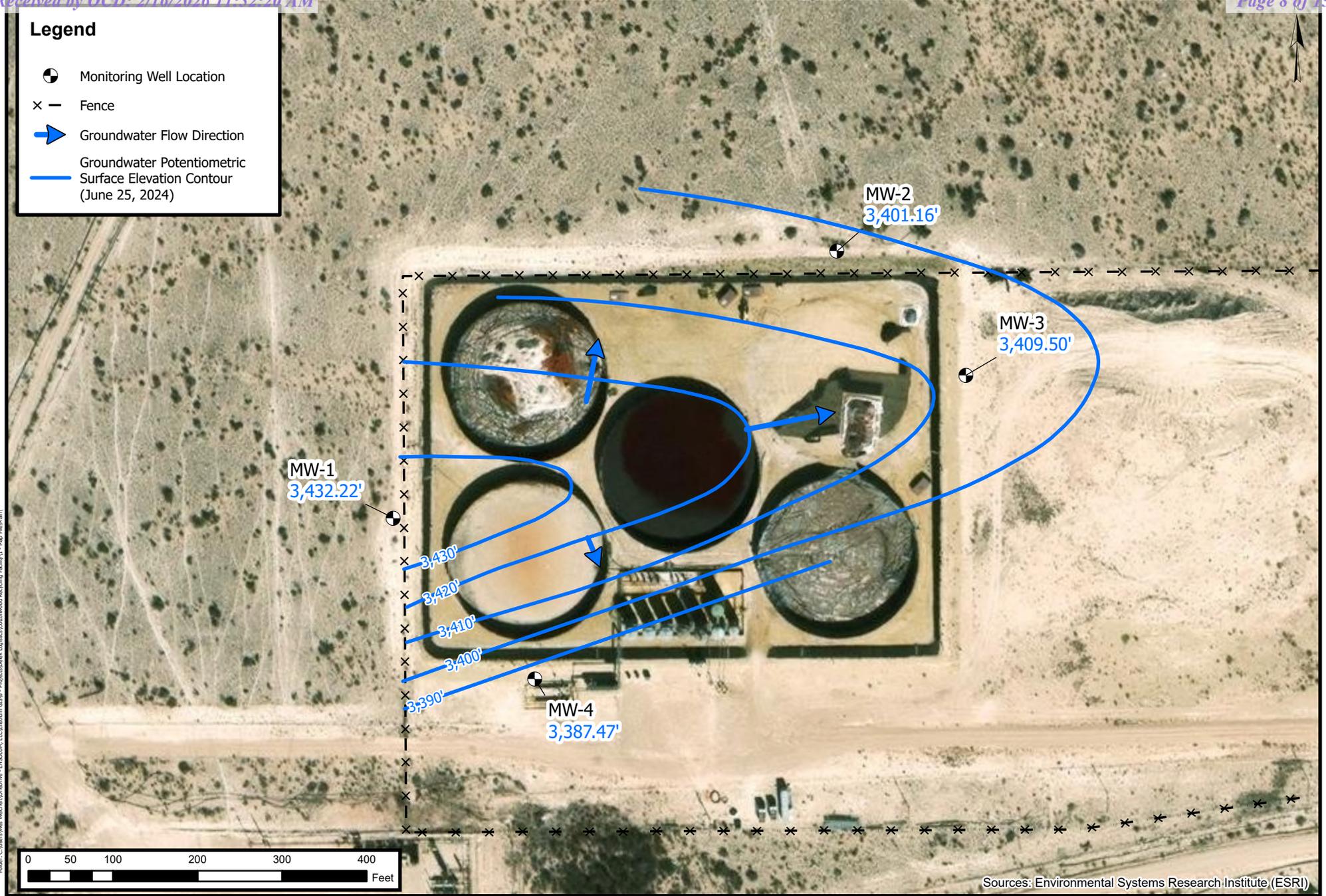
Groundwater Potentiometric Surface Map - March 2024

DKL Energy - Cottonwood, LLC
 Cottonwood Recycling Facility
 32.0210483, -104.31879
 Unit N, Sec 20, T26S, R26E
 Eddy County, New Mexico, United States

FIGURE 3

Legend

-  Monitoring Well Location
-  Fence
-  Groundwater Flow Direction
-  Groundwater Potentiometric Surface Elevation Contour (June 25, 2024)



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Sources: Environmental Systems Research Institute (ESRI)



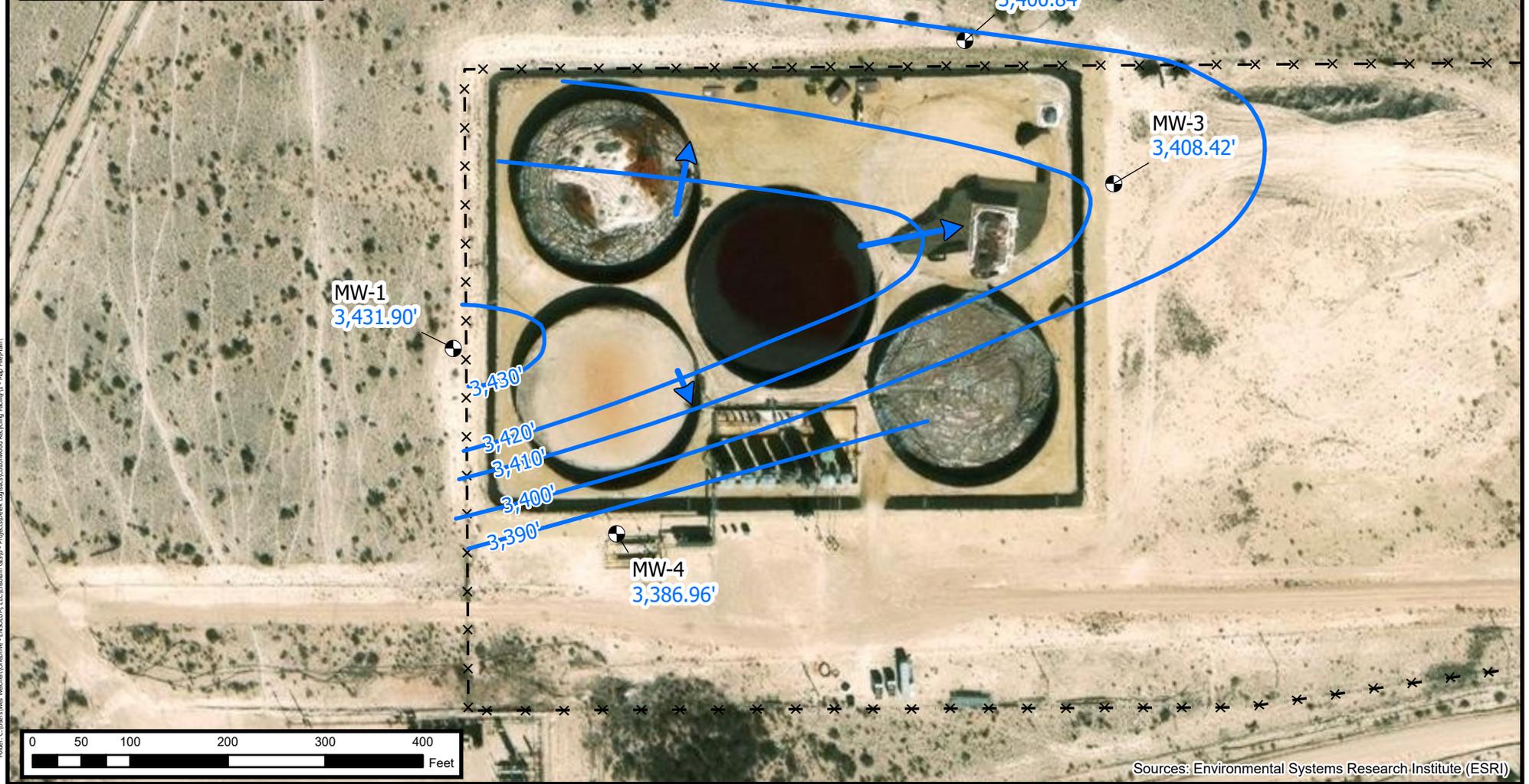
Groundwater Potentiometric Surface Map - June 2024

DKL Energy - Cottonwood, LLC
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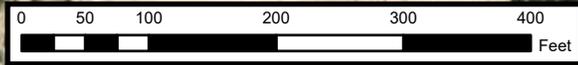
FIGURE 4

Legend

-  Monitoring Well Location
-  Fence
-  Groundwater Flow Direction
-  Groundwater Potentiometric Surface Elevation Contour (September 10, 2024)



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Sources: Environmental Systems Research Institute (ESRI)



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

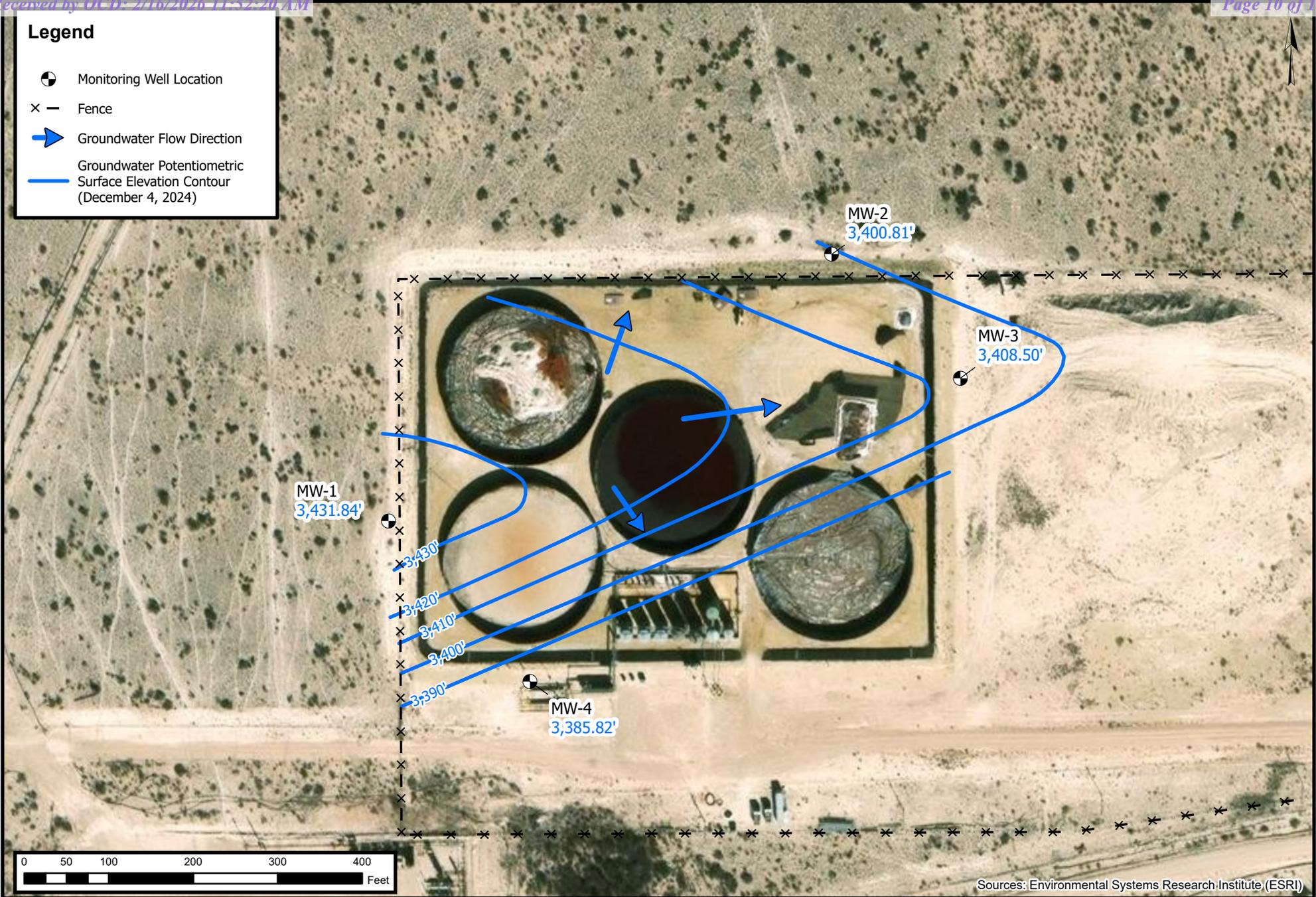
Groundwater Potentiometric Surface Map - September 2024

DKL Energy - Cottonwood, LLC
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Unit N, Sec 20, T26S, R26E
Eddy County, New Mexico, United States

FIGURE 5

Legend

-  Monitoring Well Location
-  Fence
-  Groundwater Flow Direction
-  Groundwater Potentiometric Surface Elevation Contour (December 4, 2024)



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Sources: Environmental Systems Research Institute (ESRI)



Groundwater Potentiometric Surface Map - December 2024

DKL Energy - Cottonwood, LLC
 Cottonwood Recycle Facility
 32.0210483, -104.31879
 Unit N, Sec 20, T26S, R26E
 Eddy County, New Mexico, United States

FIGURE 5



TABLES



TABLE 1
GROUNDWATER ELEVATIONS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Date	Well Top of Casing Elevation (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-1	09/25/2018	3,463.05	31.85	3,431.20
	11/13/2018		31.81	3,431.24
	12/12/2018		31.69	3,431.36
	01/29/2019		32.62	3,430.43
	05/15/2019		32.50	3,430.55
	09/12/2019		31.51	3,431.54
	09/20/2019		32.40	3,430.65
	12/04/2019		31.73	3,431.32
	02/18/2020		31.50	3,431.55
	05/07/2020		31.72	3,431.33
	08/13/2020		31.82	3,431.23
	10/06/2020		31.89	3,431.16
	01/05/2021		31.47	3,431.58
	04/29/2021		31.45	3,431.60
	06/25/2021		31.84	3,431.21
	09/01/2021		31.31	3,431.74
	11/18/2021		31.48	3,431.57
	02/24/2022		31.40	3,431.65
	05/19/2022		30.74	3,432.31
	09/23/2022		31.02	3,432.03
12/13/2022	30.42	3,432.63		
03/16/2023	31.62	3,431.43		
06/08/2023	31.02	3,432.03		
09/12/2023	30.99	3,432.06		
12/18/2023	31.06	3,431.99		
03/26/2024	30.72	3,432.33		
06/25/2024	30.83	3,432.22		
09/10/2024	31.15	3,431.90		
12/04/2024	31.21	3,431.84		



TABLE 1
GROUNDWATER ELEVATIONS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Date	Well Top of Casing Elevation (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-2	09/25/2018	3,458.26	Dry	-
	11/13/2018		Dry	-
	12/12/2018		42.52	3,415.74
	01/29/2019		42.07	3,416.19
	05/15/2019		42.70	3,415.56
	09/12/2019		43.98	3,414.28
	09/20/2019		44.78	3,413.48
	12/04/2019		45.01	3,413.25
	02/18/2020		45.10	3,413.16
	05/07/2020		49.30	3,408.96
	08/13/2020		51.69	3,406.57
	10/06/2020		52.00	3,406.26
	01/05/2021		52.21	3,406.05
	04/29/2021		54.75	3,403.51
	09/01/2021		56.93	3,401.33
	11/18/2021		57.94	3,400.32
	02/24/2022		56.88	3,401.38
	05/19/2022		56.93	3,401.33
	09/23/2022		56.44	3,401.82
	12/13/2022		56.62	3,401.64
03/16/2023	56.32	3,401.94		
06/08/2023	56.71	3,401.55		
09/12/2023	56.84	3,401.42		
12/18/2023	56.89	3,401.37		
03/26/2024	56.89	3,401.37		
06/25/2024	57.10	3,401.16		
09/10/2024	57.42	3,400.84		
12/04/2024	57.45	3,400.81		



TABLE 1
GROUNDWATER ELEVATIONS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Date	Well Top of Casing Elevation (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-3	09/25/2018	3,458.33	43.55	3,414.78
	11/13/2018		42.65	3,415.68
	12/12/2018		42.16	3,416.17
	01/29/2019		41.85	3,416.48
	05/15/2019		42.61	3,415.72
	09/12/2019		44.30	3,414.03
	09/20/2019		44.10	3,414.23
	12/04/2019		44.83	3,413.50
	02/18/2020		45.60	3,412.73
	05/07/2020		45.68	3,412.65
	08/13/2020		45.64	3,412.69
	10/06/2020		46.19	3,412.14
	01/05/2021		46.66	3,411.67
	04/29/2021		Dry	-
	09/01/2021		47.59	3,410.74
	11/18/2021		46.98	3,411.35
	02/24/2022		45.85	3,412.48
	05/19/2022		47.88	3,410.45
	09/23/2022		47.76	3,410.57
	12/13/2022		46.51	3,411.82
03/16/2023	48.11	3,410.22		
06/08/2023	46.45	3,411.88		
09/12/2023	48.97	3,409.36		
12/18/2023	47.29	3,411.04		
03/26/2024	47.38	3,410.95		
06/25/2024	48.83	3,409.50		
09/10/2024	49.91	3,408.42		
12/04/2024	49.83	3,408.50		



TABLE 1
GROUNDWATER ELEVATIONS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Date	Well Top of Casing Elevation (feet AMSL)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-4	09/25/2018	3,459.04	Dry	-
	11/13/2018		Dry	-
	12/12/2018		74.36	3,384.68
	01/29/2019		71.34	3,387.70
	05/15/2019		71.50	3,387.54
	09/12/2019		67.38	3,391.66
	09/20/2019		71.41	3,387.63
	12/04/2019		66.31	3,392.73
	02/18/2020		71.80	3,387.24
	05/07/2020		72.20	3,386.84
	08/13/2020		70.10	3,388.94
	10/06/2020		68.09	3,390.95
	01/05/2021		68.88	3,390.16
	04/29/2021		70.14	3,388.90
	06/25/2021		69.92	3,389.12
	09/01/2021		72.55	3,386.49
	11/18/2021		71.61	3,387.43
	02/24/2022		70.05	3,388.99
	05/19/2022		68.82	3,390.22
	09/23/2022		67.95	3,391.09
12/13/2022	68.58	3,390.46		
03/16/2023	71.71	3,387.33		
06/08/2023	71.29	3,387.75		
09/12/2023	70.27	3,388.77		
12/18/2023	70.21	3,388.83		
03/26/2024	69.76	3,389.28		
06/25/2024	71.57	3,387.47		
09/10/2024	72.08	3,386.96		
12/04/2024	73.22	3,385.82		

Notes:
 TOC - top of casing
 AMSL - above mean sea level
 BTOC - below top of casing



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	Total BTEX (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH (mg/L)	Chloride (mg/L)
NMWQCC Standard		0.00500	0.700	1.00	0.620	NE	NE	NE	NE	NE	250
MW-1	09/25/2018	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.556	<0.556	<0.556	<0.556	210
	11/13/2018	0.00124	<0.00200	<0.00200	<0.00200	0.00124	<0.527	<0.527	<0.527	<0.527	1,220
	12/12/2018	0.00130	<0.00200	<0.00200	<0.00200	0.00130	<0.537	<0.537	<0.537	<0.537	677
	01/29/2019	0.00489	<0.00400	<0.00400	<0.00400	0.00489	<0.0600	<0.0789	<0.0789	<0.0789	1,750
	05/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0749	<0.0749	<0.0749	214
	09/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0730	<0.0730	<0.0730	248
	12/04/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0739	<0.0739	<0.0739	224
	02/18/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0772	<0.0772	<0.0772	214
	05/07/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0787	<0.0787	<0.0787	246
	08/13/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	0.107	<0.0758	0.107	228
	10/06/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0782	<0.0782	<0.0782	218
	01/05/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0785	<0.0785	<0.0785	192
	04/29/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	2.33	0.78	3.11	201
	06/25/2021	-	-	-	-	-	<0.0600	<0.0790	<0.0790	<0.0790	-
	09/01/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.149	<0.149	<0.149	202
	11/18/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0836	<0.0836	<0.0836	182
	02/24/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0789	<0.0789	<0.0789	228
	05/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0787	<0.0787	<0.0787	194
	09/23/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0742	<0.0742	<0.0742	195
	12/13/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	0.184	<0.0988	0.184	196
03/16/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0778	<0.0778	<0.0778	275	
06/08/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0748	<0.0748	<0.0748	180	
09/12/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0760	<0.0760	<0.0760	183	
12/18/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0759	<0.0759	<0.0759	187	
03/26/2024	<0.00200	<0.00200	<0.00200	0.000788	0.000788	<5.17	<5.17	<5.17	<5.17	313	
06/25/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.901	<0.901	<0.869	<0.901	238	
09/10/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.972	<0.972	<0.938	<0.972	214	
12/04/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.988	1.65	<0.954	1.65	190	
MW-2	09/25/2018	-	-	-	-	-	-	-	-	-	-
	11/13/2018	-	-	-	-	-	-	-	-	-	-
	01/29/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0767	<0.0767	<0.0767	136
	05/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0744	<0.0744	<0.2088	106
	09/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0748	<0.0748	<0.2096	117
	12/04/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0751	<0.0751	<0.2102	105
	02/18/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0766	<0.0766	<0.2132	120
	05/07/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0823	<0.0823	<0.2246	121
	08/13/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0841	<0.0841	<0.2282	124
	10/06/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0789	<0.0789	<0.2178	137
01/05/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0874	<0.0874	<0.2348	130	



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	Total BTEX (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH (mg/L)	Chloride (mg/L)
NMWQCC Standard		0.00500	0.700	1.00	0.620	NE	NE	NE	NE	NE	250
MW-2 (continued)	04/29/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0946	<0.0946	<0.2492	132
	09/01/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.150	<0.150	<0.360	142
	11/18&22/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.00600	1.07	<0.494	1.07	149
	02/24/2022	-	-	-	-	-	-	-	-	-	-
	05/19/2022	-	-	-	-	-	-	-	-	-	-
	09/23/2022	-	-	-	-	-	-	-	-	-	-
	12/13/2022	-	-	-	-	-	-	-	-	-	-
	03/16/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0808	<0.0808	<0.0808	128
	06/08/2023	-	-	-	-	-	-	-	-	-	128
	09/12/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	-	-	-	-	134
	12/18/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	-	-	-	-	133
	03/26/2024	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<5.34	<5.34	<5.34	<5.34	162
06/25/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.988	<0.988	<0.954	<0.988	128	
09/10/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<1.00	<1.00	<0.966	<1.00	-	
12/04/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	-	-	-	-	130	
MW-3	09/25/2018	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.554	<0.554	<0.554	<0.554	101
	11/13/2018	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.574	<0.574	<0.574	<0.574	103
	01/29/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0780	<0.0780	<0.0780	140
	05/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0758	<0.0758	<0.2116	121
	09/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0737	<0.0737	<0.2074	130
	12/04/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0752	<0.0752	<0.2104	111
	02/18/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.00800	<0.0600	<0.0794	<0.0794	<0.2188	120
	05/07/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.00800	<0.0600	<0.0997	<0.0997	<0.2594	305
	08/13/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0822	<0.0822	<0.2244	125
	10/06/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0787	<0.0787	<0.2174	111
	01/05/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0858	<0.0858	<0.2316	112
	04/29/2021	-	-	-	-	-	-	-	-	-	-
	09/01/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.150	<0.150	<0.360	123
	11/18/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0878	<0.0878	<0.0878	120
	02/24/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0783	<0.0783	<0.0783	147
	05/19/2022	-	-	-	-	-	-	-	-	-	-
	09/23/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0880	<0.0880	<0.0880	146
	12/13/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.104	<0.104	<0.104	169
	03/16/2023	-	-	-	-	-	-	-	-	-	-
	06/08/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0767	<0.0767	<0.0767	165
09/12/2023	-	-	-	-	-	-	-	-	-	-	
12/18/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.0766	<0.0766	<0.0766	175	
03/26/2024	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<5.21	<5.21	<5.21	<5.21	217	
06/25/2024	-	-	-	-	-	-	-	-	-	-	



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	Total BTEX (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH (mg/L)	Chloride (mg/L)
NMWQCC Standard		0.00500	0.700	1.00	0.620	NE	NE	NE	NE	NE	250
MW-3 (continued)	09/10/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.953	<0.953	<0.920	<0.953	178
	12/04/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<1.00	<1.00	<0.970	<1.00	194
MW-4	09/25/2018	-	-	-	-	-	-	-	-	-	-
	11/13/2018	-	-	-	-	-	-	-	-	-	-
	01/29/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	0.216	<0.110	0.216	22,300
	05/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.762	<0.762	<0.2114	22,900
	09/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.741	<0.741	<0.082	26,000
	12/04/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.600	<0.752	<0.752	<2.104	24,400
	02/18/2020	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	<0.577	<0.577	<1.754	25,800
	05/07/2020	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	<0.110	<0.110	<0.820	25,400
	08/13/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.00800	<0.600	0.137	<0.0566	0.137	19,800
	10/06/2020	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	0.251	<0.0790	0.251	21,000
	01/05/2021	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	0.126	<0.0880	0.126	16,200
	04/29/2021	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	0.377	<0.0906	0.377	16,100
	06/25/2021	-	-	-	-	-	<0.600	<0.0900	<0.0900	<0.2400	-
	09/01/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.000800	<0.0600	<0.149	<0.149	<0.358	23,600
	11/18/2021	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	0.118	<0.0840	0.118	17,500
	02/24/2022	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.0600	<0.0853	<0.0853	<0.0853	20,400
	05/19/2022	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.0600	0.264	<0.0787	0.264	13,400
	09/23/2022	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.0600	0.272	<0.0745	0.272	19,300
	12/13/2022	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	<0.106	<0.106	<0.106	21,900
	03/16/2023	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	0.167	<0.0935	0.167	23,600
06/08/2023	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.600	<0.0820	<0.0820	<0.600	15,500	
09/12/2023	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.0600	0.144	<0.0867	0.144	17,800	
12/18/2023	<0.00800	<0.0200	<0.0200	<0.0200	<0.00800	<0.0600	<0.0746	<0.0746	<0.0746	20,200	
03/26/2024	0.000561	<0.00200	<0.00200	<0.00400	<0.00400	<5.26	<5.26	<5.26	<5.26	18,700	
06/25/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.969	<0.969	<0.935	<0.969	16,000	
09/10/2024	0.000600	<0.000385	<0.000475	<0.00124	<0.00124	<0.969	<0.969	<0.935	<0.969	20,200	
12/04/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.985	<0.985	<0.950	<0.985	17,600	
Dup-1 (MW-1)	02/18/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0802	<0.0802	<0.2204	210
	05/07/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0800	<0.0800	<0.2200	221
	08/13/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0747	<0.0747	<0.2094	213
	10/06/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0785	<0.0785	<0.2170	196
	01/05/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0751	<0.0751	<0.2102	194
	04/29/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0918	<0.0918	<0.2436	199
	06/25/2021	-	-	-	-	-	<0.0600	<0.0775	<0.0775	<0.2150	-
	09/01/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.1490	<0.1490	<0.898	204
	11/18/2021	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0816	<0.0816	<0.0816	183
02/24/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0832	<0.0832	<0.0832	198	



TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 Cottonwood Recycling Facility
 DKL Energy - Cottonwood, LLC
 Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	Total BTEX (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH (mg/L)	Chloride (mg/L)
NMWQCC Standard		0.00500	0.700	1.00	0.620	NE	NE	NE	NE	NE	250
Dup-1 (MW-1) (continued)	05/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0786	<0.0786	<0.0786	236
	09/23/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0768	<0.0768	<0.0768	194
	12/13/2022	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	0.128	<0.0997	0.128	196
	03/20/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0759	<0.0759	<0.0759	280
	06/08/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0764	<0.0764	<0.0764	177
	09/12/2023	<0.000800	<0.00200	<0.00200	<0.00200	<0.00200	<0.0600	<0.0780	<0.0780	<0.0780	184
	03/26/2024	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<4.98	<4.98	<4.98	<4.98	280
	06/25/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.953	<0.953	<0.920	<0.953	259
09/10/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<0.978	<0.978	<0.944	<0.978	215	
12/04/2024	<0.000460	<0.000385	<0.000475	<0.00124	<0.00124	<1.03	<1.03	<0.997	<1.03	192	

Notes:
 NMWQCC - New Mexico Water Quality Control Commission
 Concentrations in **bold** exceed the NMWQCC standards
 mg/L: milligrams per liter

NE: not established
 -: not analyzed



ATTACHMENT A
NMOCD Notifications

OCD Permitting

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

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	324334	Districts:	Artesia
Operator:	[330291] DKL Energy - Cottonwood, LLC	Counties:	Eddy
Description:	DKL Energy - Cottonwood, LLC [330291] , DKL energy-Cottonwood Facility , nAPP2405840050		
Status:	APPROVED		
Status Date:	03/18/2024		
References (1):	nAPP2405840050		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2405840050
Incident Name	NAPP2405840050 DKL ENERGY-COTTONWOOD FACILITY @ 0
Incident Type	Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	DKL energy-Cottonwood Facility
Date Release Discovered	02/27/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	0
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/26/2024
Time sampling will commence	08:00 AM

Warning: Notification can not be less than two business days prior to conducting final sampling.

Please provide any information necessary for observers to contact samplers	Contact Jason Booth Jason.booth@deleklogistics.com or at 361-788-3307
Please provide any information necessary for navigation to sampling site	The geodetic position is North 32.02104° and West -104.31879°

Comments

No comments found for this submission.

Conditions

Summary:

james.young (3/18/2024), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

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OCD Permitting

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

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	356687	Districts:	Artesia
Operator:	[330291] DKL Energy - Cottonwood, LLC	Counties:	Eddy
Description:	DKL Energy - Cottonwood, LLC [330291] , DKL energy-Cottonwood Facility , nAPP2405840050		
Status:	APPROVED		
Status Date:	06/21/2024		
References (1):	nAPP2405840050		

Foms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2405840050
Incident Name	NAPP2405840050 DKL ENERGY-COTTONWOOD FACILITY @ 0
Incident Type	Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	DKL energy-Cottonwood Facility
Date Release Discovered	02/27/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	10,000
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/25/2024
Time sampling will commence	09:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Jason Boothe (361)788-3307
Please provide any information necessary for navigation to sampling site	A-20-26S-26E 0 FNL 0 FEL (32.02104,-104.31879)

[Searches](#)

[Operator Data](#)

[Hearing Fee Application](#)

Comments

No comments found for this submission.

Conditions

Summary: *jasonbooth* (6/21/2024), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

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OCD Permitting

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

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	381148	Districts:	Artesia
Operator:	[330291] DKL Energy - Cottonwood, LLC	Counties:	Eddy
Description:	DKL Energy - Cottonwood, LLC [330291] , DKL energy-Cottonwood Facility , nAPP2405840050		
Status:	APPROVED		
Status Date:	09/06/2024		
References (1):	nAPP2405840050		

Foms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2405840050
Incident Name	NAPP2405840050 DKL ENERGY-COTTONWOOD FACILITY @ 0
Incident Type	Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	DKL energy-Cottonwood Facility
Date Release Discovered	02/27/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	10,000
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/10/2024
Time sampling will commence	09:00 AM

Warning: Notification can not be less than two business days prior to conducting final sampling.

Please provide any information necessary for observers to contact samplers	Groundwater sampling per 19.15.30.148 NMAC. For questions, contact Jason Boothe (361)788-3307.
Please provide any information necessary for navigation to sampling site	A-20-26S-26E 0 FNL 0 FEL (32.02104,-104.31879)

[Searches](#)

[Operator Data](#)

[Hearing Fee Application](#)

Comments

No comments found for this submission.

Conditions

Summary: *jasonbooth* (9/6/2024), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

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OCD Permitting

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

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	407351	Districts:	Artesia
Operator:	[330291] DKL Energy - Cottonwood, LLC	Counties:	Eddy
Description:	DKL Energy - Cottonwood, LLC [330291] , DKL energy-Cottonwood Facility , nAPP2405840050		
Status:	APPROVED		
Status Date:	12/01/2024		
References (1):	nAPP2405840050		

Foms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2405840050
Incident Name	NAPP2405840050 DKL ENERGY-COTTONWOOD FACILITY @ 0
Incident Type	Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	DKL energy-Cottonwood Facility
Date Release Discovered	02/27/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	10,000
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	12/04/2024
Time sampling will commence	09:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Groundwater sampling per 19.15.30.148 NMAC.
Please provide any information necessary for navigation to sampling site	A-20-26S-26E 0 FNL 0 FEL (32.02104,-104.31879)

[Searches](#)

[Operator Data](#)

[Hearing Fee Application](#)

Comments

No comments found for this submission.

Conditions

Summary: *jasonbooth* (12/1/2024), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

[Go Back](#)



ATTACHMENT B

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 4/10/2024 8:18:36 AM

JOB DESCRIPTION

COTTONWOOD RECYCLING FACILITY
 03C2466002

JOB NUMBER

890-6395-1

Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
4/10/2024 8:18:36 AM

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

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Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Laboratory Job ID: 890-6395-1
SDG: 03C2466002

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Definitions/Glossary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1

Job ID: 890-6395-1

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Job Narrative 890-6395-1

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

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

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

Receipt

The samples were received on 3/26/2024 5:12 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 3.4°C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-76825 and analytical batch 880-76772 was outside the upper control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-76772 recovered below the lower control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-76772/33).

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: Reanalysis of the following sample was performed outside of the analytical holding time due to client request : MW - 3 (890-6395-3).

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: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 880-76897 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample spiking error is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

MW - 1 (890-6395-1), MW - 2 (890-6395-2), MW - 3 (890-6395-3), MW - 4 (890-6395-4), DUP - 1 (890-6395-5), (560-117084-A-11), (560-117084-A-11 MS) and (560-117084-A-11 MSD)

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

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Client Sample ID: MW - 1

Lab Sample ID: 890-6395-1

Date Collected: 03/26/24 11:20

Matrix: Water

Date Received: 03/26/24 17:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/29/24 02:19	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/29/24 02:19	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/29/24 02:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/29/24 02:19	1
o-Xylene	0.000788	J	0.00200	0.000642	mg/L			03/29/24 02:19	1
Xylenes, Total	0.000788	J	0.00400	0.000642	mg/L			03/29/24 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130		03/29/24 02:19	1
1,4-Difluorobenzene (Surr)	101		70 - 130		03/29/24 02:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.000788	J	0.00400	0.000657	mg/L			03/29/24 02:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.17	U	5.17	1.02	mg/L			04/03/24 19:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.17	U	5.17	1.02	mg/L		04/01/24 11:39	04/03/24 19:52	1
Diesel Range Organics (Over C10-C28)	<5.17	U	5.17	1.02	mg/L		04/01/24 11:39	04/03/24 19:52	1
Oil Range Organics (Over C28-C36)	<5.17	U	5.17	0.986	mg/L		04/01/24 11:39	04/03/24 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 135	04/01/24 11:39	04/03/24 19:52	1
o-Terphenyl	95		70 - 135	04/01/24 11:39	04/03/24 19:52	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	313		25.0	17.3	mg/L			03/29/24 12:34	50

Client Sample ID: MW - 2

Lab Sample ID: 890-6395-2

Date Collected: 03/26/24 09:20

Matrix: Water

Date Received: 03/26/24 17:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/29/24 02:39	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/29/24 02:39	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/29/24 02:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/29/24 02:39	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/29/24 02:39	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/29/24 02:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130		03/29/24 02:39	1
1,4-Difluorobenzene (Surr)	109		70 - 130		03/29/24 02:39	1

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Client Sample ID: MW - 2
 Date Collected: 03/26/24 09:20
 Date Received: 03/26/24 17:12

Lab Sample ID: 890-6395-2
 Matrix: Water

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/29/24 02:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.34	U	5.34	1.05	mg/L			04/09/24 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.34	U	5.34	1.05	mg/L		04/01/24 11:39	04/09/24 15:55	1
Diesel Range Organics (Over C10-C28)	<5.34	U	5.34	1.05	mg/L		04/01/24 11:39	04/09/24 15:55	1
Oil Range Organics (Over C28-C36)	<5.34	U	5.34	1.02	mg/L		04/01/24 11:39	04/09/24 15:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 135				04/01/24 11:39	04/09/24 15:55	1
o-Terphenyl	99		70 - 135				04/01/24 11:39	04/09/24 15:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	162		10.0	6.93	mg/L			03/29/24 12:40	20

Client Sample ID: MW - 3
 Date Collected: 03/26/24 13:12
 Date Received: 03/26/24 17:12

Lab Sample ID: 890-6395-3
 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/29/24 02:59	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/29/24 02:59	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/29/24 02:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/29/24 02:59	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/29/24 02:59	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/29/24 02:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130					03/29/24 02:59	1
1,4-Difluorobenzene (Surr)	109		70 - 130					03/29/24 02:59	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/29/24 02:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.21	U	5.21	1.03	mg/L			04/03/24 14:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.21	U	5.21	1.03	mg/L		04/01/24 11:39	04/03/24 14:08	1
Diesel Range Organics (Over C10-C28)	<5.21	U	5.21	1.03	mg/L		04/01/24 11:39	04/03/24 14:08	1

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Client Sample ID: MW - 3
 Date Collected: 03/26/24 13:12
 Date Received: 03/26/24 17:12

Lab Sample ID: 890-6395-3
 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<5.21	U	5.21	0.993	mg/L		04/01/24 11:39	04/03/24 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 135				04/01/24 11:39	04/03/24 14:08	1
o-Terphenyl	117		70 - 135				04/01/24 11:39	04/03/24 14:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	217		10.0	6.93	mg/L			03/29/24 12:46	20

Client Sample ID: MW - 4
 Date Collected: 03/26/24 14:10
 Date Received: 03/26/24 17:12

Lab Sample ID: 890-6395-4
 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000561	J	0.00200	0.000408	mg/L			03/29/24 03:20	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/29/24 03:20	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/29/24 03:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/29/24 03:20	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/29/24 03:20	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/29/24 03:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130					03/29/24 03:20	1
1,4-Difluorobenzene (Surr)	102		70 - 130					03/29/24 03:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/29/24 03:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.26	U	5.26	1.04	mg/L			04/09/24 16:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.26	U	5.26	1.04	mg/L		04/01/24 11:39	04/09/24 16:16	1
Diesel Range Organics (Over C10-C28)	<5.26	U	5.26	1.04	mg/L		04/01/24 11:39	04/09/24 16:16	1
Oil Range Organics (Over C28-C36)	<5.26	U	5.26	1.00	mg/L		04/01/24 11:39	04/09/24 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 135				04/01/24 11:39	04/09/24 16:16	1
o-Terphenyl	87		70 - 135				04/01/24 11:39	04/09/24 16:16	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18700		100	69.3	mg/L			03/29/24 12:52	200

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Client Sample ID: DUP - 1
 Date Collected: 03/26/24 12:00
 Date Received: 03/26/24 17:12

Lab Sample ID: 890-6395-5
 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/29/24 03:40	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/29/24 03:40	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/29/24 03:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/29/24 03:40	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/29/24 03:40	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/29/24 03:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130					03/29/24 03:40	1
1,4-Difluorobenzene (Surr)	105		70 - 130					03/29/24 03:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.000657	mg/L			03/29/24 03:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.98	U	4.98	0.985	mg/L			04/03/24 17:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.98	U	4.98	0.985	mg/L		04/01/24 11:39	04/03/24 17:10	1
Diesel Range Organics (Over C10-C28)	<4.98	U	4.98	0.985	mg/L		04/01/24 11:39	04/03/24 17:10	1
Oil Range Organics (Over C28-C36)	<4.98	U	4.98	0.950	mg/L		04/01/24 11:39	04/03/24 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 135				04/01/24 11:39	04/03/24 17:10	1
o-Terphenyl	97		70 - 135				04/01/24 11:39	04/03/24 17:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		25.0	17.3	mg/L			03/29/24 12:58	50

Surrogate Summary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-6395-1	MW - 1	88	101
890-6395-1 MS	MW - 1	106	100
890-6395-1 MSD	MW - 1	114	96
890-6395-2	MW - 2	110	109
890-6395-3	MW - 3	109	109
890-6395-4	MW - 4	89	102
890-6395-5	DUP - 1	113	105
LCS 880-76772/34	Lab Control Sample	100	89
LCSD 880-76772/35	Lab Control Sample Dup	111	90
MB 880-76772/39	Method Blank	155 S1+	123
MB 880-76825/5-A	Method Blank	137 S1+	111

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

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-135)	OTPH1 (70-135)
890-6395-1	MW - 1	90	95
890-6395-2	MW - 2	84	99
890-6395-3	MW - 3	89	117
890-6395-4	MW - 4	77	87
890-6395-5	DUP - 1	87	97
LCS 860-152625/2-A	Lab Control Sample	108	104
LCSD 860-152625/3-A	Lab Control Sample Dup	110	103
MB 860-152625/1-A	Method Blank	96	115

Surrogate Legend
 1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-76772/39
 Matrix: Water
 Analysis Batch: 76772

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L			03/29/24 01:50	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L			03/29/24 01:50	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L			03/29/24 01:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L			03/29/24 01:50	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L			03/29/24 01:50	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L			03/29/24 01:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130		03/29/24 01:50	1
1,4-Difluorobenzene (Surr)	123		70 - 130		03/29/24 01:50	1

Lab Sample ID: LCS 880-76772/34
 Matrix: Water
 Analysis Batch: 76772

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08531		mg/L		85	70 - 130
Toluene	0.100	0.08909		mg/L		89	70 - 130
Ethylbenzene	0.100	0.08810		mg/L		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1927		mg/L		96	70 - 130
o-Xylene	0.100	0.09731		mg/L		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-76772/35
 Matrix: Water
 Analysis Batch: 76772

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08963		mg/L		90	70 - 130	5	20
Toluene	0.100	0.09477		mg/L		95	70 - 130	6	20
Ethylbenzene	0.100	0.09569		mg/L		96	70 - 130	8	20
m-Xylene & p-Xylene	0.200	0.2090		mg/L		104	70 - 130	8	20
o-Xylene	0.100	0.1077		mg/L		108	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 890-6395-1 MS
 Matrix: Water
 Analysis Batch: 76772

Client Sample ID: MW - 1
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09561		mg/L		96	70 - 130
Toluene	<0.00200	U	0.100	0.09241		mg/L		92	70 - 130

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

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

Lab Sample ID: 890-6395-1 MS
 Matrix: Water
 Analysis Batch: 76772

Client Sample ID: MW - 1
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.08890		mg/L		89	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2005		mg/L		100	70 - 130
o-Xylene	0.000788	J	0.100	0.1032		mg/L		102	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-6395-1 MSD
 Matrix: Water
 Analysis Batch: 76772

Client Sample ID: MW - 1
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.09802		mg/L		98	70 - 130	2	25
Toluene	<0.00200	U	0.100	0.08951		mg/L		90	70 - 130	3	25
Ethylbenzene	<0.00200	U	0.100	0.09975		mg/L		100	70 - 130	12	25
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2227		mg/L		111	70 - 130	10	25
o-Xylene	0.000788	J	0.100	0.1143		mg/L		114	70 - 130	10	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-76825/5-A
 Matrix: Water
 Analysis Batch: 76772

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 76825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000408	mg/L		03/28/24 10:40	03/28/24 14:13	1
Toluene	<0.00200	U	0.00200	0.000367	mg/L		03/28/24 10:40	03/28/24 14:13	1
Ethylbenzene	<0.00200	U	0.00200	0.000657	mg/L		03/28/24 10:40	03/28/24 14:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.000629	mg/L		03/28/24 10:40	03/28/24 14:13	1
o-Xylene	<0.00200	U	0.00200	0.000642	mg/L		03/28/24 10:40	03/28/24 14:13	1
Xylenes, Total	<0.00400	U	0.00400	0.000642	mg/L		03/28/24 10:40	03/28/24 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130	03/28/24 10:40	03/28/24 14:13	1
1,4-Difluorobenzene (Surr)	111		70 - 130	03/28/24 10:40	03/28/24 14:13	1

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

Lab Sample ID: MB 860-152625/1-A
 Matrix: Water
 Analysis Batch: 152587

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 152625

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988	mg/L		04/01/24 11:39	04/02/24 05:23	1

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QC Sample Results

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
SDG: 03C2466002

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

Lab Sample ID: MB 860-152625/1-A
Matrix: Water
Analysis Batch: 152587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 152625

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics (Over C10-C28)	<5.00	U	5.00	0.988	mg/L		04/01/24 11:39	04/02/24 05:23	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954	mg/L		04/01/24 11:39	04/02/24 05:23	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	96		70 - 135				04/01/24 11:39	04/02/24 05:23	1
o-Terphenyl	115		70 - 135				04/01/24 11:39	04/02/24 05:23	1

Lab Sample ID: LCS 860-152625/2-A
Matrix: Water
Analysis Batch: 152587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 152625

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	100	93.60		mg/L		94	70 - 135
Surrogate	LCS LCS		Limits				%Rec
	%Recovery	Qualifier					
1-Chlorooctane	108		70 - 135				
o-Terphenyl	104		70 - 135				

Lab Sample ID: LCSD 860-152625/3-A
Matrix: Water
Analysis Batch: 152587

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 152625

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	100	83.22		mg/L		83	70 - 135	0	35
Diesel Range Organics (Over C10-C28)	100	94.75		mg/L		95	70 - 135	1	35
Surrogate	LCSD LCSD		Limits			%Rec	Limits	RPD	Limit
	%Recovery	Qualifier							
1-Chlorooctane	110		70 - 135						
o-Terphenyl	103		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-76897/3
Matrix: Water
Analysis Batch: 76897

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<0.500	U	0.500	0.346	mg/L			03/29/24 10:06	1

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-76897/4
 Matrix: Water
 Analysis Batch: 76897

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	24.98		mg/L		100	90 - 110

Lab Sample ID: LCSD 880-76897/5
 Matrix: Water
 Analysis Batch: 76897

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0	24.97		mg/L		100	90 - 110	0	20

Lab Sample ID: 560-117084-A-11 MS
 Matrix: Water
 Analysis Batch: 76897

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4990	F1	1250	5637	F1	mg/L		51	90 - 110

Lab Sample ID: 560-117084-A-11 MSD
 Matrix: Water
 Analysis Batch: 76897

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4990	F1	1250	6531	F1	mg/L		123	90 - 110	15	20

QC Association Summary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

GC VOA

Analysis Batch: 76772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-1	MW - 1	Total/NA	Water	8021B	
890-6395-2	MW - 2	Total/NA	Water	8021B	
890-6395-3	MW - 3	Total/NA	Water	8021B	
890-6395-4	MW - 4	Total/NA	Water	8021B	
890-6395-5	DUP - 1	Total/NA	Water	8021B	
MB 880-76772/39	Method Blank	Total/NA	Water	8021B	
MB 880-76825/5-A	Method Blank	Total/NA	Water	8021B	76825
LCS 880-76772/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-76772/35	Lab Control Sample Dup	Total/NA	Water	8021B	
890-6395-1 MS	MW - 1	Total/NA	Water	8021B	
890-6395-1 MSD	MW - 1	Total/NA	Water	8021B	

Prep Batch: 76825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-76825/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 76966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-1	MW - 1	Total/NA	Water	Total BTEX	
890-6395-2	MW - 2	Total/NA	Water	Total BTEX	
890-6395-3	MW - 3	Total/NA	Water	Total BTEX	
890-6395-4	MW - 4	Total/NA	Water	Total BTEX	
890-6395-5	DUP - 1	Total/NA	Water	Total BTEX	

GC Semi VOA

Analysis Batch: 151502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-1	MW - 1	Total/NA	Water	8015 NM	
890-6395-2	MW - 2	Total/NA	Water	8015 NM	
890-6395-3	MW - 3	Total/NA	Water	8015 NM	
890-6395-4	MW - 4	Total/NA	Water	8015 NM	
890-6395-5	DUP - 1	Total/NA	Water	8015 NM	

Analysis Batch: 152587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-152625/1-A	Method Blank	Total/NA	Water	8015B NM	152625
LCS 860-152625/2-A	Lab Control Sample	Total/NA	Water	8015B NM	152625
LCSD 860-152625/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	152625

Prep Batch: 152625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-1	MW - 1	Total/NA	Water	8015NM Aq Prep	
890-6395-2	MW - 2	Total/NA	Water	8015NM Aq Prep	
890-6395-3	MW - 3	Total/NA	Water	8015NM Aq Prep	
890-6395-4	MW - 4	Total/NA	Water	8015NM Aq Prep	
890-6395-5	DUP - 1	Total/NA	Water	8015NM Aq Prep	
MB 860-152625/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-152625/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-152625/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

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QC Association Summary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

GC Semi VOA

Analysis Batch: 152977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-1	MW - 1	Total/NA	Water	8015B NM	152625
890-6395-3	MW - 3	Total/NA	Water	8015B NM	152625
890-6395-5	DUP - 1	Total/NA	Water	8015B NM	152625

Analysis Batch: 153956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-2	MW - 2	Total/NA	Water	8015B NM	152625
890-6395-4	MW - 4	Total/NA	Water	8015B NM	152625

HPLC/IC

Analysis Batch: 76897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6395-1	MW - 1	Total/NA	Water	300.0	
890-6395-2	MW - 2	Total/NA	Water	300.0	
890-6395-3	MW - 3	Total/NA	Water	300.0	
890-6395-4	MW - 4	Total/NA	Water	300.0	
890-6395-5	DUP - 1	Total/NA	Water	300.0	
MB 880-76897/3	Method Blank	Total/NA	Water	300.0	
LCS 880-76897/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-76897/5	Lab Control Sample Dup	Total/NA	Water	300.0	
560-117084-A-11 MS	Matrix Spike	Total/NA	Water	300.0	
560-117084-A-11 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Client Sample ID: MW - 1

Lab Sample ID: 890-6395-1

Date Collected: 03/26/24 11:20

Matrix: Water

Date Received: 03/26/24 17:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	76772	03/29/24 02:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76966	03/29/24 02:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			151502	04/03/24 19:52	ELJ	EET HOU
Total/NA	Prep	8015NM Aq Prep			29 mL	3 mL	152625	04/01/24 11:39	TH	EET HOU
Total/NA	Analysis	8015B NM		1			152977	04/03/24 19:52	T1S	EET HOU
Total/NA	Analysis	300.0		50	10 mL	10 mL	76897	03/29/24 12:34	SMC	EET MID

Client Sample ID: MW - 2

Lab Sample ID: 890-6395-2

Date Collected: 03/26/24 09:20

Matrix: Water

Date Received: 03/26/24 17:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	76772	03/29/24 02:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76966	03/29/24 02:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			151502	04/09/24 15:55	ELJ	EET HOU
Total/NA	Prep	8015NM Aq Prep			28.1 mL	3 mL	152625	04/01/24 11:39	TH	EET HOU
Total/NA	Analysis	8015B NM		1			153956	04/09/24 15:55	TH	EET HOU
Total/NA	Analysis	300.0		20	10 mL	10 mL	76897	03/29/24 12:40	SMC	EET MID

Client Sample ID: MW - 3

Lab Sample ID: 890-6395-3

Date Collected: 03/26/24 13:12

Matrix: Water

Date Received: 03/26/24 17:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	76772	03/29/24 02:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76966	03/29/24 02:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			151502	04/03/24 14:08	ELJ	EET HOU
Total/NA	Prep	8015NM Aq Prep			28.8 mL	3 mL	152625	04/01/24 11:39	TH	EET HOU
Total/NA	Analysis	8015B NM		1			152977	04/03/24 14:08	T1S	EET HOU
Total/NA	Analysis	300.0		20	10 mL	10 mL	76897	03/29/24 12:46	SMC	EET MID

Client Sample ID: MW - 4

Lab Sample ID: 890-6395-4

Date Collected: 03/26/24 14:10

Matrix: Water

Date Received: 03/26/24 17:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	76772	03/29/24 03:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76966	03/29/24 03:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			151502	04/09/24 16:16	ELJ	EET HOU
Total/NA	Prep	8015NM Aq Prep			28.5 mL	3 mL	152625	04/01/24 11:39	TH	EET HOU
Total/NA	Analysis	8015B NM		1			153956	04/09/24 16:16	TH	EET HOU
Total/NA	Analysis	300.0		200	10 mL	10 mL	76897	03/29/24 12:52	SMC	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
SDG: 03C2466002

Client Sample ID: DUP - 1

Lab Sample ID: 890-6395-5

Date Collected: 03/26/24 12:00

Matrix: Water

Date Received: 03/26/24 17:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	76772	03/29/24 03:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76966	03/29/24 03:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			151502	04/03/24 17:10	ELJ	EET HOU
Total/NA	Prep	8015NM Aq Prep			30.1 mL	3 mL	152625	04/01/24 11:39	TH	EET HOU
Total/NA	Analysis	8015B NM		1			152977	04/03/24 17:10	T1S	EET HOU
Total/NA	Analysis	300.0		50	10 mL	10 mL	76897	03/29/24 12:58	SMC	EET MID

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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

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Accreditation/Certification Summary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
 SDG: 03C2466002

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Water	Total TPH
8015B NM	8015NM Aq Prep	Water	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Aq Prep	Water	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Aq Prep	Water	Oil Range Organics (Over C28-C36)

Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

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

Method Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
SDG: 03C2466002

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 HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	Purge and Trap	SW846	EET MID
8015NM Aq Prep	Microextraction	SW846	EET HOU

Protocol References:

- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

- EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200
- EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-6395-1
SDG: 03C2466002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6395-1	MW - 1	Water	03/26/24 11:20	03/26/24 17:12
890-6395-2	MW - 2	Water	03/26/24 09:20	03/26/24 17:12
890-6395-3	MW - 3	Water	03/26/24 13:12	03/26/24 17:12
890-6395-4	MW - 4	Water	03/26/24 14:10	03/26/24 17:12
890-6395-5	DUP - 1	Water	03/26/24 12:00	03/26/24 17:12

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Bellill	Bill to: (if different)	Ben Bellill
Company Name:	Ensolum	Company Name:	Ensolum
Address:	601 N Marientfeld St #400	Address:	601 N Marientfeld St #400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	989-854-0852	Email:	bbellill@ensolum.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	State of Project:
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:	Cottonwood Recycling Facility	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number:	03C2466002	Due Date:		ANALYSIS REQUEST	
Project Location:	32.021048, -104.31879	TAT starts the day received by the lab, if received by 4:30pm		 890-6395 Chain of Custody	
Sampler's Name:	Tracy Hillard/Kelley Lowrey	Wet Ice:	Yes No	None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ NaOH: Na H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₅ : NaSO ₅ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SARC	
PO #:	600031519	Thermometer ID:	TN110C1	Preservative Codes	
SAMPLE RECEIPT	Tamp Blank	Yes No	Yes No	Incident ID: #APP Cost Center: AFE: PO#: 600031519	
Samples Received Intact:	Yes No	Correction Factor:	-0.2		
Cooler Custody Seals:	Yes No	Temperature Reading:	3.6		
Sample Custody Seals:	Yes No	Corrected Temperature:	3.9		
Total Containers:					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Other Parameters
MW-1	Water	3/26/24	1130	-	G		X	X	X	
MW-2			0930	-	G					
MW-3			1312	-	G					
MW-4			1410	-	G					
Dup-1			1200	-	G					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Janis Walker</i>	<i>B. Brown</i>	3/26/24			1/12
					4
					6

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Eurofins Carlsbad

1089 N Canal St
 Carlsbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Client Contact: Eurofins Environment Testing South Cent	Phone:	Lab P.M.: Jessica Kramer	E-Mail: Jessica.Kramer@et.eurofins.com	Carrier Tracking No(s):	State of Origin: New Mexico	COC No: 890-2744, 1
Company: Eurofins Environment Testing South Cent		Address: 4145 Greenbriar Dr	City: Stafford	State, Zip: TX 77477	Due Date Requested: 4/1/2024	Accreditations Required (See note): NELAP Texas	Page: Page 1 of 1	Job #: 890-6395-1
Project Name: COLTONWOOD RECYCLING FACILITY		Project #: 89000091	SSOW#: 89000091	PO #: WO #:	Analysis Requested:	Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NH4SO4 F MeOH G Amchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other:		
Sample Identification Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Weigher, Sieve, Overhead)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Special Instructions/Note:
MW 1 (890-6395-1)	3/26/24	11:20	Mountain	Water	Water	X	X	Temp: 25 IRID HOU-368 C/F: + 0.2 2.5 Corrected Temp:
MW 2 (890-6395-2)	3/26/24	09:20	Mountain	Water	Water	X	X	
MW 3 (890-6395-3)	3/26/24	13:12	Mountain	Water	Water	X	X	
MW 4 (890-6395-4)	3/26/24	14:10	Mountain	Water	Water	X	X	
DUP 1 (890-6395-5)	3/26/24	12:00	Mountain	Water	Water	X	X	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Cent, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/parameter being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Cent, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Cent, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Cent, LLC.		Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Date: Time: Method of Shipment:						
Relinquished by: <i>(Signature)</i>		Date/Time:	Company:	Received By: <i>(Signature)</i>		Date/Time: 3/26/2024 9:20	Company: EX	Cooler Temperature(s) °C and Other Remarks:
Custody Seals Intact: A Yes A No		Custody Seal No	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:					

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Eurofins Carlsbad

Chain of Custody Record

1089 N Canal St.
 Carlsbad NM 88220
 Phone 575-988-3199 Fax 575-988-3199



Environment Testing

Client Information (Sub Contract Lab)

Client Contact: **Kramer Jessica** Lab # **890-2746-1**
 Shipping/Receiving: **Jessica Kramer@get.eurofins.com** E-Mail: **Jessica Kramer@get.eurofins.com** State of Origin: **New Mexico**
 Company: **Eurofins Environment Testing South Cent** Phone: **89000091** Page: **1 of 1**
 Address: **1211 W Florida Ave** Due Date Requested: **4/1/2024** City: **Midland** TAT Requested (days): **NELAP - Texas** Accelerations Required (See note): **890-6395-1**
 State Zip: **TX, 79701** PO #: **432-704-5440 (Tel)** WO #: **Project #: 89000091** SSOV#:

Analysis Requested

Carrier Tracking No(s)	COC No	Preservation Codes
	890-2746-1	A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MeCA W - pH 4-5 Y - Trizma Z - other (specify)

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Solid, O=Overseal, BI=Tranq, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/5030B BTEX	Total BTEX_GCV	300_ORGFM_28D/ Chloride	Total Number of containers	Special Instructions/Note
MMW - 1 (890-6395-1)	3/26/24	11 20	Mountain	Water	X	X	X	X	X	6	
MMW - 2 (890-6395-2)	3/26/24	09 20	Mountain	Water	X	X	X	X	X	6	
MMW - 3 (890-6395-3)	3/26/24	13 12	Mountain	Water	X	X	X	X	X	6	
MMW - 4 (890-6395-4)	3/26/24	14 10	Mountain	Water	X	X	X	X	X	6	
DUP - 1 (890-6395-5)	3/26/24	12 00	Mountain	Water	X	X	X	X	X	6	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/estimation being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) **Primary Deliverable Rank: 2**

Empty Kit Relinquished by: **Return To Client** **Disposal By Lab** **Archive For** _____ **Months**

Relinquished by: **Warner** Date/Time: **3/28/24 11:15** Company: **Warner**

Relinquished by: **Warner** Date/Time: **3/28/24 11:15** Company: **Warner**

Relinquished by: **Warner** Date/Time: **3/28/24 11:15** Company: **Warner**

Custody Seals Intact: Yes No Custody Seal No: **10715**

Cooler Temperature(s) °C and Other Remarks: **10/1.5**

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6395-1

SDG Number: 03C2466002

Login Number: 6395

List Source: Eurofins Carlsbad

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	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6395-1

SDG Number: 03C2466002

Login Number: 6395

List Number: 3

Creator: Baker, Jeremiah

List Source: Eurofins Houston

List Creation: 03/28/24 01:14 PM

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
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").	True	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6395-1

SDG Number: 03C2466002

Login Number: 6395

List Source: Eurofins Midland

List Number: 2

List Creation: 03/28/24 11:20 AM

Creator: Kramer, Jessica

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
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").	True	

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tracy Hillard
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701

Generated 7/31/2024 9:08:41 PM Revision 1

JOB DESCRIPTION

COTTONWOOD RECYCLE FACILITY
 03C2466002

JOB NUMBER

890-6851-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
7/31/2024 9:08:41 PM
Revision 1

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

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Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Laboratory Job ID: 890-6851-1
SDG: 03C2466002

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Definitions/Glossary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum
Project: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1

Job ID: 890-6851-1

Eurofins Carlsbad

Job Narrative 890-6851-1

REVISION

The report being provided is a revision of the original report sent on 7/10/2024. The report (revision 1) is being revised due to Per client email, Fluoride and Sulfate was not requested. Need to be removed from report. Also review Chloride for MW-1 and DUP-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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/26/2024 8:38 AM. 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 8.8°C.

GC/MS VOA

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

Diesel Range Organics

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: The instrument blank/CCB for analytical batch 860-168880 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFM_28D: The following sample was diluted to bring the concentration of target analytes within the calibration range: DUP -1 (890-6851-4). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-168880 contained Chloride and Sulfate greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-168880 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFM_28D: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 860-168880 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-169027 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-169027 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration

Eurofins Carlsbad

Case Narrative

Client: Ensolum
Project: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1

Job ID: 890-6851-1 (Continued)

Eurofins Carlsbad

range: MW - 2 (890-6851-2) and DUP -1 (890-6851-4). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-169027 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-169027 contained Chloride and Sulfate greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-169485 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-169485 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW - 4 (890-6851-3). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-170524 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-170524 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-170524 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-170524 contained Chloride and Sulfate greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

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

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Client Sample ID: MW - 1
Date Collected: 06/25/24 13:43
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			06/28/24 20:51	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			06/28/24 20:51	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			06/28/24 20:51	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 20:51	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			06/28/24 20:51	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 20:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		06/28/24 20:51	1
4-Bromofluorobenzene (Surr)	91		74 - 124		06/28/24 20:51	1
Dibromofluoromethane (Surr)	99		75 - 131		06/28/24 20:51	1
Toluene-d8 (Surr)	100		80 - 120		06/28/24 20:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 20:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.56	U	4.56	0.901	mg/L			06/27/24 18:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.56	U	4.56	0.901	mg/L		06/27/24 10:46	06/27/24 18:05	1
Diesel Range Organics (Over C10-C28)	<4.56	U	4.56	0.901	mg/L		06/27/24 10:46	06/27/24 18:05	1
Oil Range Organics (Over C28-C36)	<4.56	U	4.56	0.869	mg/L		06/27/24 10:46	06/27/24 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 135	06/27/24 10:46	06/27/24 18:05	1
o-Terphenyl	98		70 - 135	06/27/24 10:46	06/27/24 18:05	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	238		5.00	2.50	mg/L			07/16/24 19:52	10

Client Sample ID: MW - 2
Date Collected: 06/25/24 09:42
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-2
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			06/28/24 21:11	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			06/28/24 21:11	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			06/28/24 21:11	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 21:11	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			06/28/24 21:11	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		06/28/24 21:11	1

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Client Sample ID: MW - 2
 Date Collected: 06/25/24 09:42
 Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-2
 Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		74 - 124		06/28/24 21:11	1
Dibromofluoromethane (Surr)	99		75 - 131		06/28/24 21:11	1
Toluene-d8 (Surr)	100		80 - 120		06/28/24 21:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 21:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.00	U	5.00	0.988	mg/L			06/27/24 18:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988	mg/L		06/27/24 10:46	06/27/24 18:48	1
Diesel Range Organics (Over C10-C28)	<5.00	U	5.00	0.988	mg/L		06/27/24 10:46	06/27/24 18:48	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954	mg/L		06/27/24 10:46	06/27/24 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 135	06/27/24 10:46	06/27/24 18:48	1
o-Terphenyl	103		70 - 135	06/27/24 10:46	06/27/24 18:48	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128		0.500	0.250	mg/L			06/29/24 17:38	1

Client Sample ID: MW - 4
 Date Collected: 06/25/24 15:05
 Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-3
 Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			06/28/24 21:32	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			06/28/24 21:32	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			06/28/24 21:32	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 21:32	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			06/28/24 21:32	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		63 - 144		06/28/24 21:32	1
4-Bromofluorobenzene (Surr)	92		74 - 124		06/28/24 21:32	1
Dibromofluoromethane (Surr)	99		75 - 131		06/28/24 21:32	1
Toluene-d8 (Surr)	111		80 - 120		06/28/24 21:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 21:32	1

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Client Sample Results

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Client Sample ID: MW - 4
Date Collected: 06/25/24 15:05
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.90	U	4.90	0.969	mg/L			06/27/24 19:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.90	U	4.90	0.969	mg/L		06/27/24 10:46	06/27/24 19:09	1
Diesel Range Organics (Over C10-C28)	<4.90	U	4.90	0.969	mg/L		06/27/24 10:46	06/27/24 19:09	1
Oil Range Organics (Over C28-C36)	<4.90	U	4.90	0.935	mg/L		06/27/24 10:46	06/27/24 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 135	06/27/24 10:46	06/27/24 19:09	1
o-Terphenyl	102		70 - 135	06/27/24 10:46	06/27/24 19:09	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16000		50.0	25.0	mg/L			06/29/24 21:22	100

Client Sample ID: DUP -1
Date Collected: 06/25/24 13:55
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-4
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			07/02/24 02:59	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			07/02/24 02:59	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			07/02/24 02:59	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			07/02/24 02:59	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			07/02/24 02:59	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			07/02/24 02:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		07/02/24 02:59	1
4-Bromofluorobenzene (Surr)	98		74 - 124		07/02/24 02:59	1
Dibromofluoromethane (Surr)	101		75 - 131		07/02/24 02:59	1
Toluene-d8 (Surr)	99		80 - 120		07/02/24 02:59	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			07/02/24 02:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.82	U	4.82	0.953	mg/L			06/27/24 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.82	U	4.82	0.953	mg/L		06/27/24 10:46	06/27/24 19:30	1
Diesel Range Organics (Over C10-C28)	<4.82	U	4.82	0.953	mg/L		06/27/24 10:46	06/27/24 19:30	1
Oil Range Organics (Over C28-C36)	<4.82	U	4.82	0.920	mg/L		06/27/24 10:46	06/27/24 19:30	1

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Client Sample ID: DUP -1
Date Collected: 06/25/24 13:55
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6851-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 135	06/27/24 10:46	06/27/24 19:30	1
o-Terphenyl	101		70 - 135	06/27/24 10:46	06/27/24 19:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	259		5.00	2.50	mg/L			06/29/24 17:30	10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (63-144)	BFB (74-124)	DBFM (75-131)	TOL (80-120)
880-45418-E-1 MS	Matrix Spike	97	102	100	99
890-6851-1	MW - 1	101	91	99	100
890-6851-1 MS	MW - 1	93	98	95	98
890-6851-2	MW - 2	101	90	99	100
890-6851-3	MW - 4	111	92	99	111
890-6851-4	DUP -1	103	98	101	99
LCS 860-168783/3	Lab Control Sample	93	100	97	99
LCS 860-169089/3	Lab Control Sample	95	98	102	98
LCSD 860-168783/4	Lab Control Sample Dup	91	100	94	100
LCSD 860-169089/4	Lab Control Sample Dup	96	101	101	99
MB 860-168783/9	Method Blank	93	93	97	100
MB 860-169089/9	Method Blank	102	99	101	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-135)	OTPH1 (70-135)
890-6851-1	MW - 1	93	98
890-6851-2	MW - 2	97	103
890-6851-3	MW - 4	97	102
890-6851-4	DUP -1	96	101
LCS 860-168451/2-A	Lab Control Sample	116	91
LCSD 860-168451/3-A	Lab Control Sample Dup	121	95
MB 860-168451/1-A	Method Blank	99	106

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-168783/9
Matrix: Water
Analysis Batch: 168783

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			06/28/24 19:49	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			06/28/24 19:49	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			06/28/24 19:49	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 19:49	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			06/28/24 19:49	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			06/28/24 19:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 144		06/28/24 19:49	1
4-Bromofluorobenzene (Surr)	93		74 - 124		06/28/24 19:49	1
Dibromofluoromethane (Surr)	97		75 - 131		06/28/24 19:49	1
Toluene-d8 (Surr)	100		80 - 120		06/28/24 19:49	1

Lab Sample ID: LCS 860-168783/3
Matrix: Water
Analysis Batch: 168783

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04984		mg/L		100	75 - 125
Toluene	0.0500	0.05243		mg/L		105	75 - 130
Ethylbenzene	0.0500	0.05417		mg/L		108	75 - 125
m,p-Xylenes	0.0500	0.05511		mg/L		110	75 - 125
o-Xylene	0.0500	0.05574		mg/L		111	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	97		75 - 131
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 860-168783/4
Matrix: Water
Analysis Batch: 168783

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.05310		mg/L		106	75 - 125	6	25
Toluene	0.0500	0.05633		mg/L		113	75 - 130	7	25
Ethylbenzene	0.0500	0.05893		mg/L		118	75 - 125	8	25
m,p-Xylenes	0.0500	0.06037		mg/L		121	75 - 125	9	25
o-Xylene	0.0500	0.05977		mg/L		120	75 - 125	7	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		63 - 144
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	94		75 - 131
Toluene-d8 (Surr)	100		80 - 120

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 890-6851-1 MS
Matrix: Water
Analysis Batch: 168783

Client Sample ID: MW - 1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00100	U	0.0500	0.04609		mg/L		92	66 - 142
Toluene	<0.00100	U	0.0500	0.04809		mg/L		96	59 - 139
Ethylbenzene	<0.00100	U	0.0500	0.04941		mg/L		99	75 - 125
m,p-Xylenes	<0.0100	U	0.0500	0.05039		mg/L		101	75 - 125
o-Xylene	<0.00100	U	0.0500	0.05084		mg/L		102	75 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	95		75 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 860-169089/9
Matrix: Water
Analysis Batch: 169089

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			07/02/24 01:21	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			07/02/24 01:21	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			07/02/24 01:21	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			07/02/24 01:21	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			07/02/24 01:21	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			07/02/24 01:21	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		07/02/24 01:21	1
4-Bromofluorobenzene (Surr)	99		74 - 124		07/02/24 01:21	1
Dibromofluoromethane (Surr)	101		75 - 131		07/02/24 01:21	1
Toluene-d8 (Surr)	100		80 - 120		07/02/24 01:21	1

Lab Sample ID: LCS 860-169089/3
Matrix: Water
Analysis Batch: 169089

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05933		mg/L		119	75 - 125
Toluene	0.0500	0.05825		mg/L		116	75 - 130
Ethylbenzene	0.0500	0.06060		mg/L		121	75 - 125
m,p-Xylenes	0.0500	0.06112		mg/L		122	75 - 125
o-Xylene	0.0500	0.06076		mg/L		122	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 144
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	102		75 - 131
Toluene-d8 (Surr)	98		80 - 120

QC Sample Results

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-169089/4
Matrix: Water
Analysis Batch: 169089

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.06026		mg/L		121	75 - 125	2	25
Toluene	0.0500	0.05928		mg/L		119	75 - 130	2	25
Ethylbenzene	0.0500	0.06157		mg/L		123	75 - 125	2	25
m,p-Xylenes	0.0500	0.06184		mg/L		124	75 - 125	1	25
o-Xylene	0.0500	0.06173		mg/L		123	75 - 125	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 144
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 880-45418-E-1 MS
Matrix: Water
Analysis Batch: 169089

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00100	U	0.0500	0.05387		mg/L		108	66 - 142
Toluene	<0.00100	U	0.0500	0.05440		mg/L		109	59 - 139
Ethylbenzene	<0.00100	U	0.0500	0.05679		mg/L		114	75 - 125
m,p-Xylenes	<0.0100	U	0.0500	0.05748		mg/L		115	75 - 125
o-Xylene	<0.00100	U	0.0500	0.05757		mg/L		115	75 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 144
4-Bromofluorobenzene (Surr)	102		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
Toluene-d8 (Surr)	99		80 - 120

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

Lab Sample ID: MB 860-168451/1-A
Matrix: Water
Analysis Batch: 168372

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 168451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988	mg/L		06/27/24 10:46	06/27/24 17:00	1
Diesel Range Organics (Over C10-C28)	<5.00	U	5.00	0.988	mg/L		06/27/24 10:46	06/27/24 17:00	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954	mg/L		06/27/24 10:46	06/27/24 17:00	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 135	06/27/24 10:46	06/27/24 17:00	1
o-Terphenyl	106		70 - 135	06/27/24 10:46	06/27/24 17:00	1

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

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

Lab Sample ID: LCS 860-168451/2-A
 Matrix: Water
 Analysis Batch: 168372

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 168451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	100	111.2		mg/L		111	70 - 135
Diesel Range Organics (Over C10-C28)	100	100.7		mg/L		101	70 - 135
		LCS	LCS				
Surrogate		%Recovery	Qualifier	Limits			
1-Chlorooctane		116		70 - 135			
o-Terphenyl		91		70 - 135			

Lab Sample ID: LCSD 860-168451/3-A
 Matrix: Water
 Analysis Batch: 168372

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 168451

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	100	111.9		mg/L		112	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	100	102.4		mg/L		102	70 - 135	2	35
		LCSD	LCSD						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		121		70 - 135					
o-Terphenyl		95		70 - 135					

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-168880/3
 Matrix: Water
 Analysis Batch: 168880

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			06/29/24 00:54	1

Lab Sample ID: MB 860-168880/62
 Matrix: Water
 Analysis Batch: 168880

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			06/29/24 18:22	1

Lab Sample ID: LCS 860-168880/4
 Matrix: Water
 Analysis Batch: 168880

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.561		mg/L		96	90 - 110
Fluoride	10.0	9.731		mg/L		97	90 - 110
Sulfate	10.0	9.469		mg/L		95	90 - 110

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-168880/63
 Matrix: Water
 Analysis Batch: 168880

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.624		mg/L		96	90 - 110
Fluoride	10.0	9.730		mg/L		97	90 - 110
Sulfate	10.0	9.845		mg/L		98	90 - 110

Lab Sample ID: LCSD 860-168880/5
 Matrix: Water
 Analysis Batch: 168880

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.573		mg/L		96	90 - 110	0	20
Fluoride	10.0	9.742		mg/L		97	90 - 110	0	20
Sulfate	10.0	9.492		mg/L		95	90 - 110	0	20

Lab Sample ID: LCSD 860-168880/64
 Matrix: Water
 Analysis Batch: 168880

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.570		mg/L		96	90 - 110	1	20
Fluoride	10.0	9.725		mg/L		97	90 - 110	0	20
Sulfate	10.0	9.817		mg/L		98	90 - 110	0	20

Lab Sample ID: 890-6851-2 MS
 Matrix: Water
 Analysis Batch: 168880

Client Sample ID: MW - 2
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	128		10.0	134.3	4	mg/L		61	90 - 110
Fluoride	3.16		10.0	13.58		mg/L		104	90 - 110

Lab Sample ID: 890-6851-2 MSD
 Matrix: Water
 Analysis Batch: 168880

Client Sample ID: MW - 2
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	128		10.0	134.5	4	mg/L		64	90 - 110	0	15
Fluoride	3.16		10.0	13.60		mg/L		104	90 - 110	0	15

Lab Sample ID: 890-6851-A-1 MS
 Matrix: Water
 Analysis Batch: 168880

Client Sample ID: 890-6851-A-1 MS
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.1		100	125.9		mg/L		101	90 - 110
Fluoride	<1.00	U	100	101.9		mg/L		102	90 - 110
Sulfate	738	B ^2	100	831.7	4	mg/L		94	90 - 110

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-6851-A-1 MSD
Matrix: Water
Analysis Batch: 168880

Client Sample ID: 890-6851-A-1 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.1		100	126.5		mg/L		101	90 - 110	0	15
Fluoride	<1.00	U	100	102.0		mg/L		102	90 - 110	0	15
Sulfate	738	B ^2	100	830.7	4	mg/L		93	90 - 110	0	15

Lab Sample ID: MB 860-169027/58
Matrix: Water
Analysis Batch: 169027

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			07/01/24 19:42	1

Lab Sample ID: LCS 860-169027/59
Matrix: Water
Analysis Batch: 169027

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.525		mg/L		95	90 - 110
Fluoride	10.0	9.686		mg/L		97	90 - 110
Sulfate	10.0	9.516		mg/L		95	90 - 110

Lab Sample ID: LCSD 860-169027/60
Matrix: Water
Analysis Batch: 169027

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.721		mg/L		97	90 - 110	2	20
Fluoride	10.0	9.739		mg/L		97	90 - 110	1	20
Sulfate	10.0	9.542		mg/L		95	90 - 110	0	20

Lab Sample ID: LLCS 860-169027/7
Matrix: Water
Analysis Batch: 169027

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.6861		mg/L		137	50 - 150
Fluoride	0.500	0.4623	J	mg/L		92	50 - 150
Sulfate	0.500	0.5738		mg/L		115	50 - 150

Lab Sample ID: 890-6851-4 MS
Matrix: Water
Analysis Batch: 169027

Client Sample ID: DUP -1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	236	F1	1000	1369	F1	mg/L		113	90 - 110
Fluoride	<10.0	U F1	1000	758.0	F1	mg/L		76	90 - 110
Sulfate	7170		1000	8409	4	mg/L		124	90 - 110

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-6851-4 MSD
Matrix: Water
Analysis Batch: 169027

Client Sample ID: DUP -1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	236	F1	1000	1373	F1	mg/L		114	90 - 110	0	15
Fluoride	<10.0	U F1	1000	801.0	F1	mg/L		80	90 - 110	6	15
Sulfate	7170		1000	8403	4	mg/L		123	90 - 110	0	15

Lab Sample ID: MB 860-169485/172
Matrix: Water
Analysis Batch: 169485

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			07/06/24 13:07	1

Lab Sample ID: MB 860-169485/3
Matrix: Water
Analysis Batch: 169485

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			07/03/24 15:25	1

Lab Sample ID: MB 860-169485/64
Matrix: Water
Analysis Batch: 169485

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			07/04/24 04:44	1

Lab Sample ID: LCS 860-169485/173
Matrix: Water
Analysis Batch: 169485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.33		mg/L		103	90 - 110
Fluoride	10.0	10.16		mg/L		102	90 - 110
Sulfate	10.0	10.48		mg/L		105	90 - 110

Lab Sample ID: LCS 860-169485/65
Matrix: Water
Analysis Batch: 169485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.31		mg/L		103	90 - 110
Fluoride	10.0	10.19		mg/L		102	90 - 110
Sulfate	10.0	10.43		mg/L		104	90 - 110

Lab Sample ID: LCSD 860-169485/174
Matrix: Water
Analysis Batch: 169485

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.45		mg/L		105	90 - 110	1	20
Fluoride	10.0	10.27		mg/L		103	90 - 110	1	20

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-169485/174
 Matrix: Water
 Analysis Batch: 169485

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	10.60		mg/L		106	90 - 110	1	20

Lab Sample ID: LCSD 860-169485/66
 Matrix: Water
 Analysis Batch: 169485

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.42		mg/L		104	90 - 110	1	20
Fluoride	10.0	10.28		mg/L		103	90 - 110	1	20
Sulfate	10.0	10.57		mg/L		106	90 - 110	1	20

Lab Sample ID: LLCS 860-169485/7
 Matrix: Water
 Analysis Batch: 169485

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	0.500	0.5397		mg/L		108	50 - 150		
Fluoride	0.500	0.4973	J	mg/L		99	50 - 150		
Sulfate	0.500	0.5240		mg/L		105	50 - 150		

Lab Sample ID: 870-28212-A-1 MS
 Matrix: Water
 Analysis Batch: 169485

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	30.0	F1	10.0	37.20	F1	mg/L		72	90 - 110		
Fluoride			10.0	2.303		mg/L					
Sulfate			10.0	18.38		mg/L					

Lab Sample ID: 870-28212-A-1 MSD
 Matrix: Water
 Analysis Batch: 169485

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	30.0	F1	10.0	40.03		mg/L		100	90 - 110	7	15
Fluoride			10.0	3.599		mg/L					
Sulfate			10.0	21.11		mg/L					

Lab Sample ID: MB 860-170524/3
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			07/16/24 11:20	1

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-170524/61
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			07/16/24 18:44	1

Lab Sample ID: LCS 860-170524/62
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.407		mg/L		94	90 - 110
Fluoride	10.0	9.982		mg/L		100	90 - 110
Sulfate	10.0	10.41		mg/L		104	90 - 110

Lab Sample ID: LCSD 860-170524/63
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.240		mg/L		92	90 - 110	2	20
Fluoride	10.0	9.839		mg/L		98	90 - 110	1	20
Sulfate	10.0	10.22		mg/L		102	90 - 110	2	20

Lab Sample ID: LLCS 860-170524/7
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5330		mg/L		107	50 - 150
Fluoride	0.500	0.4853	J	mg/L		97	50 - 150
Sulfate	0.500	0.4717	J	mg/L		94	50 - 150

Lab Sample ID: 820-14210-B-1 MS
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	98.7		10.0	106.7	4	mg/L		80	90 - 110
Fluoride	5.54	F1	10.0	11.10	F1	mg/L		56	90 - 110
Sulfate	138		10.0	147.3	4	mg/L		89	90 - 110

Lab Sample ID: 820-14210-B-1 MSD
 Matrix: Water
 Analysis Batch: 170524

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	98.7		10.0	106.3	4	mg/L		76	90 - 110	0	15
Fluoride	5.54	F1	10.0	11.03	F1	mg/L		55	90 - 110	1	15
Sulfate	138		10.0	147.0	4	mg/L		86	90 - 110	0	15

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QC Association Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

GC/MS VOA

Analysis Batch: 168783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-1	MW - 1	Total/NA	Water	8260C	
890-6851-2	MW - 2	Total/NA	Water	8260C	
890-6851-3	MW - 4	Total/NA	Water	8260C	
MB 860-168783/9	Method Blank	Total/NA	Water	8260C	
LCS 860-168783/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-168783/4	Lab Control Sample Dup	Total/NA	Water	8260C	
890-6851-1 MS	MW - 1	Total/NA	Water	8260C	

Analysis Batch: 169089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-4	DUP - 1	Total/NA	Water	8260C	
MB 860-169089/9	Method Blank	Total/NA	Water	8260C	
LCS 860-169089/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-169089/4	Lab Control Sample Dup	Total/NA	Water	8260C	
880-45418-E-1 MS	Matrix Spike	Total/NA	Water	8260C	

Analysis Batch: 169241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-1	MW - 1	Total/NA	Water	Total BTEX	
890-6851-2	MW - 2	Total/NA	Water	Total BTEX	
890-6851-3	MW - 4	Total/NA	Water	Total BTEX	
890-6851-4	DUP - 1	Total/NA	Water	Total BTEX	

GC Semi VOA

Analysis Batch: 168372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-1	MW - 1	Total/NA	Water	8015B NM	168451
890-6851-2	MW - 2	Total/NA	Water	8015B NM	168451
890-6851-3	MW - 4	Total/NA	Water	8015B NM	168451
890-6851-4	DUP - 1	Total/NA	Water	8015B NM	168451
MB 860-168451/1-A	Method Blank	Total/NA	Water	8015B NM	168451
LCS 860-168451/2-A	Lab Control Sample	Total/NA	Water	8015B NM	168451
LCSD 860-168451/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	168451

Prep Batch: 168451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-1	MW - 1	Total/NA	Water	8015NM Aq Prep	
890-6851-2	MW - 2	Total/NA	Water	8015NM Aq Prep	
890-6851-3	MW - 4	Total/NA	Water	8015NM Aq Prep	
890-6851-4	DUP - 1	Total/NA	Water	8015NM Aq Prep	
MB 860-168451/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-168451/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-168451/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 168659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-1	MW - 1	Total/NA	Water	8015 NM	
890-6851-2	MW - 2	Total/NA	Water	8015 NM	
890-6851-3	MW - 4	Total/NA	Water	8015 NM	
890-6851-4	DUP - 1	Total/NA	Water	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

HPLC/IC

Analysis Batch: 168880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-2	MW - 2	Total/NA	Water	300.0	
890-6851-3	MW - 4	Total/NA	Water	300.0	
890-6851-4 - DL	DUP -1	Total/NA	Water	300.0	
MB 860-168880/3	Method Blank	Total/NA	Water	300.0	
MB 860-168880/62	Method Blank	Total/NA	Water	300.0	
LCS 860-168880/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-168880/63	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-168880/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-168880/64	Lab Control Sample Dup	Total/NA	Water	300.0	
890-6851-2 MS	MW - 2	Total/NA	Water	300.0	
890-6851-2 MSD	MW - 2	Total/NA	Water	300.0	
890-6851-A-1 MS	890-6851-A-1 MS	Total/NA	Water	300.0	
890-6851-A-1 MSD	890-6851-A-1 MSD	Total/NA	Water	300.0	

Analysis Batch: 169027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-169027/58	Method Blank	Total/NA	Water	300.0	
LCS 860-169027/59	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-169027/60	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-169027/7	Lab Control Sample	Total/NA	Water	300.0	
890-6851-4 MS	DUP -1	Total/NA	Water	300.0	
890-6851-4 MSD	DUP -1	Total/NA	Water	300.0	

Analysis Batch: 169485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-169485/172	Method Blank	Total/NA	Water	300.0	
MB 860-169485/3	Method Blank	Total/NA	Water	300.0	
MB 860-169485/64	Method Blank	Total/NA	Water	300.0	
LCS 860-169485/173	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-169485/65	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-169485/174	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-169485/66	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-169485/7	Lab Control Sample	Total/NA	Water	300.0	
870-28212-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
870-28212-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 170524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6851-1	MW - 1	Total/NA	Water	300.0	
MB 860-170524/3	Method Blank	Total/NA	Water	300.0	
MB 860-170524/61	Method Blank	Total/NA	Water	300.0	
LCS 860-170524/62	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-170524/63	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-170524/7	Lab Control Sample	Total/NA	Water	300.0	
820-14210-B-1 MS	Matrix Spike	Total/NA	Water	300.0	
820-14210-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

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Lab Chronicle

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
 SDG: 03C2466002

Client Sample ID: MW - 1

Lab Sample ID: 890-6851-1

Date Collected: 06/25/24 13:43

Matrix: Water

Date Received: 06/26/24 08:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	168783	06/28/24 20:51	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			169241	06/28/24 20:51	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			168659	06/27/24 18:05	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			32.9 mL	3 mL	168451	06/27/24 10:46	TH	EET HOU
Total/NA	Analysis	8015B NM		1			168372	06/27/24 18:05	T1S	EET HOU
Total/NA	Analysis	300.0		10			170524	07/16/24 19:52	WP	EET HOU

Client Sample ID: MW - 2

Lab Sample ID: 890-6851-2

Date Collected: 06/25/24 09:42

Matrix: Water

Date Received: 06/26/24 08:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	168783	06/28/24 21:11	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			169241	06/28/24 21:11	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			168659	06/27/24 18:48	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			30 mL	3 mL	168451	06/27/24 10:46	TH	EET HOU
Total/NA	Analysis	8015B NM		1			168372	06/27/24 18:48	T1S	EET HOU
Total/NA	Analysis	300.0		1			168880	06/29/24 17:38	WP	EET HOU

Client Sample ID: MW - 4

Lab Sample ID: 890-6851-3

Date Collected: 06/25/24 15:05

Matrix: Water

Date Received: 06/26/24 08:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	168783	06/28/24 21:32	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			169241	06/28/24 21:32	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			168659	06/27/24 19:09	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			30.6 mL	3 mL	168451	06/27/24 10:46	TH	EET HOU
Total/NA	Analysis	8015B NM		1			168372	06/27/24 19:09	T1S	EET HOU
Total/NA	Analysis	300.0		100			168880	06/29/24 21:22	WP	EET HOU

Client Sample ID: DUP -1

Lab Sample ID: 890-6851-4

Date Collected: 06/25/24 13:55

Matrix: Water

Date Received: 06/26/24 08:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	169089	07/02/24 02:59	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			169241	07/02/24 02:59	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			168659	06/27/24 19:30	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			31.1 mL	3 mL	168451	06/27/24 10:46	TH	EET HOU
Total/NA	Analysis	8015B NM		1			168372	06/27/24 19:30	T1S	EET HOU
Total/NA	Analysis	300.0	DL	10			168880	06/29/24 17:30	WP	EET HOU

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Water	Total TPH
8015B NM	8015NM Aq Prep	Water	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Aq Prep	Water	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Aq Prep	Water	Oil Range Organics (Over C28-C36)
Total BTEX		Water	Total BTEX

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Method Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
Total BTEX	Total BTEX Calculation	TAL SOP	EET HOU
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU
8015NM Aq Prep	Microextraction	SW846	EET HOU

Protocol References:

- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

- EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200



Sample Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLE FACILITY

Job ID: 890-6851-1
SDG: 03C2466002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6851-1	MW - 1	Water	06/25/24 13:43	06/26/24 08:38
890-6851-2	MW - 2	Water	06/25/24 09:42	06/26/24 08:38
890-6851-3	MW - 4	Water	06/25/24 15:05	06/26/24 08:38
890-6851-4	DUP -1	Water	06/25/24 13:55	06/26/24 08:38

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Eurofins Carlsbad

1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information
 Client Contact: Tracy Hillard
 Company: Ensolum
 Address: 601 N. Marlenfeld St. Suite 400
 City: Midland
 State, Zip: TX, 79701
 Phone: 575-937-3906
 Email: thillard@ensolum.com
 Project Name: Cottonwood Recycle Facility
 Site: S50W#

Sampler: Tracy Hillard
 Phone: 575-937-3906
 Lab PM: Kramer, Jessica
 E-Mail: Jessica.Kramer@eurofins.com
 Carrier Tracking No(s):
 State of Origin: NM
 Page: Page 1 of 1
 Job #:
 Preservation Codes:

Due Date Requested:
 TAT Requested (days): 5
 Compliance Project: Yes No
 PO #:
 Purchase Order not required
 WO #:
 Project #: 89000091
 S50W#:
 Analysis Requested
 890-6851 Chain of Custody

Field Filtered Sample (Yes or No)
 Perform MS/MSD (Yes or No)
 300_ORGFM_28D - Chloride
 8015MOD_NM, 826DC
 BTEX
 TPH
 Total Number of containers
 Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (G=Comp, G-grab)	Matrix (W=Water, S=Soil, O=Organic, BR=Tissue, A=Air)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Other:
MW-1	6-25-24	1344	G	Water		X	X	
MW-2		0942		Water				
MW-4		1505		Water				
DUP-1		1355		Water				

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)
 Empty Kit Relinquished by:
 Relinquished by:
 Date/Time:
 Date:
 Company:
 Date/Time:
 Company:
 Date/Time:
 Company:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:
 Method of Shipment:
 Received by: *Sum S*
 Date/Time: 6/26/24
 Company: 838

Custody Seals Intact: Yes No
 Custody Seal No.:
 Cooler Temperature(s) °C and Other Remarks: 10000 -0.2 9.0 8 8
 Date/Time: 6/26/24
 Company: 838

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6851-1
SDG Number: 03C2466002

Login Number: 6851
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6851-1
SDG Number: 03C2466002

Login Number: 6851
List Number: 2
Creator: Grandits, Corey

List Source: Eurofins Houston
List Creation: 06/27/24 10:49 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
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.	True	
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").	True	

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tracy Hillard
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 9/19/2024 6:53:27 AM

JOB DESCRIPTION

Cottonwood Recycle Facility.
 Eddy County NM

JOB NUMBER

890-7082-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/19/2024 6:53:27 AM

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

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Client: Ensolum
Project/Site: Cottonwood Recycle Facility.

Laboratory Job ID: 890-7082-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Ensolum

Job ID: 890-7082-1

Project/Site: Cottonwood Recycle Facility.

SDG: Eddy County NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high 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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

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Case Narrative

Client: Ensolum
Project: Cottonwood Recycle Facility.

Job ID: 890-7082-1

Job ID: 890-7082-1

Eurofins Carlsbad

Job Narrative 890-7082-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 9/10/2024 3:19 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 7.4°C.

GC/MS VOA

Method 8260D: Internal standard (ISTD) response for 1,4-Dichlorobenzene-d4 for the following sample in analytical batch 860-187050 was outside acceptance criteria: MW - 4 (890-7082-4). This ISTD does not correspond to any of the requested target compounds reported from this analytical batch; therefore, the data have been reported.

Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: MW - 4 (890-7082-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: (860-82493-C-11) and (860-82493-C-11 MS). Elevated reporting limits (RLs) are provided.

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

Diesel Range Organics

Method 8015MOD_NM: see internal comment

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: The instrument blank/CCB for analytical batch 860-186993 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

Method 300_ORGFM_28D: The matrix spike duplicate (MSD) recoveries for analytical batch 860-186993 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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Client Sample Results

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Client Sample ID: MW - 1
 Date Collected: 09/10/24 12:30
 Date Received: 09/10/24 15:19

Lab Sample ID: 890-7082-1
 Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			09/13/24 14:58	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			09/13/24 14:58	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			09/13/24 14:58	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 14:58	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			09/13/24 14:58	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 14:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		63 - 144		09/13/24 14:58	1
4-Bromofluorobenzene (Surr)	96		74 - 124		09/13/24 14:58	1
Dibromofluoromethane (Surr)	123		75 - 131		09/13/24 14:58	1
Toluene-d8 (Surr)	102		80 - 120		09/13/24 14:58	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 14:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.92	U	4.92	0.972	mg/L			09/17/24 01:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.92	U	4.92	0.972	mg/L		09/13/24 05:36	09/17/24 01:42	1
Diesel Range Organics (Over C10-C28)	<4.92	U	4.92	0.972	mg/L		09/13/24 05:36	09/17/24 01:42	1
Oil Range Organics (Over C28-C36)	<4.92	U	4.92	0.938	mg/L		09/13/24 05:36	09/17/24 01:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 135	09/13/24 05:36	09/17/24 01:42	1
o-Terphenyl	95		70 - 135	09/13/24 05:36	09/17/24 01:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	214		2.50	1.25	mg/L			09/13/24 16:53	5

Client Sample ID: MW - 2
 Date Collected: 09/10/24 10:40
 Date Received: 09/10/24 15:19

Lab Sample ID: 890-7082-2
 Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			09/13/24 15:19	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			09/13/24 15:19	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			09/13/24 15:19	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 15:19	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			09/13/24 15:19	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		63 - 144		09/13/24 15:19	1

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Client Sample Results

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Client Sample ID: MW - 2

Lab Sample ID: 890-7082-2

Date Collected: 09/10/24 10:40

Matrix: Water

Date Received: 09/10/24 15:19

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		74 - 124		09/13/24 15:19	1
Dibromofluoromethane (Surr)	126		75 - 131		09/13/24 15:19	1
Toluene-d8 (Surr)	106		80 - 120		09/13/24 15:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 15:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.07	U	5.07	1.00	mg/L			09/17/24 15:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.07	U	5.07	1.00	mg/L		09/13/24 05:36	09/17/24 15:05	1
Diesel Range Organics (Over C10-C28)	<5.07	U	5.07	1.00	mg/L		09/13/24 05:36	09/17/24 15:05	1
Oil Range Organics (Over C28-C36)	<5.07	U	5.07	0.966	mg/L		09/13/24 05:36	09/17/24 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 135	09/13/24 05:36	09/17/24 15:05	1
o-Terphenyl	106		70 - 135	09/13/24 05:36	09/17/24 15:05	1

Client Sample ID: MW - 3

Lab Sample ID: 890-7082-3

Date Collected: 09/10/24 11:20

Matrix: Water

Date Received: 09/10/24 15:19

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			09/13/24 15:39	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			09/13/24 15:39	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			09/13/24 15:39	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 15:39	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			09/13/24 15:39	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		63 - 144		09/13/24 15:39	1
4-Bromofluorobenzene (Surr)	93		74 - 124		09/13/24 15:39	1
Dibromofluoromethane (Surr)	127		75 - 131		09/13/24 15:39	1
Toluene-d8 (Surr)	101		80 - 120		09/13/24 15:39	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 15:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.82	U	4.82	0.953	mg/L			09/17/24 15:05	1

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Client Sample Results

Client: Ensolium
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Client Sample ID: MW - 3
 Date Collected: 09/10/24 11:20
 Date Received: 09/10/24 15:19

Lab Sample ID: 890-7082-3
 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.82	U	4.82	0.953	mg/L		09/13/24 05:36	09/17/24 15:05	1
Diesel Range Organics (Over C10-C28)	<4.82	U	4.82	0.953	mg/L		09/13/24 05:36	09/17/24 15:05	1
Oil Range Organics (Over C28-C36)	<4.82	U	4.82	0.920	mg/L		09/13/24 05:36	09/17/24 15:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 135				09/13/24 05:36	09/17/24 15:05	1
o-Terphenyl	101		70 - 135				09/13/24 05:36	09/17/24 15:05	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	178		2.50	1.25	mg/L			09/13/24 17:18	5

Client Sample ID: MW - 4
 Date Collected: 09/10/24 13:50
 Date Received: 09/10/24 15:19

Lab Sample ID: 890-7082-4
 Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000600	J	0.00100	0.000460	mg/L			09/13/24 16:00	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			09/13/24 16:00	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			09/13/24 16:00	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 16:00	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			09/13/24 16:00	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 16:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		63 - 144					09/13/24 16:00	1
4-Bromofluorobenzene (Surr)	125	S1+ *3	74 - 124					09/13/24 16:00	1
Dibromofluoromethane (Surr)	127		75 - 131					09/13/24 16:00	1
Toluene-d8 (Surr)	114		80 - 120					09/13/24 16:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 16:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.90	U	4.90	0.969	mg/L			09/17/24 02:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.90	U	4.90	0.969	mg/L		09/13/24 05:36	09/17/24 02:04	1
Diesel Range Organics (Over C10-C28)	<4.90	U	4.90	0.969	mg/L		09/13/24 05:36	09/17/24 02:04	1
Oil Range Organics (Over C28-C36)	<4.90	U	4.90	0.935	mg/L		09/13/24 05:36	09/17/24 02:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 135				09/13/24 05:36	09/17/24 02:04	1
o-Terphenyl	99		70 - 135				09/13/24 05:36	09/17/24 02:04	1

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Client Sample Results

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Client Sample ID: MW - 4

Lab Sample ID: 890-7082-4

Date Collected: 09/10/24 13:50

Matrix: Water

Date Received: 09/10/24 15:19

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20200		50.0	25.0	mg/L			09/13/24 18:33	100

Client Sample ID: DUP - 01

Lab Sample ID: 890-7082-5

Date Collected: 09/10/24 12:00

Matrix: Water

Date Received: 09/10/24 15:19

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			09/13/24 16:20	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			09/13/24 16:20	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			09/13/24 16:20	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 16:20	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			09/13/24 16:20	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		63 - 144		09/13/24 16:20	1
4-Bromofluorobenzene (Surr)	91		74 - 124		09/13/24 16:20	1
Dibromofluoromethane (Surr)	125		75 - 131		09/13/24 16:20	1
Toluene-d8 (Surr)	104		80 - 120		09/13/24 16:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.95	U	4.95	0.978	mg/L			09/16/24 18:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.95	U	4.95	0.978	mg/L		09/13/24 05:36	09/16/24 18:22	1
Diesel Range Organics (Over C10-C28)	<4.95	U	4.95	0.978	mg/L		09/13/24 05:36	09/16/24 18:22	1
Oil Range Organics (Over C28-C36)	<4.95	U	4.95	0.944	mg/L		09/13/24 05:36	09/16/24 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 135	09/13/24 05:36	09/16/24 18:22	1
o-Terphenyl	74		70 - 135	09/13/24 05:36	09/16/24 18:22	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	215		2.50	1.25	mg/L			09/13/24 17:43	5

Surrogate Summary

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (63-144)	BFB (74-124)	DBFM (75-131)	TOL (80-120)
860-82493-C-11 MS - DL	Matrix Spike	101	94	112	96
890-7082-1	MW - 1	107	96	123	102
890-7082-2	MW - 2	108	95	126	106
890-7082-3	MW - 3	110	93	127	101
890-7082-4	MW - 4	109	125 S1+ *3	127	114
890-7082-5	DUP - 01	110	91	125	104
LCS 860-187050/3	Lab Control Sample	101	93	110	98
LCSD 860-187050/4	Lab Control Sample Dup	102	94	112	101
MB 860-187050/8	Method Blank	105	97	120	105

Surrogate Legend
 DCA = 1,2-Dichloroethane-d4 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)
 DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-135)	OTPH1 (70-135)
890-7082-1	MW - 1	95	95
890-7082-2	MW - 2	89	106
890-7082-3	MW - 3	97	101
890-7082-4	MW - 4	100	99
890-7082-5	DUP - 01	80	74
LCS 860-186962/2-A	Lab Control Sample	107	105
LCSD 860-186962/3-A	Lab Control Sample Dup	104	99
MB 860-186962/1-A	Method Blank	101	106

Surrogate Legend
 1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-187050/8
 Matrix: Water
 Analysis Batch: 187050

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			09/13/24 13:49	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			09/13/24 13:49	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			09/13/24 13:49	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 13:49	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			09/13/24 13:49	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			09/13/24 13:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		09/13/24 13:49	1
4-Bromofluorobenzene (Surr)	97		74 - 124		09/13/24 13:49	1
Dibromofluoromethane (Surr)	120		75 - 131		09/13/24 13:49	1
Toluene-d8 (Surr)	105		80 - 120		09/13/24 13:49	1

Lab Sample ID: LCS 860-187050/3
 Matrix: Water
 Analysis Batch: 187050

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05090		mg/L		102	75 - 125
Toluene	0.0500	0.04467		mg/L		89	75 - 130
Ethylbenzene	0.0500	0.04385		mg/L		88	75 - 125
m,p-Xylenes	0.0500	0.04250		mg/L		85	75 - 125
o-Xylene	0.0500	0.04092		mg/L		82	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		63 - 144
4-Bromofluorobenzene (Surr)	93		74 - 124
Dibromofluoromethane (Surr)	110		75 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 860-187050/4
 Matrix: Water
 Analysis Batch: 187050

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.05198		mg/L		104	75 - 125	2	25
Toluene	0.0500	0.04635		mg/L		93	75 - 130	4	25
Ethylbenzene	0.0500	0.04646		mg/L		93	75 - 125	6	25
m,p-Xylenes	0.0500	0.04422		mg/L		88	75 - 125	4	25
o-Xylene	0.0500	0.04323		mg/L		86	75 - 125	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		63 - 144
4-Bromofluorobenzene (Surr)	94		74 - 124
Dibromofluoromethane (Surr)	112		75 - 131
Toluene-d8 (Surr)	101		80 - 120

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QC Sample Results

Client: Ensolum
Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
SDG: Eddy County NM

Method: 8260D - Volatile Organic Compounds by GC/MS - DL

Lab Sample ID: 860-82493-C-11 MS
Matrix: Water
Analysis Batch: 187050

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

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene - DL	<0.200	U	10.0	9.928		mg/L		99	66 - 142
Toluene - DL	<0.200	U	10.0	8.807		mg/L		88	59 - 139
Ethylbenzene - DL	<0.200	U	10.0	8.858		mg/L		89	75 - 125
m,p-Xylenes - DL	<2.00	U	10.0	8.270		mg/L		83	75 - 125
o-Xylene - DL	<0.200	U	10.0	8.311		mg/L		83	75 - 125
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr) - DL	101		63 - 144						
4-Bromofluorobenzene (Surr) - DL	94		74 - 124						
Dibromofluoromethane (Surr) - DL	112		75 - 131						
Toluene-d8 (Surr) - DL	96		80 - 120						

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

Lab Sample ID: MB 860-186962/1-A
Matrix: Water
Analysis Batch: 187577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186962

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988	mg/L		09/13/24 05:36	09/17/24 13:33	1
Diesel Range Organics (Over C10-C28)	<5.00	U	5.00	0.988	mg/L		09/13/24 05:36	09/17/24 13:33	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954	mg/L		09/13/24 05:36	09/17/24 13:33	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	101		70 - 135	09/13/24 05:36	09/17/24 13:33	1			
o-Terphenyl	106		70 - 135	09/13/24 05:36	09/17/24 13:33	1			

Lab Sample ID: LCS 860-186962/2-A
Matrix: Water
Analysis Batch: 187292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186962

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	100	122.8		mg/L		123	70 - 135
Diesel Range Organics (Over C10-C28)	100	113.6		mg/L		114	70 - 135
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	107		70 - 135				
o-Terphenyl	105		70 - 135				

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QC Sample Results

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

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

Lab Sample ID: LCSD 860-186962/3-A
 Matrix: Water
 Analysis Batch: 187292

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 186962

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	100	117.7		mg/L		118	70 - 135	4	35
Diesel Range Organics (Over C10-C28)	100	107.5		mg/L		108	70 - 135	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 135
o-Terphenyl	99		70 - 135

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-186993/3
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			09/13/24 09:03	1

Lab Sample ID: MB 860-186993/58
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			09/13/24 14:54	1

Lab Sample ID: LCS 860-186993/59
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.28		mg/L		103	90 - 110

Lab Sample ID: LCSD 860-186993/60
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.48		mg/L		105	90 - 110	2	20

Lab Sample ID: LLCS 860-186993/7
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5358		mg/L		107	50 - 150

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QC Sample Results

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 860-82435-A-1 MS
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	141		10.0	150.6	4	mg/L		100	90 - 110

Lab Sample ID: 860-82435-A-1 MSD
 Matrix: Water
 Analysis Batch: 186993

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	141		10.0	152.4	4	mg/L		118	90 - 110	1	15

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QC Association Summary

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

GC/MS VOA

Analysis Batch: 187050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-1	MW - 1	Total/NA	Water	8260D	
890-7082-2	MW - 2	Total/NA	Water	8260D	
890-7082-3	MW - 3	Total/NA	Water	8260D	
890-7082-4	MW - 4	Total/NA	Water	8260D	
890-7082-5	DUP - 01	Total/NA	Water	8260D	
MB 860-187050/8	Method Blank	Total/NA	Water	8260D	
LCS 860-187050/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 860-187050/4	Lab Control Sample Dup	Total/NA	Water	8260D	
860-82493-C-11 MS - DL	Matrix Spike	Total/NA	Water	8260D	

Analysis Batch: 187454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-1	MW - 1	Total/NA	Water	Total BTEX	
890-7082-2	MW - 2	Total/NA	Water	Total BTEX	
890-7082-3	MW - 3	Total/NA	Water	Total BTEX	
890-7082-4	MW - 4	Total/NA	Water	Total BTEX	
890-7082-5	DUP - 01	Total/NA	Water	Total BTEX	

GC Semi VOA

Prep Batch: 186962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-1	MW - 1	Total/NA	Water	8015NM Aq Prep	
890-7082-2	MW - 2	Total/NA	Water	8015NM Aq Prep	
890-7082-3	MW - 3	Total/NA	Water	8015NM Aq Prep	
890-7082-4	MW - 4	Total/NA	Water	8015NM Aq Prep	
890-7082-5	DUP - 01	Total/NA	Water	8015NM Aq Prep	
MB 860-186962/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-186962/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-186962/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 187292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-186962/2-A	Lab Control Sample	Total/NA	Water	8015B NM	186962
LCSD 860-186962/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	186962

Analysis Batch: 187296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-1	MW - 1	Total/NA	Water	8015B NM	186962
890-7082-4	MW - 4	Total/NA	Water	8015B NM	186962
890-7082-5	DUP - 01	Total/NA	Water	8015B NM	186962

Analysis Batch: 187572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-2	MW - 2	Total/NA	Water	8015B NM	186962

Analysis Batch: 187577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-3	MW - 3	Total/NA	Water	8015B NM	186962
MB 860-186962/1-A	Method Blank	Total/NA	Water	8015B NM	186962

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QC Association Summary

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

GC Semi VOA

Analysis Batch: 187858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-1	MW - 1	Total/NA	Water	8015 NM	
890-7082-2	MW - 2	Total/NA	Water	8015 NM	
890-7082-3	MW - 3	Total/NA	Water	8015 NM	
890-7082-4	MW - 4	Total/NA	Water	8015 NM	
890-7082-5	DUP - 01	Total/NA	Water	8015 NM	

HPLC/IC

Analysis Batch: 186993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7082-1	MW - 1	Total/NA	Water	300.0	
890-7082-3	MW - 3	Total/NA	Water	300.0	
890-7082-4	MW - 4	Total/NA	Water	300.0	
890-7082-5	DUP - 01	Total/NA	Water	300.0	
MB 860-186993/3	Method Blank	Total/NA	Water	300.0	
MB 860-186993/58	Method Blank	Total/NA	Water	300.0	
LCS 860-186993/59	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-186993/60	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-186993/7	Lab Control Sample	Total/NA	Water	300.0	
860-82435-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
860-82435-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Ensolum
 Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
 SDG: Eddy County NM

Client Sample ID: MW - 1

Lab Sample ID: 890-7082-1

Date Collected: 09/10/24 12:30

Matrix: Water

Date Received: 09/10/24 15:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	187050	09/13/24 14:58	T1S	EET HOU
Total/NA	Analysis	Total BTEX		1			187454	09/13/24 14:58	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			187858	09/17/24 01:42	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			30.5 mL	3 mL	186962	09/13/24 05:36	TH	EET HOU
Total/NA	Analysis	8015B NM		1			187296	09/17/24 01:42	TH	EET HOU
Total/NA	Analysis	300.0		5			186993	09/13/24 16:53	WP	EET HOU

Client Sample ID: MW - 2

Lab Sample ID: 890-7082-2

Date Collected: 09/10/24 10:40

Matrix: Water

Date Received: 09/10/24 15:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	187050	09/13/24 15:19	T1S	EET HOU
Total/NA	Analysis	Total BTEX		1			187454	09/13/24 15:19	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			187858	09/17/24 15:05	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			29.6 mL	3 mL	186962	09/13/24 05:36	TH	EET HOU
Total/NA	Analysis	8015B NM		1			187572	09/17/24 15:05	MS	EET HOU

Client Sample ID: MW - 3

Lab Sample ID: 890-7082-3

Date Collected: 09/10/24 11:20

Matrix: Water

Date Received: 09/10/24 15:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	187050	09/13/24 15:39	T1S	EET HOU
Total/NA	Analysis	Total BTEX		1			187454	09/13/24 15:39	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			187858	09/17/24 15:05	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			31.1 mL	3 mL	186962	09/13/24 05:36	TH	EET HOU
Total/NA	Analysis	8015B NM		1			187577	09/17/24 15:05	T1S	EET HOU
Total/NA	Analysis	300.0		5			186993	09/13/24 17:18	WP	EET HOU

Client Sample ID: MW - 4

Lab Sample ID: 890-7082-4

Date Collected: 09/10/24 13:50

Matrix: Water

Date Received: 09/10/24 15:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	187050	09/13/24 16:00	T1S	EET HOU
Total/NA	Analysis	Total BTEX		1			187454	09/13/24 16:00	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			187858	09/17/24 02:04	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			30.6 mL	3 mL	186962	09/13/24 05:36	TH	EET HOU
Total/NA	Analysis	8015B NM		1			187296	09/17/24 02:04	TH	EET HOU
Total/NA	Analysis	300.0		100			186993	09/13/24 18:33	WP	EET HOU

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Lab Chronicle

Client: Ensolum
Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
SDG: Eddy County NM

Client Sample ID: DUP - 01
Date Collected: 09/10/24 12:00
Date Received: 09/10/24 15:19

Lab Sample ID: 890-7082-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	187050	09/13/24 16:20	T1S	EET HOU
Total/NA	Analysis	Total BTEX		1			187454	09/13/24 16:20	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			187858	09/16/24 18:22	TTD	EET HOU
Total/NA	Prep	8015NM Aq Prep			30.3 mL	3 mL	186962	09/13/24 05:36	TH	EET HOU
Total/NA	Analysis	8015B NM		1			187296	09/16/24 18:22	TH	EET HOU
Total/NA	Analysis	300.0		5			186993	09/13/24 17:43	WP	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
SDG: Eddy County NM

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Water	Total TPH
8015B NM	8015NM Aq Prep	Water	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Aq Prep	Water	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Aq Prep	Water	Oil Range Organics (Over C28-C36)
Total BTEX		Water	Total BTEX

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Method Summary

Client: Ensolum
Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
SDG: Eddy County NM

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET HOU
Total BTEX	Total BTEX Calculation	TAL SOP	EET HOU
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU
8015NM Aq Prep	Microextraction	SW846	EET HOU

Protocol References:

- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

- EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200



Sample Summary

Client: Ensolum
Project/Site: Cottonwood Recycle Facility.

Job ID: 890-7082-1
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7082-1	MW - 1	Water	09/10/24 12:30	09/10/24 15:19
890-7082-2	MW - 2	Water	09/10/24 10:40	09/10/24 15:19
890-7082-3	MW - 3	Water	09/10/24 11:20	09/10/24 15:19
890-7082-4	MW - 4	Water	09/10/24 13:50	09/10/24 15:19
890-7082-5	DUP - 01	Water	09/10/24 12:00	09/10/24 15:19

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7082-1
SDG Number: Eddy County NM

Login Number: 7082

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7082-1
SDG Number: Eddy County NM

Login Number: 7082

List Number: 2

Creator: Baker, Jeremiah

List Source: Eurofins Houston
List Creation: 09/12/24 10:38 AM

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
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").	True	

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tracy Hillard
Ensolum

601 N. Marienfeld St.
Suite 400

Midland, Texas 79701

Generated 1/2/2025 10:33:38 AM

JOB DESCRIPTION

COTTONWOOD RECYCLING FACILITY
03C2466002

JOB NUMBER

890-7439-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



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



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1/2/2025 10:33:38 AM

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

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Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Laboratory Job ID: 890-7439-1
SDG: 03C2466002

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Definitions/Glossary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
SDG: 03C2466002

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1

Job ID: 890-7439-1

Eurofins Carlsbad

Job Narrative 890-7439-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 12/5/2024 8:35 AM. 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 1.0°C.

GC/MS VOA

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

Diesel Range Organics

Method 8015MOD_NM: see internal comment

(CCV 860-204086/38), (CCV 860-204086/52) and (CCV 860-204086/80)

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-204681 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW - 1 (890-7439-1), MW - 2 (890-7439-4), MW - 3 (890-7439-6) and MW - 4 (890-7439-7). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW - 4 (890-7439-7). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-204985 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Client Sample ID: MW - 1
 Date Collected: 12/04/24 12:40
 Date Received: 12/05/24 08:35

Lab Sample ID: 890-7439-1
 Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		2.50	1.25	mg/L			12/11/24 21:38	5

Client Sample ID: MW - 1
 Date Collected: 12/04/24 12:52
 Date Received: 12/05/24 08:35

Lab Sample ID: 890-7439-2
 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.65	J	5.00	0.988	mg/L			12/10/24 06:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988	mg/L		12/09/24 08:29	12/10/24 06:23	1
Diesel Range Organics (Over C10-C28)	1.65	J	5.00	0.988	mg/L		12/09/24 08:29	12/10/24 06:23	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954	mg/L		12/09/24 08:29	12/10/24 06:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 135				12/09/24 08:29	12/10/24 06:23	1
o-Terphenyl	102		70 - 135				12/09/24 08:29	12/10/24 06:23	1

Client Sample ID: MW - 1
 Date Collected: 12/04/24 12:46
 Date Received: 12/05/24 08:35

Lab Sample ID: 890-7439-3
 Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/10/24 02:20	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/10/24 02:20	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/10/24 02:20	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 02:20	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/10/24 02:20	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 02:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		12/10/24 02:20	1
4-Bromofluorobenzene (Surr)	95		74 - 124		12/10/24 02:20	1
Dibromofluoromethane (Surr)	101		75 - 131		12/10/24 02:20	1
Toluene-d8 (Surr)	97		80 - 120		12/10/24 02:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 02:20	1

Client Sample ID: MW - 2
 Date Collected: 12/04/24 11:10
 Date Received: 12/05/24 08:35

Lab Sample ID: 890-7439-4
 Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		2.50	1.25	mg/L			12/11/24 21:53	5

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Client Sample ID: MW - 2

Lab Sample ID: 890-7439-5

Date Collected: 12/04/24 11:15

Matrix: Water

Date Received: 12/05/24 08:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/09/24 20:51	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/09/24 20:51	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/09/24 20:51	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/09/24 20:51	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/09/24 20:51	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/09/24 20:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		12/09/24 20:51	1
4-Bromofluorobenzene (Surr)	96		74 - 124		12/09/24 20:51	1
Dibromofluoromethane (Surr)	103		75 - 131		12/09/24 20:51	1
Toluene-d8 (Surr)	97		80 - 120		12/09/24 20:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			12/09/24 20:51	1

Client Sample ID: MW - 3

Lab Sample ID: 890-7439-6

Date Collected: 12/04/24 14:10

Matrix: Water

Date Received: 12/05/24 08:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/10/24 02:40	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/10/24 02:40	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/10/24 02:40	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 02:40	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/10/24 02:40	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		12/10/24 02:40	1
4-Bromofluorobenzene (Surr)	95		74 - 124		12/10/24 02:40	1
Dibromofluoromethane (Surr)	101		75 - 131		12/10/24 02:40	1
Toluene-d8 (Surr)	95		80 - 120		12/10/24 02:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 02:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.08	U	5.08	1.00	mg/L			12/10/24 06:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.08	U	5.08	1.00	mg/L		12/09/24 08:29	12/10/24 06:43	1
Diesel Range Organics (Over C10-C28)	<5.08	U	5.08	1.00	mg/L		12/09/24 08:29	12/10/24 06:43	1
Oil Range Organics (Over C28-C36)	<5.08	U	5.08	0.970	mg/L		12/09/24 08:29	12/10/24 06:43	1

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Client Sample ID: MW - 3

Lab Sample ID: 890-7439-6

Date Collected: 12/04/24 14:10

Matrix: Water

Date Received: 12/05/24 08:35

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 135	12/09/24 08:29	12/10/24 06:43	1
o-Terphenyl	98		70 - 135	12/09/24 08:29	12/10/24 06:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	194		0.500	0.250	mg/L			12/11/24 22:08	1

Client Sample ID: MW - 4

Lab Sample ID: 890-7439-7

Date Collected: 12/04/24 14:45

Matrix: Water

Date Received: 12/05/24 08:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/10/24 03:01	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/10/24 03:01	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/10/24 03:01	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 03:01	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/10/24 03:01	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		63 - 144		12/10/24 03:01	1
4-Bromofluorobenzene (Surr)	106		74 - 124		12/10/24 03:01	1
Dibromofluoromethane (Surr)	100		75 - 131		12/10/24 03:01	1
Toluene-d8 (Surr)	105		80 - 120		12/10/24 03:01	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 03:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.98	U	4.98	0.985	mg/L			12/10/24 07:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.98	U	4.98	0.985	mg/L		12/09/24 08:29	12/10/24 07:22	1
Diesel Range Organics (Over C10-C28)	<4.98	U	4.98	0.985	mg/L		12/09/24 08:29	12/10/24 07:22	1
Oil Range Organics (Over C28-C36)	<4.98	U	4.98	0.950	mg/L		12/09/24 08:29	12/10/24 07:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 135	12/09/24 08:29	12/10/24 07:22	1
o-Terphenyl	101		70 - 135	12/09/24 08:29	12/10/24 07:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17600		50.0	25.0	mg/L			12/11/24 22:30	100

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Client Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Client Sample ID: DUP - 1

Lab Sample ID: 890-7439-8

Date Collected: 12/04/24 12:00

Matrix: Water

Date Received: 12/05/24 08:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/10/24 03:21	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/10/24 03:21	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/10/24 03:21	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 03:21	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/10/24 03:21	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 03:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		12/10/24 03:21	1
4-Bromofluorobenzene (Surr)	97		74 - 124		12/10/24 03:21	1
Dibromofluoromethane (Surr)	101		75 - 131		12/10/24 03:21	1
Toluene-d8 (Surr)	98		80 - 120		12/10/24 03:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 03:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<5.23	U	5.23	1.03	mg/L			12/10/24 07:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.23	U	5.23	1.03	mg/L		12/09/24 08:29	12/10/24 07:43	1
Diesel Range Organics (Over C10-C28)	<5.23	U	5.23	1.03	mg/L		12/09/24 08:29	12/10/24 07:43	1
Oil Range Organics (Over C28-C36)	<5.23	U	5.23	0.997	mg/L		12/09/24 08:29	12/10/24 07:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 135	12/09/24 08:29	12/10/24 07:43	1
o-Terphenyl	97		70 - 135	12/09/24 08:29	12/10/24 07:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		2.50	1.25	mg/L			12/11/24 22:38	5

Surrogate Summary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (63-144)	BFB (74-124)	DBFM (75-131)	TOL (80-120)
860-88522-I-1 MS	Matrix Spike	98	102	100	99
890-7439-3	MW - 1	106	95	101	97
890-7439-3 MS	MW - 1	101	99	99	98
890-7439-5	MW - 2	106	96	103	97
890-7439-6	MW - 3	105	95	101	95
890-7439-7	MW - 4	108	106	100	105
890-7439-8	DUP - 1	102	97	101	98
LCS 860-204230/11	Lab Control Sample	100	100	101	98
LCS 860-204232/3	Lab Control Sample	98	98	100	98
LCSD 860-204230/12	Lab Control Sample Dup	99	100	104	97
LCSD 860-204232/4	Lab Control Sample Dup	100	99	100	97
MB 860-204230/17	Method Blank	102	98	103	98
MB 860-204232/9	Method Blank	104	97	103	97

Surrogate Legend

- DCA = 1,2-Dichloroethane-d4 (Surr)
- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane (Surr)
- TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-135)	OTPH1 (70-135)
890-7439-2	MW - 1	100	102
890-7439-6	MW - 3	94	98
890-7439-7	MW - 4	99	101
890-7439-8	DUP - 1	95	97
LCS 860-204094/2-A	Lab Control Sample	102	80
LCSD 860-204094/3-A	Lab Control Sample Dup	105	85
MB 860-204094/1-A	Method Blank	99	93

Surrogate Legend

- 1CO = 1-Chlorooctane
- OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-204230/17
 Matrix: Water
 Analysis Batch: 204230

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/09/24 15:02	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/09/24 15:02	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/09/24 15:02	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/09/24 15:02	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/09/24 15:02	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/09/24 15:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		12/09/24 15:02	1
4-Bromofluorobenzene (Surr)	98		74 - 124		12/09/24 15:02	1
Dibromofluoromethane (Surr)	103		75 - 131		12/09/24 15:02	1
Toluene-d8 (Surr)	98		80 - 120		12/09/24 15:02	1

Lab Sample ID: LCS 860-204230/11
 Matrix: Water
 Analysis Batch: 204230

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04872		mg/L		97	75 - 125
Toluene	0.0500	0.04819		mg/L		96	75 - 130
Ethylbenzene	0.0500	0.04884		mg/L		98	75 - 125
m,p-Xylenes	0.0500	0.04942		mg/L		99	75 - 125
o-Xylene	0.0500	0.04981		mg/L		100	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 860-204230/12
 Matrix: Water
 Analysis Batch: 204230

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04694		mg/L		94	75 - 125	4	25
Toluene	0.0500	0.04640		mg/L		93	75 - 130	4	25
Ethylbenzene	0.0500	0.04754		mg/L		95	75 - 125	3	25
m,p-Xylenes	0.0500	0.04790		mg/L		96	75 - 125	3	25
o-Xylene	0.0500	0.04863		mg/L		97	75 - 125	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	104		75 - 131
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 860-88522-I-1 MS
 Matrix: Water
 Analysis Batch: 204230

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00100	U	0.0500	0.04978		mg/L		100	66 - 142
Toluene	<0.00100	U	0.0500	0.04922		mg/L		98	59 - 139
Ethylbenzene	<0.00100	U	0.0500	0.05032		mg/L		101	75 - 125
m,p-Xylenes	<0.0100	U	0.0500	0.05069		mg/L		101	75 - 125
o-Xylene	<0.00100	U	0.0500	0.05072		mg/L		101	75 - 125

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
4-Bromofluorobenzene (Surr)	102		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: MB 860-204232/9
 Matrix: Water
 Analysis Batch: 204232

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			12/10/24 01:59	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			12/10/24 01:59	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			12/10/24 01:59	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 01:59	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			12/10/24 01:59	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			12/10/24 01:59	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		12/10/24 01:59	1
4-Bromofluorobenzene (Surr)	97		74 - 124		12/10/24 01:59	1
Dibromofluoromethane (Surr)	103		75 - 131		12/10/24 01:59	1
Toluene-d8 (Surr)	97		80 - 120		12/10/24 01:59	1

Lab Sample ID: LCS 860-204232/3
 Matrix: Water
 Analysis Batch: 204232

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04895		mg/L		98	75 - 125
Toluene	0.0500	0.04794		mg/L		96	75 - 130
Ethylbenzene	0.0500	0.04794		mg/L		96	75 - 125
m,p-Xylenes	0.0500	0.04837		mg/L		97	75 - 125
o-Xylene	0.0500	0.04927		mg/L		99	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
Toluene-d8 (Surr)	98		80 - 120

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-204232/4
 Matrix: Water
 Analysis Batch: 204232

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Benzene	0.0500	0.04918		mg/L		98	75 - 125	0	25	
Toluene	0.0500	0.04692		mg/L		94	75 - 130	2	25	
Ethylbenzene	0.0500	0.04757		mg/L		95	75 - 125	1	25	
m,p-Xylenes	0.0500	0.04816		mg/L		96	75 - 125	0	25	
o-Xylene	0.0500	0.04874		mg/L		97	75 - 125	1	25	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 890-7439-3 MS
 Matrix: Water
 Analysis Batch: 204232

Client Sample ID: MW - 1
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	RPD
Benzene	<0.00100	U	0.0500	0.05128		mg/L		103	66 - 142	
Toluene	<0.00100	U	0.0500	0.05027		mg/L		101	59 - 139	
Ethylbenzene	<0.00100	U	0.0500	0.05085		mg/L		102	75 - 125	
m,p-Xylenes	<0.0100	U	0.0500	0.05124		mg/L		102	75 - 125	
o-Xylene	<0.00100	U	0.0500	0.05187		mg/L		104	75 - 125	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		63 - 144
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
Toluene-d8 (Surr)	98		80 - 120

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

Lab Sample ID: MB 860-204094/1-A
 Matrix: Water
 Analysis Batch: 204086

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 204094

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988	mg/L		12/09/24 08:29	12/09/24 17:35	1
Diesel Range Organics (Over C10-C28)	<5.00	U	5.00	0.988	mg/L		12/09/24 08:29	12/09/24 17:35	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954	mg/L		12/09/24 08:29	12/09/24 17:35	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	99		70 - 135	12/09/24 08:29	12/09/24 17:35	1
o-Terphenyl	93		70 - 135	12/09/24 08:29	12/09/24 17:35	1

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

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

Lab Sample ID: LCS 860-204094/2-A
 Matrix: Water
 Analysis Batch: 204086

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 204094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	100	106.8		mg/L		107	70 - 135
Diesel Range Organics (Over C10-C28)	100	99.24		mg/L		99	70 - 135
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	102		70 - 135				
o-Terphenyl	80		70 - 135				

Lab Sample ID: LCSD 860-204094/3-A
 Matrix: Water
 Analysis Batch: 204086

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 204094

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	100	107.9		mg/L		108	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	100	101.3		mg/L		101	70 - 135	2	35
		LCSD	LCSD						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	105		70 - 135						
o-Terphenyl	85		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-204681/3
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			12/11/24 10:46	1

Lab Sample ID: MB 860-204681/55
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			12/11/24 17:58	1

Lab Sample ID: LCS 860-204681/4
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.964		mg/L		100	90 - 110
Fluoride	10.0	9.853		mg/L		99	90 - 110
Sulfate	10.0	9.711		mg/L		97	90 - 110

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QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-204681/56
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.893		mg/L		99	90 - 110
Fluoride	10.0	9.923		mg/L		99	90 - 110
Sulfate	10.0	9.681		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-204681/5
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.22		mg/L		102	90 - 110	3	20
Fluoride	10.0	10.06		mg/L		101	90 - 110	2	20
Sulfate	10.0	9.860		mg/L		99	90 - 110	2	20

Lab Sample ID: LCSD 860-204681/57
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.916		mg/L		99	90 - 110	0	20
Fluoride	10.0	10.00		mg/L		100	90 - 110	1	20
Sulfate	10.0	9.789		mg/L		98	90 - 110	1	20

Lab Sample ID: LLCS 860-204681/7
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5326		mg/L		107	50 - 150
Fluoride	0.500	0.5548		mg/L		111	50 - 150
Sulfate	0.500	0.4995	J	mg/L		100	50 - 150

Lab Sample ID: 860-88873-A-9 MS
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	1.03	J F1	100	55.15	F1	mg/L		54	90 - 110
Sulfate	3840		100	3936	4	mg/L		96	90 - 110

Lab Sample ID: 860-88873-A-9 MSD
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	1.03	J F1	100	55.81	F1	mg/L		55	90 - 110	1	15
Sulfate	3840		100	3934	4	mg/L		95	90 - 110	0	15

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-7420-A-1 MS
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chloride	4.72		10.0	14.81		mg/L		101		90 - 110
Fluoride	0.191	J	10.0	10.01		mg/L		98		90 - 110
Sulfate	<0.500	U	10.0	9.473		mg/L		95		90 - 110

Lab Sample ID: 890-7420-A-1 MSD
 Matrix: Water
 Analysis Batch: 204681

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

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Chloride	4.72		10.0	14.80		mg/L		101		90 - 110	0	15
Fluoride	0.191	J	10.0	9.997		mg/L		98		90 - 110	0	15
Sulfate	<0.500	U	10.0	9.487		mg/L		95		90 - 110	0	15

Lab Sample ID: MB 860-204985/3
 Matrix: Water
 Analysis Batch: 204985

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<0.500	U	0.500	0.250	mg/L			12/12/24 10:22	1

Lab Sample ID: MB 860-204985/51
 Matrix: Water
 Analysis Batch: 204985

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<0.500	U	0.500	0.250	mg/L			12/12/24 16:20	1

Lab Sample ID: LCS 860-204985/52
 Matrix: Water
 Analysis Batch: 204985

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits
Chloride	10.0	10.10		mg/L		101		90 - 110
Fluoride	10.0	10.01		mg/L		100		90 - 110
Sulfate	10.0	9.770		mg/L		98		90 - 110

Lab Sample ID: LCSD 860-204985/53
 Matrix: Water
 Analysis Batch: 204985

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
Chloride	10.0	10.22		mg/L		102		90 - 110	1	20
Fluoride	10.0	10.11		mg/L		101		90 - 110	1	20
Sulfate	10.0	9.921		mg/L		99		90 - 110	2	20

QC Sample Results

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LLCS 860-204985/7
Matrix: Water
Analysis Batch: 204985

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

Analyte	Spike Added	LLCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Chloride	0.500	0.5500		mg/L		110	50 - 150
Fluoride	0.500	0.5539		mg/L		111	50 - 150
Sulfate	0.500	0.5154		mg/L		103	50 - 150

Lab Sample ID: 880-52055-F-2 MS
Matrix: Water
Analysis Batch: 204985

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
Chloride	54.7		10.0	89.12	4	mg/L		344	90 - 110
Fluoride	0.157	J	10.0	9.195		mg/L		90	90 - 110
Sulfate	59.7		10.0	96.97	4	mg/L		372	90 - 110

Lab Sample ID: 880-52055-F-2 MSD
Matrix: Water
Analysis Batch: 204985

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec Limits	RPD	
				Result	Qualifier					RPD	Limit
Chloride	54.7		10.0	89.25	4	mg/L		345	90 - 110	0	15
Fluoride	0.157	J	10.0	9.151		mg/L		90	90 - 110	0	15
Sulfate	59.7		10.0	96.82	4	mg/L		371	90 - 110	0	15

QC Association Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
SDG: 03C2466002

GC/MS VOA

Analysis Batch: 204230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-5	MW - 2	Total/NA	Water	8260D	
MB 860-204230/17	Method Blank	Total/NA	Water	8260D	
LCS 860-204230/11	Lab Control Sample	Total/NA	Water	8260D	
LCSD 860-204230/12	Lab Control Sample Dup	Total/NA	Water	8260D	
860-88522-I-1 MS	Matrix Spike	Total/NA	Water	8260D	

Analysis Batch: 204232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-3	MW - 1	Total/NA	Water	8260D	
890-7439-6	MW - 3	Total/NA	Water	8260D	
890-7439-7	MW - 4	Total/NA	Water	8260D	
890-7439-8	DUP - 1	Total/NA	Water	8260D	
MB 860-204232/9	Method Blank	Total/NA	Water	8260D	
LCS 860-204232/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 860-204232/4	Lab Control Sample Dup	Total/NA	Water	8260D	
890-7439-3 MS	MW - 1	Total/NA	Water	8260D	

Analysis Batch: 204760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-3	MW - 1	Total/NA	Water	Total BTEX	
890-7439-5	MW - 2	Total/NA	Water	Total BTEX	
890-7439-6	MW - 3	Total/NA	Water	Total BTEX	
890-7439-7	MW - 4	Total/NA	Water	Total BTEX	
890-7439-8	DUP - 1	Total/NA	Water	Total BTEX	

GC Semi VOA

Analysis Batch: 204086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-2	MW - 1	Total/NA	Water	8015B NM	204094
890-7439-6	MW - 3	Total/NA	Water	8015B NM	204094
890-7439-7	MW - 4	Total/NA	Water	8015B NM	204094
890-7439-8	DUP - 1	Total/NA	Water	8015B NM	204094
MB 860-204094/1-A	Method Blank	Total/NA	Water	8015B NM	204094
LCS 860-204094/2-A	Lab Control Sample	Total/NA	Water	8015B NM	204094
LCSD 860-204094/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	204094

Prep Batch: 204094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-2	MW - 1	Total/NA	Water	8015NM Aq Prep	
890-7439-6	MW - 3	Total/NA	Water	8015NM Aq Prep	
890-7439-7	MW - 4	Total/NA	Water	8015NM Aq Prep	
890-7439-8	DUP - 1	Total/NA	Water	8015NM Aq Prep	
MB 860-204094/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-204094/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-204094/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 208769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-2	MW - 1	Total/NA	Water	8015 NM	
890-7439-6	MW - 3	Total/NA	Water	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
SDG: 03C2466002

GC Semi VOA (Continued)

Analysis Batch: 208769 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-7	MW - 4	Total/NA	Water	8015 NM	
890-7439-8	DUP - 1	Total/NA	Water	8015 NM	

HPLC/IC

Analysis Batch: 204681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7439-1	MW - 1	Total/NA	Water	300.0	
890-7439-4	MW - 2	Total/NA	Water	300.0	
890-7439-6	MW - 3	Total/NA	Water	300.0	
890-7439-7 - DL	MW - 4	Total/NA	Water	300.0	
890-7439-8	DUP - 1	Total/NA	Water	300.0	
MB 860-204681/3	Method Blank	Total/NA	Water	300.0	
MB 860-204681/55	Method Blank	Total/NA	Water	300.0	
LCS 860-204681/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-204681/56	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-204681/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-204681/57	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-204681/7	Lab Control Sample	Total/NA	Water	300.0	
860-88873-A-9 MS	Matrix Spike	Total/NA	Water	300.0	
860-88873-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
890-7420-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
890-7420-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 204985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-204985/3	Method Blank	Total/NA	Water	300.0	
MB 860-204985/51	Method Blank	Total/NA	Water	300.0	
LCS 860-204985/52	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-204985/53	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-204985/7	Lab Control Sample	Total/NA	Water	300.0	
880-52055-F-2 MS	Matrix Spike	Total/NA	Water	300.0	
880-52055-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Client Sample ID: MW - 1

Lab Sample ID: 890-7439-1

Date Collected: 12/04/24 12:40

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			204681	12/11/24 21:38	A1S	EET HOU

Client Sample ID: MW - 1

Lab Sample ID: 890-7439-2

Date Collected: 12/04/24 12:52

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			208769	12/10/24 06:23	SC	EET HOU
Total/NA	Prep	8015NM Aq Prep			30 mL	3 mL	204094	12/09/24 08:29	TH	EET HOU
Total/NA	Analysis	8015B NM		1			204086	12/10/24 06:23	T1S	EET HOU

Client Sample ID: MW - 1

Lab Sample ID: 890-7439-3

Date Collected: 12/04/24 12:46

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	204232	12/10/24 02:20	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			204760	12/10/24 02:20	KLK	EET HOU

Client Sample ID: MW - 2

Lab Sample ID: 890-7439-4

Date Collected: 12/04/24 11:10

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			204681	12/11/24 21:53	A1S	EET HOU

Client Sample ID: MW - 2

Lab Sample ID: 890-7439-5

Date Collected: 12/04/24 11:15

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	204230	12/09/24 20:51	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			204760	12/09/24 20:51	KLK	EET HOU

Client Sample ID: MW - 3

Lab Sample ID: 890-7439-6

Date Collected: 12/04/24 14:10

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	204232	12/10/24 02:40	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			204760	12/10/24 02:40	KLK	EET HOU
Total/NA	Analysis	8015 NM		1			208769	12/10/24 06:43	SC	EET HOU
Total/NA	Prep	8015NM Aq Prep			29.5 mL	3 mL	204094	12/09/24 08:29	TH	EET HOU
Total/NA	Analysis	8015B NM		1			204086	12/10/24 06:43	T1S	EET HOU
Total/NA	Analysis	300.0		1			204681	12/11/24 22:08	A1S	EET HOU

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Client Sample ID: MW - 4

Lab Sample ID: 890-7439-7

Date Collected: 12/04/24 14:45

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	204232	12/10/24 03:01	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			204760	12/10/24 03:01	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			208769	12/10/24 07:22	SC	EET HOU
Total/NA	Prep	8015NM Aq Prep			30.1 mL	3 mL	204094	12/09/24 08:29	TH	EET HOU
Total/NA	Analysis	8015B NM		1			204086	12/10/24 07:22	T1S	EET HOU
Total/NA	Analysis	300.0	DL	100			204681	12/11/24 22:30	A1S	EET HOU

Client Sample ID: DUP - 1

Lab Sample ID: 890-7439-8

Date Collected: 12/04/24 12:00

Matrix: Water

Date Received: 12/05/24 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	204232	12/10/24 03:21	NA	EET HOU
Total/NA	Analysis	Total BTEX		1			204760	12/10/24 03:21	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			208769	12/10/24 07:43	SC	EET HOU
Total/NA	Prep	8015NM Aq Prep			28.7 mL	3 mL	204094	12/09/24 08:29	TH	EET HOU
Total/NA	Analysis	8015B NM		1			204086	12/10/24 07:43	T1S	EET HOU
Total/NA	Analysis	300.0		5			204681	12/11/24 22:38	A1S	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
 Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
 SDG: 03C2466002

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Water	Total TPH
8015B NM	8015NM Aq Prep	Water	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Aq Prep	Water	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Aq Prep	Water	Oil Range Organics (Over C28-C36)
Total BTEX		Water	Total BTEX

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Method Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
SDG: 03C2466002

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET HOU
Total BTEX	Total BTEX Calculation	TAL SOP	EET HOU
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU
8015NM Aq Prep	Microextraction	SW846	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Sample Summary

Client: Ensolum
Project/Site: COTTONWOOD RECYCLING FACILITY

Job ID: 890-7439-1
SDG: 03C2466002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7439-1	MW - 1	Water	12/04/24 12:40	12/05/24 08:35
890-7439-2	MW - 1	Water	12/04/24 12:52	12/05/24 08:35
890-7439-3	MW - 1	Water	12/04/24 12:46	12/05/24 08:35
890-7439-4	MW - 2	Water	12/04/24 11:10	12/05/24 08:35
890-7439-5	MW - 2	Water	12/04/24 11:15	12/05/24 08:35
890-7439-6	MW - 3	Water	12/04/24 14:10	12/05/24 08:35
890-7439-7	MW - 4	Water	12/04/24 14:45	12/05/24 08:35
890-7439-8	DUP - 1	Water	12/04/24 12:00	12/05/24 08:35

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

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Project Manager:	Tracy Hillard	Bill to: (if different)	Tracy Hillard
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	575-937-3906	Email:	thillard@ensolum.com / usantillana@ensolum.com

Project Name:	Cottonwood Recycling Facility	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number:	03C2466002	Pres. Code	
Project Location:	32.021048, -104.31879	Due Date:	
Sampler's Name:	Uriel Santillana	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Parameters
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	T/M001		
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor:	-0.2		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading:	1.2		
Total Containers:		Corrected Temperature:	1.0		



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)	Sample Comments
MMW-1	GW	12/4/2024	12:40	—	G	1	X			
MMW-1	GW	12/4/2024	12:52	—	G	2	X			
MMW-1	GW	12/4/2024	12:46	—	G	3				
MMW-2	GW	12/4/2024	11:10	—	G	1	X			
MMW-2	GW	12/4/2024	11:15	—	G	1				
MMW-3	GW	12/4/2024	14:10	—	G	6	X	X	X	
MMW-4	GW	12/4/2024	14:45	—	G	6	X	X	X	
DUP-1	GW	12/4/2024	12:00	—	G	6	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471

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 \$65.00 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.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	12/5 8:35			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7439-1

SDG Number: 03C2466002

Login Number: 7439

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7439-1

SDG Number: 03C2466002

Login Number: 7439

List Number: 2

Creator: Baker, Jeremiah

List Source: Eurofins Houston

List Creation: 12/06/24 02:35 PM

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
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").	True	

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 554306

CONDITIONS

Operator: DKL Energy - Cottonwood, LLC 5850 Granite Parkway #450 Plano, TX 75024	OGRID: 330291
	Action Number: 554306
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	None	2/18/2026