ENSOLUM

July 19, 2023

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

RE: Closure Request
Eunice Monument South Unit B Facility
Incident Number NAPP2206638414
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Empire New Mexico, LLC (Empire), has prepared the following *Closure Request* to document the excavation and soil sampling activities performed at the Eunice Monument South Unit B Facility (Site) as outlined in the *Remediation Work Plan (Work Plan)*, dated March 18, 2022. The purpose of the excavation and soil sampling activities was to address impacts to soil following a release of crude oil and produced water onto the surface of the well pad and adjacent pasture at the Site. Based on the excavation activities and soil sample laboratory analytical results, Empire is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2206638414.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit A, Section 23, Township 20 South, Range 36 East, in Lea County, New Mexico (32.564939°, - 103.31831°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM).

On February 1, 2022, an open top tank overflowed, resulting in the release of 361 barrels (bbls) of crude oil and 589 bbls of produced water onto the surface of the well pad and adjacent pasture. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 300 bbls of crude oil and 480 bbls of produced water were recovered. Empire reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on February 15, 2022, and submitted a Release Notification Form C-141 (Form C-141) on March 7, 2022. The release was assigned Incident Number nAPP2206638414.

BACKGROUND

During February 2022, assessment activities were conducted at the Site to delineate the impacted soil resulting from the February 1, 2022, crude oil and produced water release. Based on the delineation soil sample analytical results, a *Work Plan* was submitted to the NMOCD on March 18, 2022. Details regarding the site characterization, delineation, and soil sampling activities can be referenced in the March 18, 2022, *Work Plan*. The NMOCD denied the *Work Plan* on April 26, 2022, for the following reason:

- *The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site,*

and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. Vertical delineation needs to be completed at boring BH05 (TPH<100 mg/kg).

Following a review of the NMOCD denial, Empire proceeded to remediate the release to the most stringent Table I Closure Criteria, including the area around borehole BH05. The excavation and soil sampling activities described below were completed as outlined in the March 18, 2022, *Work Plan*.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

OFF-PAD EXCAVATION AND SOIL SAMPLING ACTIVITIES

Between February 24, 2022 and February 21, 2023, Ensolum personnel were at the Site to oversee excavation activities as outlined in the *Work Plan.* Excavation activities were performed via track-hoe and transport vehicles. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) and chloride utilizing Hach® chloride QuanTab® test strips. The off-pad excavation was completed to depths ranging from 4 feet to 5 feet bgs. Photographic documentation of the excavation activities is included in Appendix A.

Following removal of impacted soil, 5-point composite soil samples were collected every 500 square feet from the floor and sidewalls of the excavation, as outlined in the *Work Plan*. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS47 were collected from the floor of the excavation at a depth of 4 feet bgs. Composite soil samples SW01 through SW13 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The off-pad excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 2A.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COC): benzene, toluene, ethylbenzene, and total xylenes (BTEX) following United States Environmental Protection Agency (EPA) Method 8021B; Total Petroleum Hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they are collected may not have equilibrated to the 6 degrees Celcius required for shipment, but are considered to have been received in acceptable condition.

Laboratory analytical results for excavation floor samples FS01, FS02, FS04, FS12, FS14, FS15, FS19, FS25, FS26, FS30 through FS32, FS34, FS39, FS43, FS45, and FS47 and excavation sidewall samples SW01 through SW13 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Laboratory analytical results for excavation floor samples FS03, FS05 through FS11, FS13, FS16 through FS18, FS20 through FS24, FS27 through FS29, FS33, FS35 through FS38, FS40 through FS42, FS44, and FS46 indicated TPH concentrations exceeded the most stringent Table I Closure Criteria. Additional soil was removed from these areas and subsequent floor samples FS03B, FS05A, FS06B, FS07B, FS08A through FS11A, FS13A, FS16A, FS17A, FS18B, FS20B, FS21A, FS22A, FS23B, FS24B, FS27B, FS28A, FS29A, FS33B, FS35B, FS36B, FS37A, FS38A, FS40B, FS41B, FS42A, FS44B, and FS46B were compliant with the most stringent Table I Closure Criteria. The

laboratory analytical results are summarized on Table 1 and laboratory analytical reports are included as Appendix D.

The off-pad excavation measured approximately 22,800 square feet in areal extent. A total of approximately 3,500 cubic yards of impacted soil were removed during the excavation activities. The soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was backfilled.

ON-PAD EXCAVATION AND SOIL SAMPLING ACTIVITIES

In coordination with the off-pad excavation activities, Ensolum personnel oversaw excavation of the on-pad release area. Excavation activities were performed as described above. The on-pad excavation was completed to depths ranging from 0.5 feet to 1-foot bgs. Photographic documentation of the excavation activities is included in Appendix A.

Following removal of impacted soil, 5-point composite soil samples were collected from the floor of the excavation. Due to the shallow depth of the on-pad excavation, soil from the sidewalls was incorporated into the floor samples. Composite soil samples FS48 through FS80 were collected from the floor of the excavation at a depth of 0.5 feet bgs. The soil samples were collected, handled, and analyzed as described above and submitted to Eurofins, in Carlsbad, New Mexico. The on-pad excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 2B.

Laboratory analytical results for excavation floor samples FS72 through FS80 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Laboratory analytical results for excavation soil sample FS48 through FS71 indicated TPH concentrations exceeded the most stringent Table I Closure Criteria. Additional soil was removed from these areas and subsequent floor samples FS48A through FS71A were compliant with the most stringent Table I Closure Criteria. The laboratory analytical results are summarized on Table 2 and laboratory analytical reports are included as Appendix D.

The on-pad excavation measured approximately 17,150 square feet in areal extent. A total of approximately 1,900 cubic yards of impacted soil were removed during the excavation activities. The soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was backfilled.

CLOSURE REQUEST

Excavation and soil sampling activities were completed at the Site to address the impacted soil resulting from the February 1, 2022, crude oil and produced water release. The remediation activities were completed as outlined in the March 18, 2022, *Work Plan* and as requested by NMOCD in the April 26, 2022 denial. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Based on excavation soil sample analytical results, no further remediation is required.

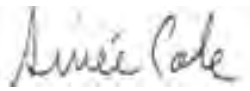
Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. Empire backfilled the excavations with material purchased locally and recontoured the Site to match pre-existing conditions. Empire believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2206638414. The NMOCD sampling notifications are included in Appendix B and the Final C-141 is provided as Appendix C.

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

Sincerely,
Ensolum, LLC



Kalei Jennings
Senior Scientist



Aimee Cole
Senior Managing Scientist

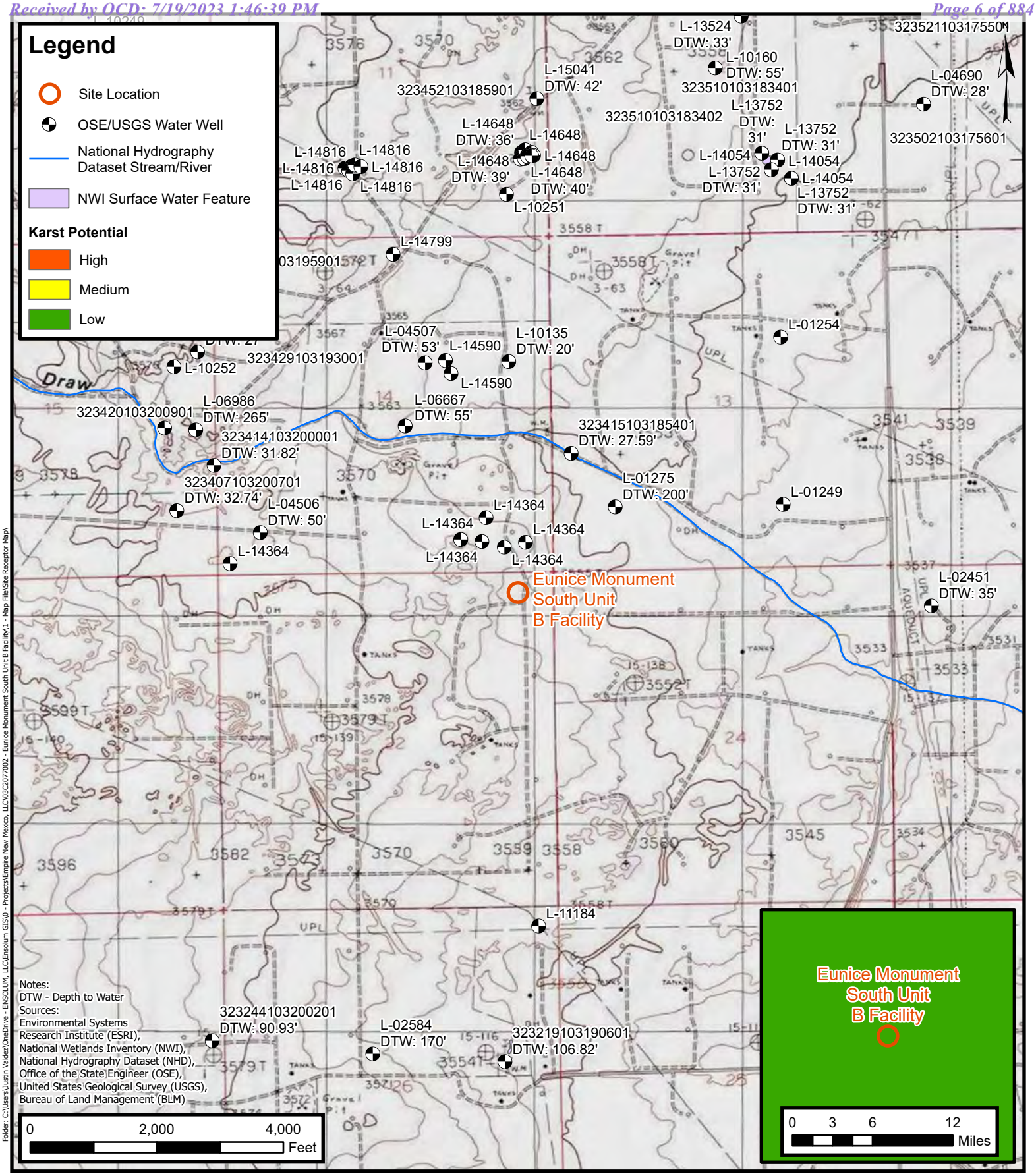
cc: Toby Holland, Empire
Bureau of Land Management
Jimmy Cooper, Cooper Ranch

Appendices:

Figure 1	Site Receptor Map
Figure 2A	Off-Pad Excavation Soil Sample Locations
Figure 2B	On-Pad Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Appendix A	Photographic Log
Appendix B	NMOCD Notifications
Appendix C	Final C-141
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation

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FIGURES

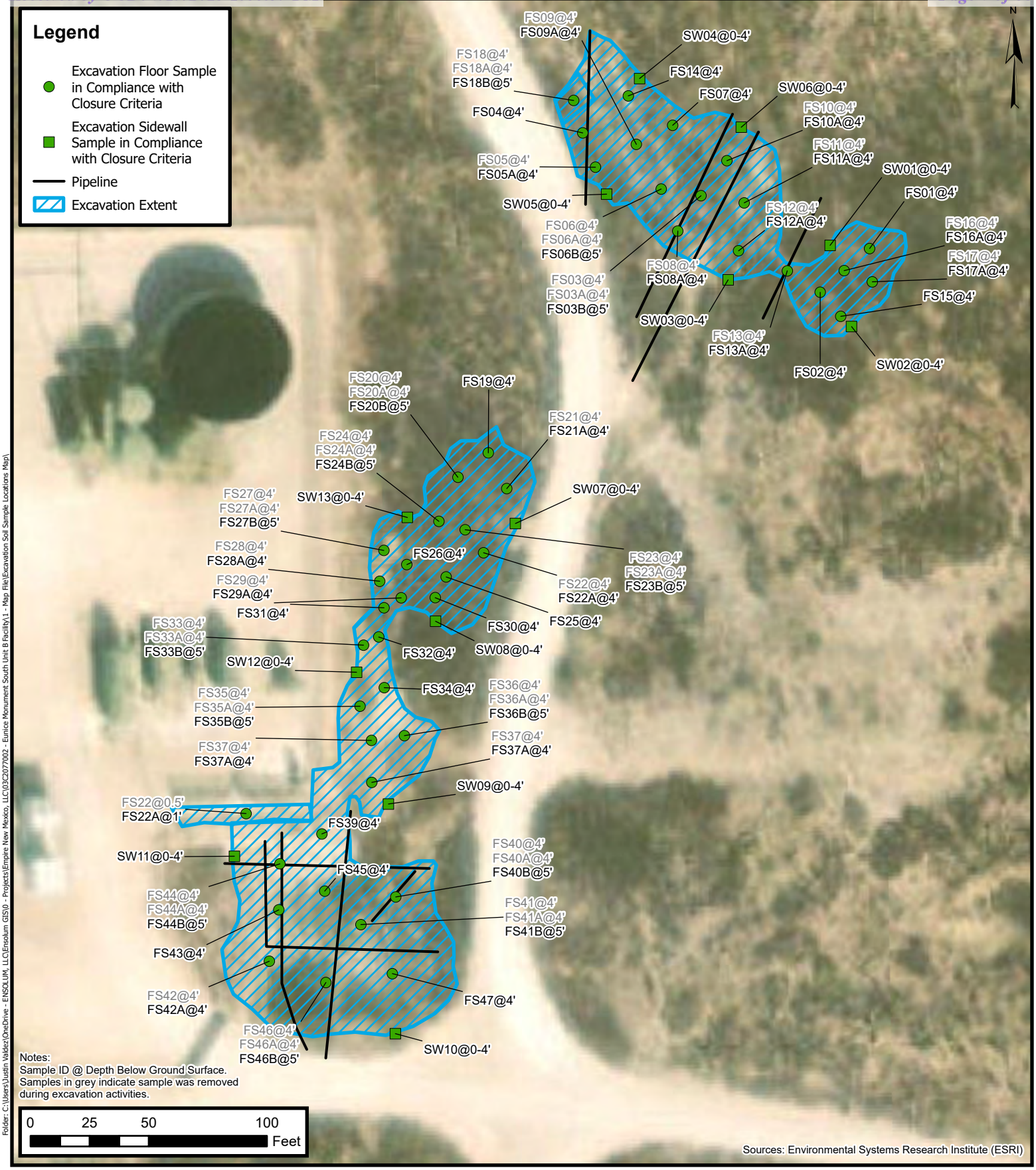


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Site Receptor Map

Empire New Mexico, LLC
Eunice Monument South Unit B Facility
Incident Number: NAPP2206638414
Unit A, Sec 23, T20S, R36E
Eddy County, New Mexico

FIGURE 1



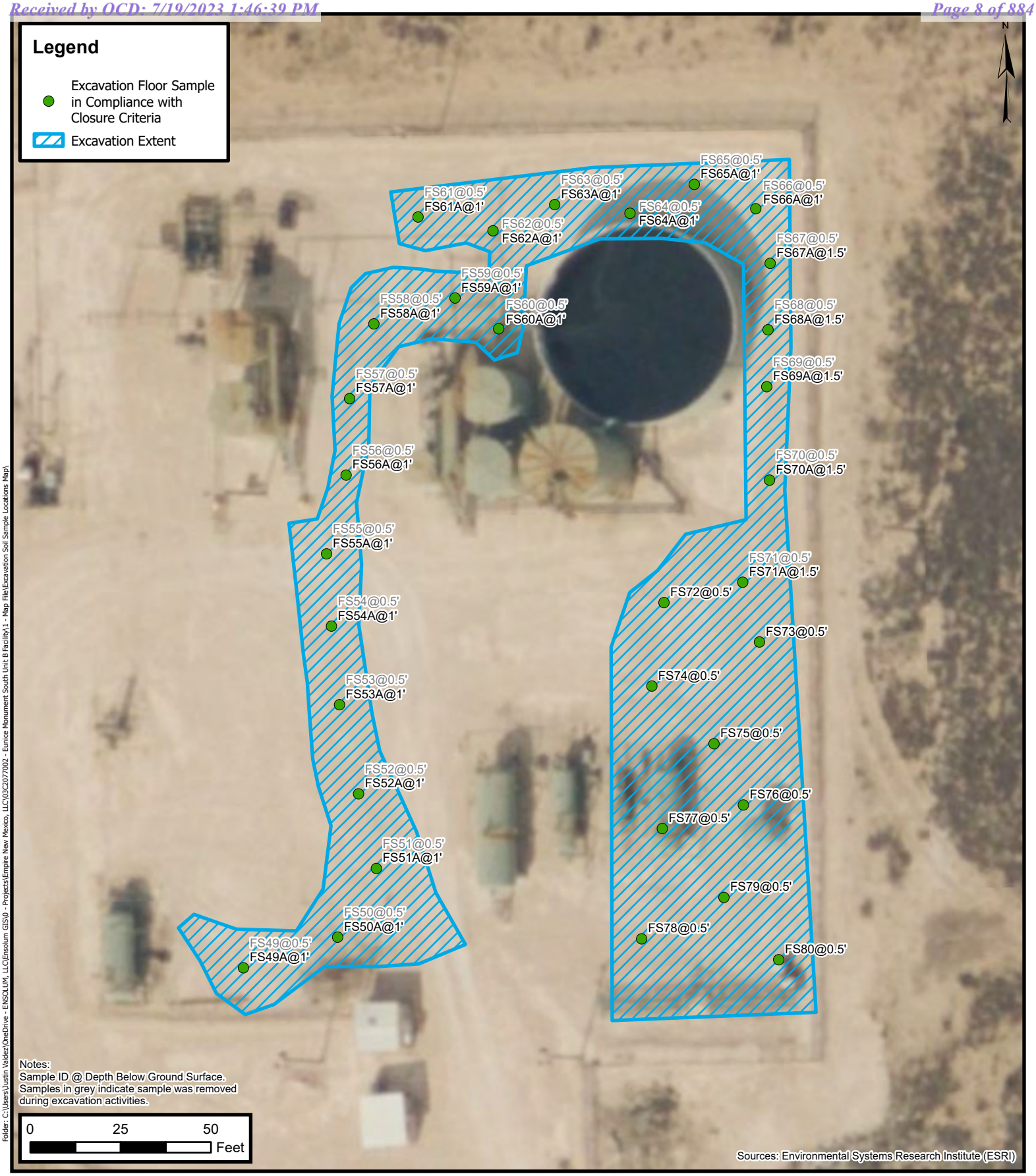
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Off-Pad Excavation Soil Sample Locations

Empire New Mexico, LLC
Eunice Monument South Unit B Facility
Incident Number: NAPP2206638414
Unit A, Sec 23, T20S, R36E
Eddy County, New Mexico

FIGURE 2A



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\Empire New Mexico, LLC\03C2077002 - Eunice Monument South Unit B Facility\1 - Map Files\Excavation Soil Sample Locations Map\

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On-Pad Excavation Soil Sample Locations

Empire New Mexico, LLC
Eunice Monument South Unit B Facility
Incident Number: NAPP2206638414
Unit A, Sec 23, T20S, R36E
Eddy County, New Mexico

FIGURE 2B

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Eunice Monument South Unit B Facility
Empire New Mexico, LLC
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Off-Pad Excavation Soil Samples										
FS01	02/24/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<5.04
FS02	02/24/2022	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	<4.95
~~FS03~~	~~02/24/2022~~	~~4~~	~~<0.00200~~	~~0.0100~~	~~<49.9~~	~~200~~	~~<49.9~~	~~200~~	~~**200**~~	~~58.1~~
~~FS03A~~	~~09/12/2022~~	~~4~~	~~<0.000383~~	~~<0.00100~~	~~27.5~~	~~160~~	~~65.0~~	~~188~~	~~**253**~~	~~37.3~~
FS03B	10/25/2022	5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	34.7
FS04	02/24/2022	4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	286
~~FS05~~	~~03/07/2022~~	~~4~~	~~<0.00199~~	~~<0.00398~~	~~<50.0~~	~~452~~	~~<50.0~~	~~452~~	~~**452**~~	~~13.9~~
FS05A	09/12/2022	4	<0.000384	<0.00101	22.5	38.0	38.5	60.5	99.0	8.63
~~FS06~~	~~03/07/2022~~	~~4~~	~~<0.0398~~	~~<0.0797~~	~~<500~~	~~153~~	~~<50.0~~	~~153~~	~~**153**~~	~~247~~
~~FS06A~~	~~09/12/2022~~	~~4~~	~~<0.000389~~	~~<0.00102~~	~~27.8~~	~~69.4~~	~~48.1~~	~~97.2~~	~~**145**~~	~~9.11~~
FS06B	10/25/2022	5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	15.4
~~FS07~~	~~03/07/2022~~	~~4~~	~~<0.0402~~	~~<0.0805~~	~~<50.0~~	~~974~~	~~<50.0~~	~~974~~	~~**974**~~	~~209~~
~~FS07A~~	~~09/12/2022~~	~~4~~	~~<0.000387~~	~~<0.00102~~	~~27.0~~	~~43.6~~	~~43.9~~	~~70.6~~	~~**115**~~	~~43.0~~
FS07B	10/25/2022	5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	35.6
~~FS08~~	~~03/03/2022~~	~~4~~	~~<0.0398~~	~~<0.0795~~	~~<49.9~~	~~285~~	~~<49.9~~	~~285~~	~~**285**~~	~~328~~
FS08A	09/12/2022	4	<0.000384	<0.00101	24.3	18.1	23.3	42.4	65.7	12.9
~~FS09~~	~~03/07/2022~~	~~4~~	~~<0.0403~~	~~0.284~~	~~<49.9~~	~~730~~	~~<49.9~~	~~730~~	~~**730**~~	~~386~~
FS09A	09/12/2022	4	<0.000383	<0.00101	29.7	<15.0	20.2	29.7	49.9	52.5
~~FS10~~	~~03/03/2022~~	~~4~~	~~<0.0400~~	~~<0.0800~~	~~<50.0~~	~~152~~	~~<50.0~~	~~152~~	~~**152**~~	~~169~~
FS10A	09/12/2022	4	<0.000383	<0.00101	19.6	36.2	22.4	55.8	78.2	16.2
~~FS11~~	~~03/03/2022~~	~~4~~	~~<0.0402~~	~~0.220~~	~~<50.0~~	~~436~~	~~<50.0~~	~~436~~	~~**436**~~	~~45.6~~
FS11A	09/12/2022	4	<0.000387	<0.00102	25.2	27.6	19.6	52.8	72.4	15.4
FS12	03/03/2022	4	<0.0403	<0.0806	<50.0	68.5	<50.0	68.5	68.5	15.3
FS12A	09/12/2022	4	<0.000386	<0.00101	26.1	24.7	29.1	50.8	79.9	8.17
~~FS13~~	~~03/03/2022~~	~~4~~	~~<0.0399~~	~~<0.0798~~	~~<50.0~~	~~163~~	~~<50.0~~	~~163~~	~~**163**~~	~~<5.04~~
FS13A	10/25/2022	5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	19.9
FS14	03/07/2022	4	<0.00200	<0.00400	<50.0	52.3	<50.0	52.3	52.3	444
FS15	03/03/2022	4	<0.0399	<0.0798	<50.0	<50.0	<50.0	<50.0	<50.0	<4.95
~~FS16~~	~~03/03/2022~~	~~4~~	~~<0.0397~~	~~<0.0794~~	~~<50.0~~	~~106~~	~~<50.0~~	~~106~~	~~**106**~~	~~<5.00~~
FS16A	09/12/2022	4	<0.000388	<0.00102	27.7	<15.0	23.3	27.7	51.0	18.4
~~FS17~~	~~03/03/2022~~	~~4~~	~~<0.0400~~	~~<0.0800~~	~~<50.0~~	~~395~~	~~<50.0~~	~~395~~	~~**395**~~	~~<4.99~~
FS17A	09/12/2022	4	0.00100	0.00677	22.8	<15.0	23.4	22.8	46.2	10.5

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Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
~~FS18~~	~~03/07/2022~~	~~4~~	~~<0.00200~~	~~<0.00399~~	~~<49.9~~	~~101.0~~	~~<49.9~~	~~101~~	~~**101**~~	~~365~~
~~FS18A~~	~~09/12/2022~~	~~4~~	~~<0.000388~~	~~<0.00102~~	~~16.6~~	~~227~~	~~89.2~~	~~244~~	~~**333**~~	~~18.8~~
FS18B	10/19/2022	5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	23.0
FS19	03/10/2022	4	<0.00200	<0.00399	<49.8	50.1	<49.8	50.1	50.1	27.7
~~FS20~~	~~03/10/2022~~	~~4~~	~~<0.0199~~	~~8.38~~	~~543~~	~~2,210~~	~~319~~	~~2,753~~	~~**3,070**~~	~~23.3~~
~~FS20A~~	~~09/12/2023~~	~~4~~	~~0.000528~~	~~0.00192~~	~~25.7~~	~~169~~	~~107~~	~~195~~	~~**302**~~	~~8.31~~
FS20B	10/31/2022	5	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	14.8
~~FS21~~	~~03/10/2022~~	~~4~~	~~<0.0200~~	~~7.00~~	~~<49.9~~	~~194~~	~~<49.9~~	~~194~~	~~**194**~~	~~22.1~~
FS21A	09/12/2022	4	0.00823	0.0205	21.1	<15.0	20.4	21.1	41.5	10.1
~~FS22~~	~~03/10/2022~~	~~4~~	~~<0.0199~~	~~0.733~~	~~<50.0~~	~~227~~	~~<50.0~~	~~227~~	~~**227**~~	~~248~~
FS22A	09/12/2022	4	0.000684	0.00133	18.0	18.9	44.1	36.9	81.0	15.3
~~FS23~~	~~03/10/2022~~	~~4~~	~~<0.0200~~	~~0.314~~	~~<50.0~~	~~225~~	~~<50.0~~	~~225~~	~~**225**~~	~~49.9~~
~~FS23A~~	~~09/12/2022~~	~~4~~	~~<0.000384~~	~~<0.00101~~	~~21.8~~	~~98.5~~	~~51.9~~	~~120~~	~~**172**~~	~~10.5~~
FS23B	10/31/2022	5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	10.7
~~FS24~~	~~03/10/2022~~	~~4~~	~~<0.0200~~	~~0.218~~	~~<50.0~~	~~183~~	~~<50.0~~	~~183~~	~~**183**~~	~~325~~
~~FS24A~~	~~09/12/2022~~	~~4~~	~~<0.000381~~	~~<0.00100~~	~~29.0~~	~~38.3~~	~~39.4~~	~~67.3~~	~~**107**~~	~~8.87~~
FS24B	10/31/2022	5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	10.6
FS25	03/10/2022	4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	<4.98
FS26	03/10/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	277
~~FS27~~	~~03/10/2022~~	~~4~~	~~<0.0398~~	~~0.693~~	~~<49.9~~	~~587~~	~~81.6~~	~~587~~	~~**669**~~	~~275~~
~~FS27A~~	~~09/12/2022~~	~~4~~	~~<0.000389~~	~~<0.00102~~	~~21.5~~	~~40.2~~	~~45.6~~	~~61.7~~	~~**107**~~	~~12.7~~
FS27B	10/31/2022	5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	<4.96
~~FS28~~	~~03/10/2022~~	~~4~~	~~<0.0398~~	~~<0.0797~~	~~89.4~~	~~2,700~~	~~401~~	~~2,790~~	~~**3,190**~~	~~170~~
FS28A	09/12/2022	4	<0.000384	<0.00101	24.5	<15.0	24.2	24.5	48.7	11.7
~~FS29~~	~~03/10/2022~~	~~4~~	~~<0.0200~~	~~<0.0401~~	~~<49.8~~	~~404~~	~~62.8~~	~~404~~	~~**467**~~	~~225~~
FS29A	09/12/2022	4	0.00162	0.0164	22.4	<15.0	21.0	22.4	43.4	7.90
FS30	03/10/2022	4	<0.0201	<0.0402	<50.0	<50.0	<50.0	<50.0	<50.0	225
FS31	03/10/2022	4	<0.0200	<0.0399	<49.9	<49.9	<49.9	<49.9	<49.9	230
FS32	03/10/2022	4	<0.0398	<0.0795	<50.0	50.1	<50.0	<50.0	50.1	185
~~FS33~~	~~03/10/2022~~	~~4~~	~~<0.0196~~	~~0.166~~	~~<50.0~~	~~121~~	~~<50.0~~	~~121~~	~~**121**~~	~~243~~
~~FS33A~~	~~09/12/2022~~	~~4~~	~~<0.000383~~	~~<0.00101~~	~~22.1~~	~~80.5~~	~~26.6~~	~~103~~	~~**129**~~	~~8.55~~
FS33B	10/31/2022	5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	<5.00

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NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
FS34	03/10/2022	4	<0.00201	<0.00402	<50.0	61.3	<50.0	61.3	61.3	241
~~FS35~~	~~03/10/2022~~	~~4~~	~~0.117~~	~~1.64~~	~~<49.9~~	~~2,690~~	~~696~~	~~2,690~~	~~**3,390**~~	~~169~~
~~FS35A~~	~~09/12/2022~~	~~4~~	~~<0.000384~~	~~<0.00101~~	~~25.7~~	~~75.7~~	~~23.0~~	~~101~~	~~**124**~~	~~12.3~~
FS35B	10/31/2022	5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	<4.99
~~FS36~~	~~03/10/2022~~	~~4~~	~~0.202~~	~~0.202~~	~~<50.0~~	~~250~~	~~111~~	~~250~~	~~**361**~~	~~<5.00~~
~~FS36A~~	~~09/12/2022~~	~~4~~	~~<0.000386~~	~~<0.00101~~	~~27.6~~	~~100~~	~~38.8~~	~~128~~	~~**166**~~	~~8.19~~
FS36B	10/31/2022	5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	<4.95
~~FS37~~	~~03/10/2022~~	~~4~~	~~0.0901~~	~~0.0901~~	~~<49.9~~	~~311~~	~~84.4~~	~~311~~	~~**395**~~	~~80.3~~
FS37A	09/12/2022	4	<0.000387	<0.00102	21.5	37.8	<15.0	59.3	59.3	8.44
~~FS38~~	~~03/10/2022~~	4	~~<0.0498~~	~~<0.0996~~	~~<49.8~~	~~1,530~~	~~436~~	~~1,530~~	~~**1,970**~~	~~101~~
FS38A	09/12/2022	4	<0.000384	<0.00101	24.0	20.8	27.7	44.8	72.5	13.1
FS39	03/10/2022	4	<0.0199	<0.0398	<49.8	82.5	<49.8	82.5	82.5	31.4
~~FS40~~	~~03/10/2022~~	~~4~~	~~0.148~~	~~1.99~~	~~<50.0~~	~~635~~	~~<50.0~~	~~635~~	~~**635**~~	~~220~~
~~FS40A~~	~~09/12/2022~~	~~4~~	~~<0.000383~~	~~<0.00100~~	~~25.5~~	~~109~~	~~25.6~~	~~135~~	~~**160**~~	~~49.8~~
FS40B	10/31/2022	5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	10.8
~~FS41~~	~~03/10/2022~~	~~4~~	~~<0.0201~~	~~<0.0402~~	~~<49.9~~	~~203~~	~~<49.9~~	~~203~~	~~**203**~~	~~192~~
~~FS41A~~	~~09/12/2022~~	~~4~~	~~<0.000381~~	~~<0.00100~~	~~23.7~~	~~94.6~~	~~23.5~~	~~118~~	~~**142**~~	~~70.1~~
FS41B	10/31/2022	5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	8.70
~~FS42~~	~~03/10/2022~~	~~4~~	~~<0.0200~~	~~<0.0401~~	~~<50.0~~	~~133~~	~~<50.0~~	~~133~~	~~**133**~~	~~34.3~~
FS42A	09/12/2022	4	0.000501	<0.00102	22.7	46.4	<15.0	69.1	69.1	12.0
FS43	03/03/2022	4	<0.00200	<0.00399	<49.9	61.9	<49.9	61.9	61.9	338
~~FS44~~	~~03/10/2022~~	~~4~~	~~<0.00199~~	~~<0.00398~~	~~<49.8~~	~~242~~	~~<49.8~~	~~242~~	~~**242**~~	~~277~~
~~FS44A~~	~~09/12/2022~~	~~4~~	~~0.000754~~	~~0.00169~~	~~<15.0~~	~~176~~	~~<15.0~~	~~176~~	~~**176**~~	~~12.9~~
FS44B	10/31/2022	5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	6.83
FS45	03/10/2022	4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	<496
~~FS46~~	~~03/10/2022~~	~~4~~	~~<0.00200~~	~~<0.00401~~	~~<49.9~~	~~164~~	~~<49.9~~	~~164~~	~~**164**~~	~~218~~
~~FS46A~~	~~09/12/2022~~	~~4~~	~~<0.000384~~	~~<0.00101~~	~~26.8~~	~~223~~	~~<15.0~~	~~250~~	~~**250**~~	~~8.94~~
FS46B	10/31/2022	5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	66.2
FS47	03/10/2022	4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	421

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Eunice Monument South Unit B Facility
Empire New Mexico, LLC
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
SW01	03/10/2022	0 - 4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	<5.05
SW02	03/10/2022	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	<4.99
SW03	03/10/2022	0 - 4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	<4.98
SW04	03/10/2022	0 - 4	<0.00200	<0.0962	<50.0	<50.0	<50.0	<50.0	<50.0	<4.97
SW05	03/10/2022	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	<4.98
SW06	03/10/2022	0 - 4	0.127	0.127	<49.8	<49.8	<49.8	<49.8	<49.8	<4.95
SW07	03/14/2022	0 - 4	<0.00200	0.0126	<50.0	<50.0	<50.0	<50.0	<50.0	<10.2
SW08	03/14/2022	0 - 4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	21.7
SW09	03/14/2022	0 - 4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<10.1
SW10	03/14/2022	0 - 4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	<9.96
SW11	03/14/2022	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	11.1
SW12	03/14/2022	0 - 4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	32.9
SW13	03/14/2022	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	12.2

ENSOLUM

TABLE 2
SOIL SAMPLE ANALYTICAL RESULTS
Eunice Monument South Unit B Facility
Empire New Mexico, LLC
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
On-Pad Excavation Soil Samples										
~~FS48~~	~~09/13/2022~~	0.5	~~<0.200~~	~~<0.401~~	~~<250~~	~~5,100~~	~~1,540~~	~~5,100~~	~~**6,640**~~	~~303~~
FS48A	01/17/2023	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	78.0
~~FS49~~	~~09/13/2022~~	0.5	~~0.164~~	~~0.164~~	~~<49.9~~	~~1,240~~	~~337~~	~~1,240~~	~~**1,580**~~	~~48.5~~
FS49A	01/17/2023	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	53.5
~~FS50~~	~~09/13/2022~~	0.5	~~<0.200~~	~~<0.400~~	~~<250~~	~~4,600~~	~~902~~	~~4,600~~	~~**5,500**~~	~~154~~
FS50A	01/12/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	126
~~FS51~~	~~09/13/2022~~	0.5	~~<0.198~~	~~<0.397~~	~~<250~~	~~3,630~~	~~798~~	~~3,630~~	~~**4,430**~~	~~231~~
FS51A	01/11/2023	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	59.0
~~FS52~~	~~09/13/2022~~	0.5	~~<0.202~~	~~<0.404~~	~~<250~~	~~5,730~~	~~1,920~~	~~5,730~~	~~**7,650**~~	~~216~~
FS52A	01/11/2023	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	59.5
~~FS53~~	~~09/13/2022~~	0.5	~~<0.0994~~	~~<0.199~~	~~<250~~	~~5,740~~	~~1,330~~	~~5,740~~	~~**7,070**~~	~~477~~
FS53A	01/11/2023	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	62.3
~~FS54~~	~~09/13/2022~~	0.5	~~0.0718~~	~~0.713~~	~~<50.0~~	~~1,130~~	~~297~~	~~1,130~~	~~**1,430**~~	~~251~~
FS54A	01/09/2023	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	121
~~FS55~~	~~09/13/2022~~	0.5	~~<0.0503~~	~~0.165~~	~~<50.0~~	~~1,800~~	~~599~~	~~1,800~~	~~**2,400**~~	~~89.2~~
FS55A	01/09/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	135
~~FS56~~	~~09/13/2022~~	0.5	~~<0.199~~	~~<0.398~~	~~<250~~	~~4,300~~	~~978~~	~~4,300~~	~~**5,280**~~	~~514~~
FS56A	01/09/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	142
~~FS57~~	~~09/13/2022~~	0.5	~~<0.201~~	~~<0.402~~	~~<249~~	~~4,640~~	~~780~~	~~4,640~~	~~**5,420**~~	~~503~~
FS57A	12/27/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	11.7
~~FS58~~	~~09/13/2022~~	0.5	~~<0.202~~	~~<0.403~~	~~<49.9~~	~~3,000~~	~~969~~	~~3,000~~	~~**3,970**~~	~~487~~
FS58A	02/21/2023	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	8.75
~~FS59~~	~~09/13/2022~~	0.5	~~0.186~~	~~<0.199~~	~~<249~~	~~4,230~~	~~813~~	~~4,230~~	~~**5,040**~~	~~428~~
FS59A	02/21/2023	1	<0.00199	<0.0038	<50.0	<50.0	<50.0	<50.0	<50.0	14.3
~~FS60~~	~~09/13/2022~~	0.5	~~0.178~~	~~0.178~~	~~<250~~	~~4,290~~	~~1,180~~	~~4,290~~	~~**5,470**~~	~~154~~
FS60A	02/21/2023	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	14.0
~~FS61~~	~~09/13/2022~~	0.5	~~0.164~~	~~0.351~~	~~<250~~	~~3,500~~	~~673~~	~~3,500~~	~~**4,170**~~	~~148~~
FS61A	02/21/2023	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	18.3
~~FS62~~	~~09/13/2022~~	0.5	~~0.164~~	~~0.247~~	~~<250~~	~~6,340~~	~~1,850~~	~~6,340~~	~~**8,190**~~	~~255~~
FS62A	02/21/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	16.3
~~FS63~~	~~09/13/2022~~	0.5	~~<0.201~~	~~<0.402~~	~~<249~~	~~6,330~~	~~1,640~~	~~6,330~~	~~**7,970**~~	~~442~~
FS63A	02/21/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	11.7

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TABLE 2
SOIL SAMPLE ANALYTICAL RESULTS
Eunice Monument South Unit B Facility
Empire New Mexico, LLC
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
~~FS64~~	~~09/13/2022~~	0.5	~~0.180~~	~~0.250~~	~~<250~~	~~4,470~~	~~1,370~~	~~4,470~~	~~**5,840**~~	~~339~~
FS64A	02/21/2023	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	10.0
~~FS65~~	~~09/13/2022~~	0.5	~~0.189~~	~~0.345~~	~~<249~~	~~5,690~~	~~1,610~~	~~5,690~~	~~**7,300**~~	~~482~~
FS65A	02/21/2023	1	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	9.04
~~FS66~~	~~09/13/2022~~	0.5	~~<0.201~~	~~1.03~~	~~<250~~	~~3,430~~	~~759~~	~~3,430~~	~~**4,190**~~	~~206~~
FS66A	02/21/2023	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	12.0
~~FS67~~	~~09/13/2022~~	0.5	~~<0.198~~	~~<0.397~~	~~<249~~	~~3,550~~	~~855~~	~~3,550~~	~~**4,410**~~	~~**1,080**~~
FS67A	11/18/2022	1.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	36.5
~~FS68~~	~~09/13/2022~~	0.5	~~<0.0503~~	~~<0.101~~	~~<250~~	~~6,430~~	~~<250~~	~~6,430~~	~~**6,430**~~	~~**648**~~
FS68A	11/18/2022	1.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	31.1
~~FS69~~	~~09/13/2022~~	0.5	~~<0.0998~~	~~<0.200~~	~~<249~~	~~8,980~~	~~<249~~	~~8,980~~	~~**8,980**~~	~~194~~
FS69A	11/18/2022	1.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	34.6
~~FS70~~	~~09/13/2022~~	0.5	~~<0.0996~~	~~<0.199~~	~~4,330~~	~~11,800~~	~~<499~~	~~16,100~~	~~**16,100**~~	~~151~~
FS70A	11/18/2022	1.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	80.6
~~FS71~~	~~09/13/2022~~	0.5	~~<0.0499~~	~~<0.0998~~	~~<249~~	~~6,940~~	~~<249~~	~~6,940~~	~~**6,940**~~	~~304~~
FS71A	11/18/2022	1.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	58.7
FS72	03/15/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	19.5
FS73	03/15/2022	0.5	<0.00202	<0.00404	<49.9	18.4	<49.9	18.4	18.4	117
FS74	03/15/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	45.1
FS75	03/15/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	63.9
FS76	03/15/2022	0.5	<0.00201	<0.00402	<49.9	91.3	<49.9	91.3	91.3	214
FS77	03/15/2022	0.5	<0.00202	<0.00404	<50.0	52.8	<50.0	52.8	52.8	83.2
FS78	03/15/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	54.9
FS79	03/15/2022	0.5	<0.00200	<0.00401	<50.0	60.4	<50.0	60.4	60.4	62.4
FS80	03/15/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	56.0

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

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APPENDIX A

Photographic Log

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Photographic Log
Empire New Mexico, LLC
Eunice Monument South Unit B Facility
NAPP2206638414



Photograph 1 Date: 2/8/2022
Description: View of release on pad facing North



Photograph 2 Date: 2/8/2022
Description: View of release on pad and open top tank facing North



Photograph 3 Date: 2/8/2022
Description: View of release in pasture facing North



Photograph 4 Date: 2/8/2022
Description: View of release in pasture facing West

ENSOLUM

Photographic Log
Empire New Mexico, LLC
Eunice Monument South Unit B Facility
NAPP2206638414



Photograph 5 Date: 11/18/2022
Description: View of excavation on pad facing East



Photograph 6 Date: 11/18/2022
Description: View of excavation in pasture facing Northwest



Photograph 7 Date: 11/18/2022
Description: Veiw of excavation in pasture facing West



Photograph 8 Date: 1/9/2023
Description: View of excavation on pad facing North

ENSOLUM

Photographic Log
Empire New Mexico, LLC
Eunice Monument B Facility
NAPP2206638414



Photograph 9 Date: March 9, 2023

Description: View of pasture backfill.



Photograph 10 Date: March 9, 2023

Description: View of pasture backfill.

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APPENDIX B

NMOCD Notifications

From: Nobui, Jennifer, EMNRD
To: Tacoma Morrissey
Cc: Bratcher, Michael, EMNRD
Subject: FW: [EXTERNAL] Empire- Sampling Notification
Date: Monday, October 17, 2022 9:44:05 AM
Attachments: image001.png
image002.png
image003.png
image004.png

[**EXTERNAL EMAIL**]

Tacoma

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Monday, October 17, 2022 8:27 AM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Subject: Fw: [EXTERNAL] Empire- Sampling Notification

From: Tacoma Morrissey <tmorrissey@ensolum.com>
Sent: Sunday, October 16, 2022 9:33 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Toby Holland <tholland@empirepetrocorp.com>; Stuart Hyde <shyde@ensolum.com>
Subject: [EXTERNAL] Empire- Sampling Notification

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

All,

On behalf of Empire New Mexico, LLC we respectfully submit notification of sampling to be conducted at the below location the week of 10/17/2022

EMSU B Facility / Incident Number NAPP2206638414

Thank you,

Tacoma Morrissey
Senior Geologist

From: Nobui, Jennifer, EMNRD
To: Tacoma Morrissey
Cc: Bratcher, Michael, EMNRD
Subject: FW: [EXTERNAL] Empire- Sampling Notification
Date: Wednesday, October 26, 2022 4:31:19 PM
Attachments: image001.png
image002.png
image003.png
image004.png

[**EXTERNAL EMAIL**]

Tacoma

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Wednesday, October 26, 2022 3:24 PM
To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Empire- Sampling Notification

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@state.nm.us
http:// **www.emnrd.nm.gov**

From: Tacoma Morrissey <tmorrissey@ensolum.com>
Sent: Wednesday, October 26, 2022 2:34 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Toby Holland <tholland@empirepetrocorp.com>; Stuart Hyde <shyde@ensolum.com>
Subject: [EXTERNAL] Empire- Sampling Notification

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

links or opening attachments.

All,

On behalf of Empire New Mexico, LLC we respectfully submit notification of sampling to be conducted at the below location the week of 10/31/2022

EMSU B Facility / Incident Number NAPP2206638414

Thank you,

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

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APPENDIX C

Final C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2206638414
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Empire New Mexico LLC	OGRID: 330679
Contact Name: Toby Holland	Contact Telephone: (575) 704-2329
Contact email: tholland@empirepetrocorp.com	Incident #:
Contact mailing address 2200 S. Utica Place Suite 150 Tulsa, OK 74114	

Location of Release Source

Latitude 32.5649393 Longitude -103.31831

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Eunice Monument South Unit B Facility	Site Type Exploration and Production
Date Release Discovered 02/01/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
A	23	20S	36E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☒ Private (*Name:* Jimmy Cooper)

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 361 bbls	Volume Recovered (bbls) 300 bbls
☒ Produced Water	Volume Released (bbls) 589 bbls	Volume Recovered (bbls) 480 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release: Open top tank overflowed and breached the pad berm resulting in the release of crude oil to the pad soils and adjacent pasture.		

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2206638414
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ____Toby Holland_____ Title: __Environmental Coordinator_____

Signature: Toby Holland Date: 07/19/2023

email: ___tholland@empirepetrocorp.com_____ Telephone: __575-704-2329_____

OCD Only

Received by: _____ Date: _____

ESTIMATED RELEASE VOLUME TOOL

This tool estimates a release volume based on the size and concentration of a saturated release.

Location/Site Name	EMSU B Facility
GPS Coordinates	32.5649393 -103.3183064
Spill Date and Time	2/1/2022

Instructions: Input the release parameters (dimensions) in blue text, and the spreadsheet calculates a potential spill volume. Other parameters can be changed as appropriate.

Area	21,000	square feet
Saturation (or depth)	7.0	inches
Percent Hydrocarbon	38	% Hydrocarbon (0-100)
Porosity (choose one)	0.20	
Saturated Soil Volume	453.70	cubic yards

Total Hydrocarbon (oil)	**165.81**	**barrels**
Total Produced Water	**270.53**	**barrels**

Types of Soil	**Porosity Factor**
Sand	0.20
Clay	0.05
Clay/Silt-Sandy Mix	0.15
Caliche	0.03
Gravel	0.25
Unknown	0.25

Area Name (ft2)	Saturation Depth (in)	Total Oil (bbls)	Total Water (bbls)
29041 (pasture)	6	195	318
21000 (pad)	7	166	271
	Totals:	361	589
		Total Volume Released:	950

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: Empire New Mexico LLC 2200 S. Utica Place Tulsa, OK 74114	OGRID: 330679
	Action Number: 87580
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	3/9/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2206638414
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2206638414
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _Toby Holland_____ Title: _Environmental Coordinator_____

Signature: Toby Holland Date: 07/19/2023

email: _tholland@empirepetrocorp.com_____ Telephone: ____575-704-2329_____

OCD Only

Received by: Shelly Wells Date: 7/20/2023

Incident ID	nAPP2206638414
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Toby Holland Title: Environmental Coordinator

Signature: Toby Holland Date: 07/19/2023

email: tholland@empirepetrocorp.com Telephone: 575-704-2329

OCD Only

Received by: Shelly Wells Date: 7/20/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Nelson Velez Date: 10/13/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-1914-1
Laboratory SDG: Eunice Monument South Unit B Facility
Client Project/Site: Empire Petroleum-

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
2/22/2022 1:57:23 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Job ID: 890-1914-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1914-1

Receipt
The samples were received on 2/7/2022 3:51 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 21.6°C

GC VOA
Method 8021B: The following samples were diluted due to the nature of the sample matrix: SS01 (890-1914-1), SS02 (890-1914-2), SS03 (890-1914-3) and SS04 (890-1914-4) at 100.0, 100.0, 100.0 and 100.0. Elevated reporting limits (RLs) are provided.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS05 (890-1914-5) and SS06 (890-1914-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18887 and analytical batch 880-18897 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-1914-1), SS02 (890-1914-2), SS03 (890-1914-3), SS04 (890-1914-4), SS05 (890-1914-5), SS06 (890-1914-6) and SS07 (890-1914-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1915-A-1-D MSD). Evidence of matrix interferences is not obvious.

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 and precision for preparation batch 880-20032 and analytical batch 880-20033 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS01 Lab Sample ID: 890-1914-1

Date Collected: 02/07/22 12:11 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/Kg		02/09/22 08:46	02/10/22 06:36	100
Toluene	**3.10**		0.200		mg/Kg		02/09/22 08:46	02/10/22 06:36	100
Ethylbenzene	**10.4**		0.200		mg/Kg		02/09/22 08:46	02/10/22 06:36	100
m-Xylene & p-Xylene	**19.5**		0.401		mg/Kg		02/09/22 08:46	02/10/22 06:36	100
o-Xylene	**2.77**		0.200		mg/Kg		02/09/22 08:46	02/10/22 06:36	100
Xylenes, Total	**22.3**		0.401		mg/Kg		02/09/22 08:46	02/10/22 06:36	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*02/09/22 08:46*	*02/10/22 06:36*	*100*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*02/09/22 08:46*	*02/10/22 06:36*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**35.8**		0.401		mg/Kg			02/10/22 10:09	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15600**		500		mg/Kg			02/10/22 09:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**3640**		500		mg/Kg		02/09/22 14:52	02/10/22 02:14	10
Diesel Range Organics (Over C10-C28)	**12000**		500		mg/Kg		02/09/22 14:52	02/10/22 02:14	10
Oil Range Organics (Over C28-C36)	<500	U	500		mg/Kg		02/09/22 14:52	02/10/22 02:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*64*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 02:14*	*10*
o-Terphenyl	*41*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 02:14*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**190**		4.98		mg/Kg			02/16/22 03:27	1

Client Sample ID: SS02 Lab Sample ID: 890-1914-2

Date Collected: 02/07/22 12:13 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		02/09/22 08:46	02/10/22 06:56	100
Toluene	**2.65**		0.201		mg/Kg		02/09/22 08:46	02/10/22 06:56	100
Ethylbenzene	**7.22**		0.201		mg/Kg		02/09/22 08:46	02/10/22 06:56	100
m-Xylene & p-Xylene	**13.9**		0.402		mg/Kg		02/09/22 08:46	02/10/22 06:56	100
o-Xylene	**2.08**		0.201		mg/Kg		02/09/22 08:46	02/10/22 06:56	100
Xylenes, Total	**16.0**		0.402		mg/Kg		02/09/22 08:46	02/10/22 06:56	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/09/22 08:46*	*02/10/22 06:56*	*100*

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS02 Lab Sample ID: 890-1914-2

Date Collected: 02/07/22 12:13 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*02/09/22 08:46*	*02/10/22 06:56*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**25.9**		0.402		mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**21600**		499		mg/Kg			02/10/22 09:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**5480**		499		mg/Kg		02/09/22 14:52	02/10/22 02:35	10
Diesel Range Organics (Over C10-C28)	**16100**		499		mg/Kg		02/09/22 14:52	02/10/22 02:35	10
Oil Range Organics (Over C28-C36)	<499	U	499		mg/Kg		02/09/22 14:52	02/10/22 02:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*02/09/22 14:52*	*02/10/22 02:35*	*10*
o-Terphenyl	*45*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 02:35*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**402**		5.00		mg/Kg			02/16/22 03:33	1

Client Sample ID: SS03 Lab Sample ID: 890-1914-3

Date Collected: 02/07/22 12:15 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.202	U	0.202		mg/Kg		02/09/22 08:46	02/10/22 07:17	100
Toluene	**3.19**		0.202		mg/Kg		02/09/22 08:46	02/10/22 07:17	100
Ethylbenzene	**8.82**		0.202		mg/Kg		02/09/22 08:46	02/10/22 07:17	100
m-Xylene & p-Xylene	**18.6**		0.404		mg/Kg		02/09/22 08:46	02/10/22 07:17	100
o-Xylene	**3.19**		0.202		mg/Kg		02/09/22 08:46	02/10/22 07:17	100
Xylenes, Total	**21.8**		0.404		mg/Kg		02/09/22 08:46	02/10/22 07:17	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/09/22 08:46*	*02/10/22 07:17*	*100*
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*02/09/22 08:46*	*02/10/22 07:17*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**33.8**		0.404		mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**22300**		500		mg/Kg			02/10/22 09:32	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS03 — Lab Sample ID: 890-1914-3

Date Collected: 02/07/22 12:15 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**7290**		500		mg/Kg		02/09/22 14:52	02/10/22 02:56	10
Diesel Range Organics (Over C10-C28)	**15000**		500		mg/Kg		02/09/22 14:52	02/10/22 02:56	10
Oil Range Organics (Over C28-C36)	<500	U	500		mg/Kg		02/09/22 14:52	02/10/22 02:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/09/22 14:52*	*02/10/22 02:56*	*10*
o-Terphenyl	*42*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 02:56*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**433**		4.95		mg/Kg			02/16/22 03:40	1

Client Sample ID: SS04 — Lab Sample ID: 890-1914-4

Date Collected: 02/07/22 12:23 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.202	U	0.202		mg/Kg		02/09/22 08:46	02/10/22 07:37	100
Toluene	**5.76**		0.202		mg/Kg		02/09/22 08:46	02/10/22 07:37	100
Ethylbenzene	**10.1**		0.202		mg/Kg		02/09/22 08:46	02/10/22 07:37	100
m-Xylene & p-Xylene	**22.7**		0.404		mg/Kg		02/09/22 08:46	02/10/22 07:37	100
o-Xylene	**4.01**		0.202		mg/Kg		02/09/22 08:46	02/10/22 07:37	100
Xylenes, Total	**26.7**		0.404		mg/Kg		02/09/22 08:46	02/10/22 07:37	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*02/09/22 08:46*	*02/10/22 07:37*	*100*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*02/09/22 08:46*	*02/10/22 07:37*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**42.6**		0.404		mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26000**		499		mg/Kg			02/10/22 09:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**6400**		499		mg/Kg		02/09/22 14:52	02/10/22 03:17	10
Diesel Range Organics (Over C10-C28)	**19600**		499		mg/Kg		02/09/22 14:52	02/10/22 03:17	10
Oil Range Organics (Over C28-C36)	<499	U	499		mg/Kg		02/09/22 14:52	02/10/22 03:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*02/09/22 14:52*	*02/10/22 03:17*	*10*
o-Terphenyl	*58*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 03:17*	*10*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Empire Petroleum-

Job ID: 890-1914-1
SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS04

Lab Sample ID: 890-1914-4
Matrix: Solid
Date Collected: 02/07/22 12:23
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**808**	**F1**	4.95		mg/Kg			02/22/22 11:04	1

Client Sample ID: SS05

Lab Sample ID: 890-1914-5
Matrix: Solid
Date Collected: 02/07/22 12:27
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		02/09/22 08:46	02/10/22 07:58	100
Toluene	**3.20**		0.201		mg/Kg		02/09/22 08:46	02/10/22 07:58	100
Ethylbenzene	**9.32**		0.201		mg/Kg		02/09/22 08:46	02/10/22 07:58	100
m-Xylene & p-Xylene	**21.5**		0.402		mg/Kg		02/09/22 08:46	02/10/22 07:58	100
o-Xylene	**4.59**		0.201		mg/Kg		02/09/22 08:46	02/10/22 07:58	100
Xylenes, Total	**26.1**		0.402		mg/Kg		02/09/22 08:46	02/10/22 07:58	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*02/09/22 08:46*	*02/10/22 07:58*	*100*
1,4-Difluorobenzene (Surr)	*58*	*S1-*	*70 - 130*	*02/09/22 08:46*	*02/10/22 07:58*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**38.6**		0.402		mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**29000**		499		mg/Kg			02/10/22 09:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**7930**		499		mg/Kg		02/09/22 14:52	02/10/22 03:37	10
Diesel Range Organics (Over C10-C28)	**21100**		499		mg/Kg		02/09/22 14:52	02/10/22 03:37	10
Oil Range Organics (Over C28-C36)	<499	U	499		mg/Kg		02/09/22 14:52	02/10/22 03:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*02/09/22 14:52*	*02/10/22 03:37*	*10*
o-Terphenyl	*61*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 03:37*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.2**		4.99		mg/Kg			02/16/22 03:52	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS06 Lab Sample ID: 890-1914-6

Date Collected: 02/07/22 12:30 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/Kg		02/09/22 08:46	02/10/22 08:18	100
Toluene	**1.73**		0.200		mg/Kg		02/09/22 08:46	02/10/22 08:18	100
Ethylbenzene	**6.79**		0.200		mg/Kg		02/09/22 08:46	02/10/22 08:18	100
m-Xylene & p-Xylene	**14.9**		0.401		mg/Kg		02/09/22 08:46	02/10/22 08:18	100
o-Xylene	**2.62**		0.200		mg/Kg		02/09/22 08:46	02/10/22 08:18	100
Xylenes, Total	**17.5**		0.401		mg/Kg		02/09/22 08:46	02/10/22 08:18	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*02/09/22 08:46*	*02/10/22 08:18*	*100*
1,4-Difluorobenzene (Surr)	*40*	*S1-*	*70 - 130*	*02/09/22 08:46*	*02/10/22 08:18*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**26.0**		0.401		mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**27500**		499		mg/Kg			02/10/22 09:32	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**8330**		499		mg/Kg		02/09/22 14:52	02/10/22 03:58	10
Diesel Range Organics (Over C10-C28)	**19200**		499		mg/Kg		02/09/22 14:52	02/10/22 03:58	10
Oil Range Organics (Over C28-C36)	<499	U	499		mg/Kg		02/09/22 14:52	02/10/22 03:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*02/09/22 14:52*	*02/10/22 03:58*	*10*
o-Terphenyl	*54*	*S1-*	*70 - 130*	*02/09/22 14:52*	*02/10/22 03:58*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**587**		5.04		mg/Kg			02/16/22 04:10	1

Client Sample ID: SS07 Lab Sample ID: 890-1914-7

Date Collected: 02/07/22 12:33 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/Kg		02/09/22 08:46	02/10/22 08:38	100
Toluene	**2.31**		0.200		mg/Kg		02/09/22 08:46	02/10/22 08:38	100
Ethylbenzene	**13.9**		0.200		mg/Kg		02/09/22 08:46	02/10/22 08:38	100
m-Xylene & p-Xylene	**33.4**		0.399		mg/Kg		02/09/22 08:46	02/10/22 08:38	100
o-Xylene	**6.52**		0.200		mg/Kg		02/09/22 08:46	02/10/22 08:38	100
Xylenes, Total	**39.9**		0.399		mg/Kg		02/09/22 08:46	02/10/22 08:38	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/09/22 08:46*	*02/10/22 08:38*	*100*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS07 **Lab Sample ID: 890-1914-7**
Date Collected: 02/07/22 12:33 **Matrix: Solid**
Date Received: 02/07/22 15:51
Sample Depth: 0.25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*02/09/22 08:46*	*02/10/22 08:38*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**56.1**		0.399	mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**34100**		500	mg/Kg			02/10/22 09:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**8690**		500	mg/Kg		02/09/22 14:52	02/10/22 04:19	10
Diesel Range Organics (Over C10-C28)	**25400**		500	mg/Kg		02/09/22 14:52	02/10/22 04:19	10
OII Range Organics (Over C28-C36)	<500	U	500	mg/Kg		02/09/22 14:52	02/10/22 04:19	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*186*	*S1+*	*70 - 130*	*02/09/22 14:52*	*02/10/22 04:19*	*10*
o-Terphenyl	*93*		*70 - 130*	*02/09/22 14:52*	*02/10/22 04:19*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.6**		4.97	mg/Kg			02/16/22 04:17	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-11024-A-1-I MS	Matrix Spike	50 S1-	41 S1-
880-11024-A-1-J MSD	Matrix Spike Duplicate	110	85
890-1914-1	SS01	148 S1+	79
890-1914-2	SS02	105	72
890-1914-3	SS03	106	67 S1-
890-1914-4	SS04	118	85
890-1914-5	SS05	80	58 S1-
890-1914-6	SS06	72	40 S1-
890-1914-7	SS07	122	71
LCS 880-18887/1-A	Lab Control Sample	126	94
LCSD 880-18887/2-A	Lab Control Sample Dup	124	94
MB 880-18884/5-A	Method Blank	120	105
MB 880-18887/5-A	Method Blank	120	96

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1914-1	SS01	64 S1-	41 S1-
890-1914-2	SS02	71	45 S1-
890-1914-3	SS03	85	42 S1-
890-1914-4	SS04	87	58 S1-
890-1914-5	SS05	137 S1+	61 S1-
890-1914-6	SS06	125	54 S1-
890-1914-7	SS07	186 S1+	93
890-1915-A-1-C MS	Matrix Spike	74	71
890-1915-A-1-D MSD	Matrix Spike Duplicate	73	68 S1-

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-18934/2-A	Lab Control Sample	99	95
LCSD 880-18934/3-A	Lab Control Sample Dup	100	106
MB 880-18934/1-A	Method Blank	86	87

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Empire Petroleum-

Job ID: 890-1914-1
SDG: Eunice Monument South Unit B Facility

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18884/5-A
Matrix: Solid
Analysis Batch: 18897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18884

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:40	02/09/22 13:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:40	02/09/22 13:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:40	02/09/22 13:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/09/22 08:40	02/09/22 13:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:40	02/09/22 13:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/09/22 08:40	02/09/22 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/09/22 08:40*	*02/09/22 13:18*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/09/22 08:40*	*02/09/22 13:18*	*1*

Lab Sample ID: MB 880-18887/5-A
Matrix: Solid
Analysis Batch: 18897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18887

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:46	02/10/22 00:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:46	02/10/22 00:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:46	02/10/22 00:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/09/22 08:46	02/10/22 00:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/09/22 08:46	02/10/22 00:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/09/22 08:46	02/10/22 00:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/09/22 08:46*	*02/10/22 00:53*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/09/22 08:46*	*02/10/22 00:53*	*1*

Lab Sample ID: LCS 880-18887/1-A
Matrix: Solid
Analysis Batch: 18897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18887

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09015		mg/Kg		90	70 - 130		
Toluene			0.100	0.09559		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09884		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene			0.200	0.1881		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.09545		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-18887/2-A
Matrix: Solid
Analysis Batch: 18897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18887

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09027		mg/Kg		90	70 - 130	0	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

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

Lab Sample ID: LCSD 880-18887/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18897 **Prep Batch: 18887**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.1005		mg/Kg		101	70 - 130	5	35
Ethylbenzene			0.100	0.09927		mg/Kg		99	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1905		mg/Kg		95	70 - 130	1	35
o-Xylene			0.100	0.09450		mg/Kg		95	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-11024-A-1-I MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18897 **Prep Batch: 18887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F2 F1	0.0990	0.03933	F1	mg/Kg		40	70 - 130
Toluene	<0.00199	U F2 F1	0.0990	0.009521	F1	mg/Kg		10	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.0990	0.04334	F1	mg/Kg		44	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.198	0.09630	F1	mg/Kg		49	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0990	0.02899	F1	mg/Kg		29	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*50*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*41*	*S1-*	*70 - 130*

Lab Sample ID: 880-11024-A-1-J MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18897 **Prep Batch: 18887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0998	0.06677	F2 F1	mg/Kg		67	70 - 130	52	35
Toluene	<0.00199	U F2 F1	0.0998	0.07602	F2	mg/Kg		76	70 - 130	155	35
Ethylbenzene	<0.00199	U F2 F1	0.0998	0.07943	F2	mg/Kg		80	70 - 130	59	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1488	F2	mg/Kg		75	70 - 130	43	35
o-Xylene	<0.00199	U F2 F1	0.0998	0.08039	F2	mg/Kg		81	70 - 130	94	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

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

Lab Sample ID: MB 880-18934/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18891 **Prep Batch: 18934**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/09/22 14:52	02/09/22 20:38	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

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

Lab Sample ID: MB 880-18934/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18891 **Prep Batch: 18934**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/09/22 14:52	02/09/22 20:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/09/22 14:52	02/09/22 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*02/09/22 14:52*	*02/09/22 20:38*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/09/22 14:52*	*02/09/22 20:38*	*1*

Lab Sample ID: LCS 880-18934/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18891 **Prep Batch: 18934**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1072		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1015		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-18934/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18891 **Prep Batch: 18934**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1054		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1020		mg/Kg		102	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: 890-1915-A-1-C MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18891 **Prep Batch: 18934**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	852.3		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)	93.3		1000	950.0		mg/Kg		86	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*71*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

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

Lab Sample ID: 890-1915-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18891 **Prep Batch: 18934**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	843.4		mg/Kg		81	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	93.3		998	933.9		mg/Kg		84	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*73*		*70 - 130*
o-Terphenyl	*68*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19069/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/22 02:07	1

Lab Sample ID: LCS 880-19069/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	260.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-19069/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	240.1		mg/Kg		96	90 - 110	8	20

Lab Sample ID: 890-1914-5 MS **Client Sample ID: SS05**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	90.2		250	341.3		mg/Kg		101	90 - 110		

Lab Sample ID: 890-1914-5 MSD **Client Sample ID: SS05**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	90.2		250	348.6		mg/Kg		104	90 - 110	2	20

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-19432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/20/22 12:22	1

Lab Sample ID: LCS 880-19432/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.7		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-19432/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	249.8		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-11202-A-12-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	333		250	582.4		mg/Kg		100	90 - 110		

Lab Sample ID: 880-11202-A-12-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	333		250	567.2		mg/Kg		94	90 - 110	3	20

Lab Sample ID: MB 880-20032/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20033

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/22/22 10:15	1

Lab Sample ID: LCS 880-20032/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20033

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	247.7		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-20032/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20033

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	247.4		mg/Kg		99	90 - 110	0	20

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1914-4 MS **Client Sample ID: SS04**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20033

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	808	F1	248	1022	F1	mg/Kg		87	90 - 110		

Lab Sample ID: 890-1914-4 MSD **Client Sample ID: SS04**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20033

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	808	F1	248	1016	F1	mg/Kg		84	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

GC VOA

Prep Batch: 18884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18884/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 18887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Total/NA	Solid	5035	
890-1914-2	SS02	Total/NA	Solid	5035	
890-1914-3	SS03	Total/NA	Solid	5035	
890-1914-4	SS04	Total/NA	Solid	5035	
890-1914-5	SS05	Total/NA	Solid	5035	
890-1914-6	SS06	Total/NA	Solid	5035	
890-1914-7	SS07	Total/NA	Solid	5035	
MB 880-18887/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18887/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18887/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11024-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-11024-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Total/NA	Solid	8021B	18887
890-1914-2	SS02	Total/NA	Solid	8021B	18887
890-1914-3	SS03	Total/NA	Solid	8021B	18887
890-1914-4	SS04	Total/NA	Solid	8021B	18887
890-1914-5	SS05	Total/NA	Solid	8021B	18887
890-1914-6	SS06	Total/NA	Solid	8021B	18887
890-1914-7	SS07	Total/NA	Solid	8021B	18887
MB 880-18884/5-A	Method Blank	Total/NA	Solid	8021B	18884
MB 880-18887/5-A	Method Blank	Total/NA	Solid	8021B	18887
LCS 880-18887/1-A	Lab Control Sample	Total/NA	Solid	8021B	18887
LCSD 880-18887/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18887
880-11024-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	18887
880-11024-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18887

Analysis Batch: 19024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Total/NA	Solid	Total BTEX	

Analysis Batch: 19173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-2	SS02	Total/NA	Solid	Total BTEX	
890-1914-3	SS03	Total/NA	Solid	Total BTEX	
890-1914-4	SS04	Total/NA	Solid	Total BTEX	
890-1914-5	SS05	Total/NA	Solid	Total BTEX	
890-1914-6	SS06	Total/NA	Solid	Total BTEX	
890-1914-7	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Total/NA	Solid	8015B NM	18934

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

GC Semi VOA (Continued)

Analysis Batch: 18891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-2	SS02	Total/NA	Solid	8015B NM	18934
890-1914-3	SS03	Total/NA	Solid	8015B NM	18934
890-1914-4	SS04	Total/NA	Solid	8015B NM	18934
890-1914-5	SS05	Total/NA	Solid	8015B NM	18934
890-1914-6	SS06	Total/NA	Solid	8015B NM	18934
890-1914-7	SS07	Total/NA	Solid	8015B NM	18934
MB 880-18934/1-A	Method Blank	Total/NA	Solid	8015B NM	18934
LCS 880-18934/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18934
LCSD 880-18934/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18934
890-1915-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	18934
890-1915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18934

Prep Batch: 18934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Total/NA	Solid	8015NM Prep	
890-1914-2	SS02	Total/NA	Solid	8015NM Prep	
890-1914-3	SS03	Total/NA	Solid	8015NM Prep	
890-1914-4	SS04	Total/NA	Solid	8015NM Prep	
890-1914-5	SS05	Total/NA	Solid	8015NM Prep	
890-1914-6	SS06	Total/NA	Solid	8015NM Prep	
890-1914-7	SS07	Total/NA	Solid	8015NM Prep	
MB 880-18934/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18934/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18934/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1915-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1915-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Total/NA	Solid	8015 NM	
890-1914-2	SS02	Total/NA	Solid	8015 NM	
890-1914-3	SS03	Total/NA	Solid	8015 NM	
890-1914-4	SS04	Total/NA	Solid	8015 NM	
890-1914-5	SS05	Total/NA	Solid	8015 NM	
890-1914-6	SS06	Total/NA	Solid	8015 NM	
890-1914-7	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Soluble	Solid	DI Leach	
890-1914-2	SS02	Soluble	Solid	DI Leach	
890-1914-3	SS03	Soluble	Solid	DI Leach	
890-1914-5	SS05	Soluble	Solid	DI Leach	
890-1914-6	SS06	Soluble	Solid	DI Leach	
890-1914-7	SS07	Soluble	Solid	DI Leach	
MB 880-19069/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-5 MS	SS05	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

HPLC/IC (Continued)

Leach Batch: 19069 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-5 MSD	SS05	Soluble	Solid	DI Leach	

Leach Batch: 19432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19432/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19432/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19432/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11202-A-12-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11202-A-12-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-1	SS01	Soluble	Solid	300.0	19069
890-1914-2	SS02	Soluble	Solid	300.0	19069
890-1914-3	SS03	Soluble	Solid	300.0	19069
890-1914-5	SS05	Soluble	Solid	300.0	19069
890-1914-6	SS06	Soluble	Solid	300.0	19069
890-1914-7	SS07	Soluble	Solid	300.0	19069
MB 880-19069/1-A	Method Blank	Soluble	Solid	300.0	19069
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	300.0	19069
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19069
890-1914-5 MS	SS05	Soluble	Solid	300.0	19069
890-1914-5 MSD	SS05	Soluble	Solid	300.0	19069

Analysis Batch: 19879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19432/1-A	Method Blank	Soluble	Solid	300.0	19432
LCS 880-19432/2-A	Lab Control Sample	Soluble	Solid	300.0	19432
LCSD 880-19432/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19432
880-11202-A-12-D MS	Matrix Spike	Soluble	Solid	300.0	19432
880-11202-A-12-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19432

Leach Batch: 20032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-4	SS04	Soluble	Solid	DI Leach	
MB 880-20032/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20032/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20032/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-4 MS	SS04	Soluble	Solid	DI Leach	
890-1914-4 MSD	SS04	Soluble	Solid	DI Leach	

Analysis Batch: 20033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1914-4	SS04	Soluble	Solid	300.0	20032
MB 880-20032/1-A	Method Blank	Soluble	Solid	300.0	20032
LCS 880-20032/2-A	Lab Control Sample	Soluble	Solid	300.0	20032
LCSD 880-20032/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20032
890-1914-4 MS	SS04	Soluble	Solid	300.0	20032
890-1914-4 MSD	SS04	Soluble	Solid	300.0	20032

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS01 Lab Sample ID: 890-1914-1

Date Collected: 02/07/22 12:11 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 06:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19024	02/10/22 10:09	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 02:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1			19488	02/16/22 03:27	CH	XEN MID

Client Sample ID: SS02 Lab Sample ID: 890-1914-2

Date Collected: 02/07/22 12:13 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 06:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19173	02/11/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 02:35	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1			19488	02/16/22 03:33	CH	XEN MID

Client Sample ID: SS03 Lab Sample ID: 890-1914-3

Date Collected: 02/07/22 12:15 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 07:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19173	02/11/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 02:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1			19488	02/16/22 03:40	CH	XEN MID

Client Sample ID: SS04 Lab Sample ID: 890-1914-4

Date Collected: 02/07/22 12:23 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 07:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19173	02/11/22 13:37	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS04 Lab Sample ID: 890-1914-4

Date Collected: 02/07/22 12:23 **Matrix: Solid**
Date Received: 02/07/22 15:51

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			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 03:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	20032	02/22/22 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			20033	02/22/22 11:04	CH	XEN MID

Client Sample ID: SS05 Lab Sample ID: 890-1914-5

Date Collected: 02/07/22 12:27 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 07:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19173	02/11/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 03:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1			19488	02/16/22 03:52	CH	XEN MID

Client Sample ID: SS06 Lab Sample ID: 890-1914-6

Date Collected: 02/07/22 12:30 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 08:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19173	02/11/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 03:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1			19488	02/16/22 04:10	CH	XEN MID

Client Sample ID: SS07 Lab Sample ID: 890-1914-7

Date Collected: 02/07/22 12:33 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	18897	02/10/22 08:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19173	02/11/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		10			18891	02/10/22 04:19	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Client Sample ID: SS07 Lab Sample ID: 890-1914-7

Date Collected: 02/07/22 12:33 **Matrix: Solid**
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1			19488	02/16/22 04:17	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-1914-1
Project/Site: Empire Petroleum- SDG: Eunice Monument South Unit B Facility

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Empire Petroleum-

Job ID: 890-1914-1
SDG: Eunice Monument South Unit B Facility

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1914-1	SS01	Solid	02/07/22 12:11	02/07/22 15:51	0.25
890-1914-2	SS02	Solid	02/07/22 12:13	02/07/22 15:51	0.25
890-1914-3	SS03	Solid	02/07/22 12:15	02/07/22 15:51	0.25
890-1914-4	SS04	Solid	02/07/22 12:23	02/07/22 15:51	0.25
890-1914-5	SS05	Solid	02/07/22 12:27	02/07/22 15:51	0.25
890-1914-6	SS06	Solid	02/07/22 12:30	02/07/22 15:51	0.25
890-1914-7	SS07	Solid	02/07/22 12:33	02/07/22 15:51	0.25

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 1 of 1

Work Order No: _____

2/22/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	WSP USA	Company Name:	WSP USA
Address:	3300 North A Street Building 1, unit 222	Address:	3300 North A Street Building 1, unit 222
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Midland, Texas 79705
Phone:	337-257-8307	Email:	tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:	Empire Petroleum-	Turn Around	
Project Number:	Eunice Monument South Unit B Facility	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Payton Benner	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	21.8/21.6	Thermometer ID	TWM_007
Received Intact:	(Yes) No	Correction Factor:	-0.2
~~Cooler Custody Seals:~~	~~Yes No~~ (N/A)	Total Containers:	
Sample Custody Seals:	Yes No N/A		

ANALYSIS REQUEST

890-1914 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
SS01	S	02/08/22	12:11	0.25	1	X	X	X	Discrete
SS02	S	02/08/22	12:13	0.25	1	X	X	X	Discrete
SS03	S	02/08/22	12:15	0.25	1	X	X	X	Discrete
SS04	S	02/08/22	12:23	0.25	1	X	X	X	Discrete
SS05	S	02/08/22	12:27	0.25	1	X	X	X	Discrete
SS06	S	02/08/22	12:30	0.25	1	X	X	X	Discrete
SS07	S	02/08/22	12:33	0.25	1	X	X	X	Discrete

Work Order Notes

~~TAT starts the day recevied by the lab, if received by 4:30pm~~

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1	pbenner	Cruz Coff	2.7.22 16:5	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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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

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-615 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1914-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 2/11/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Empire Petroleum-	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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 Na2O4S, Q Na2SO3, R - Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
Preservation Code:													
SS01 (890-1914-1)	2/7/22	12 11 Mountain		Solid			X	X	X	X	X	1	
SS02 (890-1914-2)	2/7/22	12 13 Mountain		Solid			X	X	X	X	X	1	
SS03 (890-1914-3)	2/7/22	12 15 Mountain		Solid			X	X	X	X	X	1	
SS04 (890-1914-4)	2/7/22	12 23 Mountain		Solid			X	X	X	X	X	1	
SS05 (890-1914-5)	2/7/22	12 27 Mountain		Solid			X	X	X	X	X	1	
SS06 (890-1914-6)	2/7/22	12 30 Mountain		Solid			X	X	X	X	X	1	
SS07 (890-1914-7)	2/7/22	12 33 Mountain		Solid			X	X	X	X	X	1	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time.	Company	Received by	Date/Time	Company
1	Cle Cup 2-8-22					
2	Relinquished by	Date/Time.	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		2.6/25

Ver: 06/08/2021

Received by OCD: 7/19/2023 1:46:39 PM
Page 28 of 30
2/22/2022
Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1914-1
SDG Number: Eunice Monument South Unit B Facility

Login Number: 1914
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1914-1
SDG Number: Eunice Monument South Unit B Facility

Login Number: 1914
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 02/09/22 11:55 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").	N/A	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-1983-1
Laboratory Sample Delivery Group: 31403551.001 Task 01.02
Client Project/Site: EUNICE

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
3/2/2022 7:32:22 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS
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Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1983-1
Project/Site: EUNICE SDG: 31403551.001 Task 01.02

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Job ID: 890-1983-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1983-1

Receipt
The samples were received on 2/21/2022 10:14 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 1.4°C

Receipt Exceptions
The following samples were listed on the Chain of Custody (COC); however, no samples were received: BH01A (890-1983-1), BH01C (890-1983-2), BH02A (890-1983-3), BH02C (890-1983-4), BH03A (890-1983-5), BH03C (890-1983-6), BH04 (890-1983-7), BH04C (890-1983-8), BH05 (890-1983-9), BH05A (890-1983-10), BH05C (890-1983-11), BH06 (890-1983-12), BH06C (890-1983-13), BH07 (890-1983-14) and BH07C (890-1983-15).

GC VOA
Method 8021B: The following samples were diluted due to the nature of the sample matrix: BH04 (890-1983-7) and BH07 (890-1983-14) at 50.0 and 100.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: BH06 (890-1983-12) at 100.0. 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.

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20076 and analytical batch 880-20020 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH07 (890-1983-14). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-20089 and analytical batch 880-20115 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-11518-A-21-B) and (880-11518-A-21-C MS). Evidence of matrix interferences is not obvious.

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 preparation batch 880-20130 and analytical batch 880-20165 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.BH01A (890-1983-1), BH01C (890-1983-2), BH02A (890-1983-3), BH02C (890-1983-4), BH03A (890-1983-5), BH03C (890-1983-6) and BH04 (890-1983-7)

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH01A

Date Collected: 02/16/22 11:40
Date Received: 02/21/22 10:14
Sample Depth: 2

Lab Sample ID: 890-1983-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/28/22 12:51	02/28/22 21:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/28/22 12:51	02/28/22 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/28/22 12:51*	*02/28/22 21:56*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/28/22 12:51*	*02/28/22 21:56*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		02/22/22 16:57	02/24/22 02:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 02:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*02/22/22 16:57*	*02/24/22 02:07*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/22/22 16:57*	*02/24/22 02:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.5**		5.04		mg/Kg			02/25/22 23:55	1

Client Sample ID: BH01C

Date Collected: 02/16/22 12:00
Date Received: 02/21/22 10:14
Sample Depth: 4

Lab Sample ID: 890-1983-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:17	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:17	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:17	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/28/22 12:51	02/28/22 22:17	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:17	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/28/22 12:51	02/28/22 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/28/22 12:51*	*02/28/22 22:17*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH01C

Date Collected: 02/16/22 12:00
Date Received: 02/21/22 10:14
Sample Depth: 4

Lab Sample ID: 890-1983-2

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/28/22 12:51*	*02/28/22 22:17*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		02/22/22 16:57	02/24/22 02:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/22/22 16:57	02/24/22 02:28	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/22/22 16:57	02/24/22 02:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*76*		*70 - 130*	*02/22/22 16:57*	*02/24/22 02:28*	*1*
o-Terphenyl	*77*		*70 - 130*	*02/22/22 16:57*	*02/24/22 02:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.9**		4.99		mg/Kg			02/26/22 00:02	1

Client Sample ID: BH02A

Date Collected: 02/16/22 12:45
Date Received: 02/21/22 10:14
Sample Depth: 2

Lab Sample ID: 890-1983-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:37	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:37	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:37	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/28/22 12:51	02/28/22 22:37	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	02/28/22 22:37	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/28/22 12:51	02/28/22 22:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/28/22 12:51*	*02/28/22 22:37*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/28/22 12:51*	*02/28/22 22:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**265**		50.0		mg/Kg			02/23/22 11:22	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH02A

Lab Sample ID: 890-1983-3
Matrix: Solid
Date Collected: 02/16/22 12:45
Date Received: 02/21/22 10:14
Sample Depth: 2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		02/22/22 16:57	02/24/22 05:13	1
Diesel Range Organics (Over C10-C28)	**265**		50.0		mg/Kg		02/22/22 16:57	02/24/22 05:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*02/22/22 16:57*	*02/24/22 05:13*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/22/22 16:57*	*02/24/22 05:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.8**		4.98		mg/Kg			02/26/22 00:08	1

Client Sample ID: BH02C

Lab Sample ID: 890-1983-4
Matrix: Solid
Date Collected: 02/16/22 12:55
Date Received: 02/21/22 10:14
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 22:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 22:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 22:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/28/22 12:51	02/28/22 22:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 22:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/28/22 12:51	02/28/22 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/28/22 12:51*	*02/28/22 22:58*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/28/22 12:51*	*02/28/22 22:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		02/22/22 16:57	02/24/22 02:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 02:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*02/22/22 16:57*	*02/24/22 02:48*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/22/22 16:57*	*02/24/22 02:48*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH02C

Date Collected: 02/16/22 12:55
Date Received: 02/21/22 10:14
Sample Depth: 4

Lab Sample ID: 890-1983-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.46		4.96		mg/Kg			02/26/22 00:14	1

Client Sample ID: BH03A

Date Collected: 02/16/22 13:20
Date Received: 02/21/22 10:14
Sample Depth: 2

Lab Sample ID: 890-1983-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/28/22 12:51	02/28/22 23:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/28/22 12:51	02/28/22 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*02/28/22 12:51*	*02/28/22 23:18*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/28/22 12:51*	*02/28/22 23:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		02/22/22 16:57	02/24/22 03:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/22/22 16:57	02/24/22 03:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/22/22 16:57	02/24/22 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/22/22 16:57*	*02/24/22 03:09*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/22/22 16:57*	*02/24/22 03:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.1		5.00		mg/Kg			02/26/22 00:21	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH03C

Lab Sample ID: 890-1983-6
Matrix: Solid
Date Collected: 02/16/22 13:30
Date Received: 02/21/22 10:14
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:39	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:39	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/28/22 12:51	02/28/22 23:39	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	02/28/22 23:39	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/28/22 12:51	02/28/22 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/28/22 12:51*	*02/28/22 23:39*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/28/22 12:51*	*02/28/22 23:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		02/22/22 16:57	02/24/22 03:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 03:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/22/22 16:57*	*02/24/22 03:30*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/22/22 16:57*	*02/24/22 03:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.4**		5.00		mg/Kg			02/26/22 00:27	1

Client Sample ID: BH04

Lab Sample ID: 890-1983-7
Matrix: Solid
Date Collected: 02/16/22 14:15
Date Received: 02/21/22 10:14
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.106**		0.101		mg/Kg		02/28/22 12:51	03/01/22 00:40	50
Toluene	**0.224**		0.101		mg/Kg		02/28/22 12:51	03/01/22 00:40	50
Ethylbenzene	**3.47**		0.101		mg/Kg		02/28/22 12:51	03/01/22 00:40	50
m-Xylene & p-Xylene	**3.59**		0.202		mg/Kg		02/28/22 12:51	03/01/22 00:40	50
o-Xylene	**0.176**		0.101		mg/Kg		02/28/22 12:51	03/01/22 00:40	50
Xylenes, Total	**3.77**		0.202		mg/Kg		02/28/22 12:51	03/01/22 00:40	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*02/28/22 12:51*	*03/01/22 00:40*	*50*

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH04

Lab Sample ID: 890-1983-7
Matrix: Solid
Date Collected: 02/16/22 14:15
Date Received: 02/21/22 10:14
Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/28/22 12:51*	*03/01/22 00:40*	*50*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**7.57**		0.202	mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5070**		250	mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**975**		250	mg/Kg		03/01/22 13:25	03/02/22 02:30	5
Diesel Range Organics (Over C10-C28)	**4090**		250	mg/Kg		03/01/22 13:25	03/02/22 02:30	5
Oil Range Organics (Over C28-C36)	<250	U	250	mg/Kg		03/01/22 13:25	03/02/22 02:30	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*112*		*70 - 130*	*03/01/22 13:25*	*03/02/22 02:30*	*5*
o-Terphenyl	*84*		*70 - 130*	*03/01/22 13:25*	*03/02/22 02:30*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**575**		5.00	mg/Kg			02/26/22 00:33	1

Client Sample ID: BH04C

Lab Sample ID: 890-1983-8
Matrix: Solid
Date Collected: 02/16/22 14:30
Date Received: 02/21/22 10:14
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/28/22 12:51	02/28/22 23:59	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/28/22 12:51	02/28/22 23:59	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/28/22 12:51	02/28/22 23:59	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		02/28/22 12:51	02/28/22 23:59	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/28/22 12:51	02/28/22 23:59	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		02/28/22 12:51	02/28/22 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/28/22 12:51*	*02/28/22 23:59*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/28/22 12:51*	*02/28/22 23:59*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/23/22 11:22	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH04C

Lab Sample ID: 890-1983-8
Matrix: Solid
Date Collected: 02/16/22 14:30
Date Received: 02/21/22 10:14
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		02/22/22 16:57	02/24/22 03:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 03:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/24/22 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*02/22/22 16:57*	*02/24/22 03:50*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/22/22 16:57*	*02/24/22 03:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.9**		5.05		mg/Kg			02/24/22 18:15	1

Client Sample ID: BH05

Lab Sample ID: 890-1983-9
Matrix: Solid
Date Collected: 02/17/22 09:50
Date Received: 02/21/22 10:14
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00405**		0.00200		mg/Kg		02/28/22 12:51	03/01/22 00:20	1
Toluene	**0.00456**		0.00200		mg/Kg		02/28/22 12:51	03/01/22 00:20	1
Ethylbenzene	**0.0455**		0.00200		mg/Kg		02/28/22 12:51	03/01/22 00:20	1
m-Xylene & p-Xylene	**0.0810**		0.00399		mg/Kg		02/28/22 12:51	03/01/22 00:20	1
o-Xylene	**0.00822**		0.00200		mg/Kg		02/28/22 12:51	03/01/22 00:20	1
Xylenes, Total	**0.0892**		0.00399		mg/Kg		02/28/22 12:51	03/01/22 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*183*	*S1+*	*70 - 130*	*02/28/22 12:51*	*03/01/22 00:20*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/28/22 12:51*	*03/01/22 00:20*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.143**		0.00399		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3070**		250		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**480**		250		mg/Kg		03/01/22 13:25	03/02/22 02:51	5
Diesel Range Organics (Over C10-C28)	**2590**		250		mg/Kg		03/01/22 13:25	03/02/22 02:51	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		03/01/22 13:25	03/02/22 02:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/01/22 13:25*	*03/02/22 02:51*	*5*
o-Terphenyl	*76*		*70 - 130*	*03/01/22 13:25*	*03/02/22 02:51*	*5*

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH05

Lab Sample ID: 890-1983-9
Matrix: Solid
Date Collected: 02/17/22 09:50
Date Received: 02/21/22 10:14
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.5**		4.99		mg/Kg			02/24/22 19:00	1

Client Sample ID: BH05C

Lab Sample ID: 890-1983-11
Matrix: Solid
Date Collected: 02/17/22 10:00
Date Received: 02/21/22 10:14
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	03/01/22 02:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	03/01/22 02:22	1
Ethylbenzene	**0.00272**		0.00200		mg/Kg		02/28/22 12:51	03/01/22 02:22	1
m-Xylene & p-Xylene	**0.00492**		0.00399		mg/Kg		02/28/22 12:51	03/01/22 02:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	03/01/22 02:22	1
Xylenes, Total	**0.00492**		0.00399		mg/Kg		02/28/22 12:51	03/01/22 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*02/28/22 12:51*	*03/01/22 02:22*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*02/28/22 12:51*	*03/01/22 02:22*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00764**		0.00399		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**387**		49.9		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		02/22/22 16:57	02/24/22 04:52	1
Diesel Range Organics (Over C10-C28)	**387**		49.9		mg/Kg		02/22/22 16:57	02/24/22 04:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/22/22 16:57	02/24/22 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*02/22/22 16:57*	*02/24/22 04:52*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/22/22 16:57*	*02/24/22 04:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**410**		4.98		mg/Kg			02/24/22 19:07	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH06

Lab Sample ID: 890-1983-12
Matrix: Solid

Date Collected: 02/17/22 11:05
Date Received: 02/21/22 10:14
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.202	U	0.202		mg/Kg		03/02/22 08:00	03/02/22 13:37	100
Toluene	**0.284**		0.202		mg/Kg		03/02/22 08:00	03/02/22 13:37	100
Ethylbenzene	**3.00**		0.202		mg/Kg		03/02/22 08:00	03/02/22 13:37	100
m-Xylene & p-Xylene	**3.63**		0.404		mg/Kg		03/02/22 08:00	03/02/22 13:37	100
o-Xylene	**0.323**		0.202		mg/Kg		03/02/22 08:00	03/02/22 13:37	100
Xylenes, Total	**3.95**		0.404		mg/Kg		03/02/22 08:00	03/02/22 13:37	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*185*	*S1+*	*70 - 130*	*03/02/22 08:00*	*03/02/22 13:37*	*100*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/02/22 08:00*	*03/02/22 13:37*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**7.24**		0.404		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4930**		249		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**830**		249		mg/Kg		02/22/22 15:52	02/23/22 03:38	5
Diesel Range Organics (Over C10-C28)	**4100**		249		mg/Kg		02/22/22 15:52	02/23/22 03:38	5
Oil Range Organics (Over C28-C36)	<249	U	249		mg/Kg		02/22/22 15:52	02/23/22 03:38	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*02/22/22 15:52*	*02/23/22 03:38*	*5*
o-Terphenyl	*83*		*70 - 130*	*02/22/22 15:52*	*02/23/22 03:38*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**252**		5.02		mg/Kg			02/24/22 19:13	1

Client Sample ID: BH06C

Lab Sample ID: 890-1983-13
Matrix: Solid

Date Collected: 02/17/22 11:20
Date Received: 02/21/22 10:14
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	03/01/22 03:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	03/01/22 03:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	03/01/22 03:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/28/22 12:51	03/01/22 03:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/28/22 12:51	03/01/22 03:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/28/22 12:51	03/01/22 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*02/28/22 12:51*	*03/01/22 03:03*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH06C

Lab Sample ID: 890-1983-13
Matrix: Solid
Date Collected: 02/17/22 11:20
Date Received: 02/21/22 10:14
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/28/22 12:51*	*03/01/22 03:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/22 15:52	02/23/22 02:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 15:52	02/23/22 02:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 15:52	02/23/22 02:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*89*		*70 - 130*	*02/22/22 15:52*	*02/23/22 02:34*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/22/22 15:52*	*02/23/22 02:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**567**		4.98		mg/Kg			02/24/22 19:19	1

Client Sample ID: BH07

Lab Sample ID: 890-1983-14
Matrix: Solid
Date Collected: 02/17/22 12:20
Date Received: 02/21/22 10:14
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.622**		0.200		mg/Kg		02/28/22 12:51	03/01/22 01:00	100
Toluene	**2.43**		0.200		mg/Kg		02/28/22 12:51	03/01/22 01:00	100
Ethylbenzene	**17.1**		0.200		mg/Kg		02/28/22 12:51	03/01/22 01:00	100
m-Xylene & p-Xylene	**28.1**		0.401		mg/Kg		02/28/22 12:51	03/01/22 01:00	100
o-Xylene	**2.83**		0.200		mg/Kg		02/28/22 12:51	03/01/22 01:00	100
Xylenes, Total	**30.9**		0.401		mg/Kg		02/28/22 12:51	03/01/22 01:00	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*173*	*S1+*	*70 - 130*	*02/28/22 12:51*	*03/01/22 01:00*	*100*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*02/28/22 12:51*	*03/01/22 01:00*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**51.1**		0.401		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**8560**		250		mg/Kg			02/23/22 11:22	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH07

Lab Sample ID: 890-1983-14
Matrix: Solid
Date Collected: 02/17/22 12:20
Date Received: 02/21/22 10:14
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1960		250		mg/Kg		02/22/22 15:52	02/23/22 03:17	5
Diesel Range Organics (Over C10-C28)	6600		250		mg/Kg		02/22/22 15:52	02/23/22 03:17	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		02/22/22 15:52	02/23/22 03:17	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*38*	*S1-*	*70 - 130*	*02/22/22 15:52*	*02/23/22 03:17*	*5*
o-Terphenyl	*23*	*S1-*	*70 - 130*	*02/22/22 15:52*	*02/23/22 03:17*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.8		4.99		mg/Kg			02/24/22 19:39	1

Client Sample ID: BH07C

Lab Sample ID: 890-1983-15
Matrix: Solid
Date Collected: 02/17/22 12:35
Date Received: 02/21/22 10:14
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	03/01/22 03:23	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	03/01/22 03:23	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	03/01/22 03:23	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/28/22 12:51	03/01/22 03:23	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/28/22 12:51	03/01/22 03:23	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/28/22 12:51	03/01/22 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*02/28/22 12:51*	*03/01/22 03:23*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/28/22 12:51*	*03/01/22 03:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/02/22 20:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/23/22 11:22	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/22/22 15:52	02/23/22 02:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/22/22 15:52	02/23/22 02:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/22/22 15:52	02/23/22 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/22/22 15:52*	*02/23/22 02:55*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/22/22 15:52*	*02/23/22 02:55*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH07C
Date Collected: 02/17/22 12:35
Date Received: 02/21/22 10:14
Sample Depth: 4

Lab Sample ID: 890-1983-15
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.72		4.96		mg/Kg			02/24/22 19:45	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-11814-A-1-B MS	Matrix Spike	124	91										
880-11814-A-1-C MSD	Matrix Spike Duplicate	136 S1+	87										
890-1983-1	BH01A	106	98										
890-1983-1 MS	BH01A	111	97										
890-1983-1 MSD	BH01A	109	96										
890-1983-2	BH01C	106	99										
890-1983-3	BH02A	112	98										
890-1983-4	BH02C	104	98										
890-1983-5	BH03A	113	97										
890-1983-6	BH03C	104	97										
890-1983-7	BH04	109	93										
890-1983-8	BH04C	102	97										
890-1983-9	BH05	183 S1+	93										
890-1983-11	BH05C	129	77										
890-1983-12	BH06	185 S1+	93										
890-1983-13	BH06C	103	100										
890-1983-14	BH07	173 S1+	87										
890-1983-15	BH07C	101	99										
LCS 880-20498/1-A	Lab Control Sample	101	100										
LCS 880-20523/1-A	Lab Control Sample	100	101										
LCSD 880-20498/2-A	Lab Control Sample Dup	104	101										
LCSD 880-20523/2-A	Lab Control Sample Dup	102	100										
MB 880-20209/5-A	Method Blank	104	96										
MB 880-20498/5-A	Method Blank	101	95										
MB 880-20523/5-A	Method Blank	104	96										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-11518-A-21-C MS	Matrix Spike	75	63 S1-										
880-11518-A-21-D MSD	Matrix Spike Duplicate	74	80										
890-1983-1	BH01A	102	106										
890-1983-2	BH01C	76	77										
890-1983-3	BH02A	90	87										
890-1983-4	BH02C	97	98										
890-1983-5	BH03A	84	86										
890-1983-6	BH03C	100	102										
890-1983-7	BH04	112	84										
890-1983-8	BH04C	99	103										
890-1983-9	BH05	92	76										
890-1983-11	BH05C	86	86										
890-1983-12	BH06	72	83										
890-1983-13	BH06C	89	93										

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1983-1
Project/Site: EUNICE SDG: 31403551.001 Task 01.02

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1983-14	BH07	38 S1-	23 S1-
890-1983-15	BH07C	91	92
890-1985-A-1-B MS	Matrix Spike	79	84
890-1985-A-1-C MSD	Matrix Spike Duplicate	79	82
890-2018-A-1-H MS	Matrix Spike	101	95
890-2018-A-1-I MSD	Matrix Spike Duplicate	98	97
LCS 880-20610/2-A	Lab Control Sample	103	87
LCSD 880-20610/3-A	Lab Control Sample Dup	104	90
MB 880-20610/1-A	Method Blank	100	98

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-20076/2-A	Lab Control Sample	107	112
LCS 880-20089/2-A	Lab Control Sample	100	101
LCSD 880-20076/3-A	Lab Control Sample Dup	97	110
LCSD 880-20089/3-A	Lab Control Sample Dup	110	112
MB 880-20076/1-A	Method Blank	92	100
MB 880-20089/1-A	Method Blank	101	106

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20209/5-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20209

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/28/22 07:30	02/28/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/28/22 07:30*	*02/28/22 10:40*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/28/22 07:30*	*02/28/22 10:40*	*1*

Lab Sample ID: MB 880-20498/5-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20498

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/28/22 12:51	02/28/22 21:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 12:51	02/28/22 21:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/28/22 12:51	02/28/22 21:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*02/28/22 12:51*	*02/28/22 21:34*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/28/22 12:51*	*02/28/22 21:34*	*1*

Lab Sample ID: LCS 880-20498/1-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20498

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1047		mg/Kg		105	70 - 130		
Toluene			0.100	0.1025		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.1019		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.2099		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1066		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-20498/2-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20498

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1127		mg/Kg		113	70 - 130	7	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCSD 880-20498/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20398 — **Prep Batch: 20498**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.1096		mg/Kg		110	70 - 130	7	35
Ethylbenzene			0.100	0.1081		mg/Kg		108	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2238		mg/Kg		112	70 - 130	6	35
o-Xylene			0.100	0.1171		mg/Kg		117	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-1983-1 MS — **Client Sample ID: BH01A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20398 — **Prep Batch: 20498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0990	0.08725		mg/Kg		88	70 - 130
Toluene	<0.00200	U	0.0990	0.08125		mg/Kg		82	70 - 130
Ethylbenzene	<0.00200	U	0.0990	0.08199		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1618		mg/Kg		81	70 - 130
o-Xylene	<0.00200	U	0.0990	0.08006		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-1983-1 MSD — **Client Sample ID: BH01A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20398 — **Prep Batch: 20498**

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	0.09190		mg/Kg		92	70 - 130	5	35
Toluene	<0.00200	U	0.100	0.08554		mg/Kg		85	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.100	0.08645		mg/Kg		85	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1719		mg/Kg		85	70 - 130	6	35
o-Xylene	<0.00200	U	0.100	0.08020		mg/Kg		80	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-20523/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20656 — **Prep Batch: 20523**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/22 08:00	03/02/22 10:52	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: MB 880-20523/5-A
Matrix: Solid
Analysis Batch: 20656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20523

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/22 08:00	03/02/22 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/02/22 08:00*	*03/02/22 10:52*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/02/22 08:00*	*03/02/22 10:52*	*1*

Lab Sample ID: LCS 880-20523/1-A
Matrix: Solid
Analysis Batch: 20656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20523

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1010		mg/Kg		101	70 - 130		
Toluene			0.100	0.09891		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.09931		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene			0.200	0.2053		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1006		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-20523/2-A
Matrix: Solid
Analysis Batch: 20656

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20523

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1081		mg/Kg		108	70 - 130	7	35
Toluene			0.100	0.1065		mg/Kg		107	70 - 130	7	35
Ethylbenzene			0.100	0.1073		mg/Kg		107	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.2216		mg/Kg		111	70 - 130	8	35
o-Xylene			0.100	0.1087		mg/Kg		109	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-11814-A-1-B MS
Matrix: Solid
Analysis Batch: 20656

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20523

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F2 F1	0.101	0.006109	F1	mg/Kg		5	70 - 130		
Toluene	0.00355	F2 F1	0.101	0.05388	F1	mg/Kg		50	70 - 130		
Ethylbenzene	<0.00200	U F1	0.101	0.03209	F1	mg/Kg		31	70 - 130		
m-Xylene & p-Xylene	<0.00400	U F1	0.202	0.3573	F1	mg/Kg		175	70 - 130		
o-Xylene	<0.00200	U F1	0.101	0.1313		mg/Kg		128	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 880-11814-A-1-B MS
Matrix: Solid
Analysis Batch: 20656

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20523

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 880-11814-A-1-C MSD
Matrix: Solid
Analysis Batch: 20656

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20523

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0994	0.01011	F2 F1	mg/Kg		9	70 - 130	49	35
Toluene	0.00355	F2 F1	0.0994	0.09011	F2	mg/Kg		87	70 - 130	50	35
Ethylbenzene	<0.00200	U F1	0.0994	0.04057	F1	mg/Kg		40	70 - 130	23	35
m-Xylene & p-Xylene	<0.00400	U F1	0.199	0.4460	F1	mg/Kg		223	70 - 130	22	35
o-Xylene	<0.00200	U F1	0.0994	0.1525	F1	mg/Kg		152	70 - 130	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-20076/1-A
Matrix: Solid
Analysis Batch: 20020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20076

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/22 15:52	02/22/22 18:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 15:52	02/22/22 18:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 15:52	02/22/22 18:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	02/22/22 15:52	02/22/22 18:46	1
o-Terphenyl	100		70 - 130	02/22/22 15:52	02/22/22 18:46	1

Lab Sample ID: LCS 880-20076/2-A
Matrix: Solid
Analysis Batch: 20020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20076

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	926.5		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	969.7		mg/Kg		97	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	112		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCSD 880-20076/3-A
Matrix: Solid
Analysis Batch: 20020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20076

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	904.1		mg/Kg		90	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	910.9		mg/Kg		91	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*110*		*70 - 130*

Lab Sample ID: 890-1985-A-1-B MS
Matrix: Solid
Analysis Batch: 20020

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	1000	1471	F1	mg/Kg		144	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	1563	F1	mg/Kg		153	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

Lab Sample ID: 890-1985-A-1-C MSD
Matrix: Solid
Analysis Batch: 20020

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20076

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	998	1514	F1	mg/Kg		149	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	1556	F1	mg/Kg		153	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: MB 880-20089/1-A
Matrix: Solid
Analysis Batch: 20115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20089

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/23/22 20:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/23/22 20:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/22/22 16:57	02/23/22 20:26	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: MB 880-20089/1-A
Matrix: Solid
Analysis Batch: 20115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20089

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	02/22/22 16:57	02/23/22 20:26	1
o-Terphenyl	106		70 - 130	02/22/22 16:57	02/23/22 20:26	1

Lab Sample ID: LCS 880-20089/2-A
Matrix: Solid
Analysis Batch: 20115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20089

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	929.8		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	888.1		mg/Kg		89	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-20089/3-A
Matrix: Solid
Analysis Batch: 20115

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20089

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1281	*1	mg/Kg		128	70 - 130	32	20
Diesel Range Organics (Over C10-C28)			1000	996.6		mg/Kg		100	70 - 130	12	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: 880-11518-A-21-C MS
Matrix: Solid
Analysis Batch: 20115

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20089

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	1000	1152		mg/Kg		111	70 - 130		
Diesel Range Organics (Over C10-C28)	180		1000	1413		mg/Kg		123	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	63	S1-	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 880-11518-A-21-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20115 — **Prep Batch: 20089**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	1166		mg/Kg		112	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	180		998	1478		mg/Kg		130	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Lab Sample ID: MB 880-20610/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20583 — **Prep Batch: 20610**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/01/22 13:25	03/01/22 20:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/01/22 13:25	03/01/22 20:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/01/22 13:25	03/01/22 20:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/01/22 13:25*	*03/01/22 20:07*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/01/22 13:25*	*03/01/22 20:07*	*1*

Lab Sample ID: LCS 880-20610/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20583 — **Prep Batch: 20610**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1004		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	805.6		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: LCSD 880-20610/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20583 — **Prep Batch: 20610**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1008		mg/Kg		101	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	858.0		mg/Kg		86	70 - 130	6	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCSD 880-20610/3-A
Matrix: Solid
Analysis Batch: 20583

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20610

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 890-2018-A-1-H MS
Matrix: Solid
Analysis Batch: 20583

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	996.1		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	875.9		mg/Kg		88	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-2018-A-1-I MSD
Matrix: Solid
Analysis Batch: 20583

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20610

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1026		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	900.7		mg/Kg		90	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	97		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20130/1-A
Matrix: Solid
Analysis Batch: 20165

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/25/22 09:44	1

Lab Sample ID: LCS 880-20130/2-A
Matrix: Solid
Analysis Batch: 20165

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	249.1		mg/Kg		100	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-20130/3-A
Matrix: Solid
Analysis Batch: 20165

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	255.6		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 880-11518-A-11-F MS
Matrix: Solid
Analysis Batch: 20165

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	538		248	780.5		mg/Kg		98	90 - 110		

Lab Sample ID: 880-11518-A-11-G MSD
Matrix: Solid
Analysis Batch: 20165

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	538		248	780.3		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-20134/1-A
Matrix: Solid
Analysis Batch: 20166

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/24/22 17:56	1

Lab Sample ID: LCS 880-20134/2-A
Matrix: Solid
Analysis Batch: 20166

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	254.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-20134/3-A
Matrix: Solid
Analysis Batch: 20166

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	257.5		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-1983-8 MS
Matrix: Solid
Analysis Batch: 20166

Client Sample ID: BH04C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	19.9		253	276.4		mg/Kg		102	90 - 110		

Lab Sample ID: 890-1983-8 MSD
Matrix: Solid
Analysis Batch: 20166

Client Sample ID: BH04C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19.9		253	273.8		mg/Kg		101	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

GC VOA

Prep Batch: 20209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20209/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 20398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Total/NA	Solid	8021B	20498
890-1983-2	BH01C	Total/NA	Solid	8021B	20498
890-1983-3	BH02A	Total/NA	Solid	8021B	20498
890-1983-4	BH02C	Total/NA	Solid	8021B	20498
890-1983-5	BH03A	Total/NA	Solid	8021B	20498
890-1983-6	BH03C	Total/NA	Solid	8021B	20498
890-1983-7	BH04	Total/NA	Solid	8021B	20498
890-1983-8	BH04C	Total/NA	Solid	8021B	20498
890-1983-9	BH05	Total/NA	Solid	8021B	20498
890-1983-11	BH05C	Total/NA	Solid	8021B	20498
890-1983-13	BH06C	Total/NA	Solid	8021B	20498
890-1983-14	BH07	Total/NA	Solid	8021B	20498
890-1983-15	BH07C	Total/NA	Solid	8021B	20498
MB 880-20209/5-A	Method Blank	Total/NA	Solid	8021B	20209
MB 880-20498/5-A	Method Blank	Total/NA	Solid	8021B	20498
LCS 880-20498/1-A	Lab Control Sample	Total/NA	Solid	8021B	20498
LCSD 880-20498/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20498
890-1983-1 MS	BH01A	Total/NA	Solid	8021B	20498
890-1983-1 MSD	BH01A	Total/NA	Solid	8021B	20498

Prep Batch: 20498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Total/NA	Solid	5035	
890-1983-2	BH01C	Total/NA	Solid	5035	
890-1983-3	BH02A	Total/NA	Solid	5035	
890-1983-4	BH02C	Total/NA	Solid	5035	
890-1983-5	BH03A	Total/NA	Solid	5035	
890-1983-6	BH03C	Total/NA	Solid	5035	
890-1983-7	BH04	Total/NA	Solid	5035	
890-1983-8	BH04C	Total/NA	Solid	5035	
890-1983-9	BH05	Total/NA	Solid	5035	
890-1983-11	BH05C	Total/NA	Solid	5035	
890-1983-13	BH06C	Total/NA	Solid	5035	
890-1983-14	BH07	Total/NA	Solid	5035	
890-1983-15	BH07C	Total/NA	Solid	5035	
MB 880-20498/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20498/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20498/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1983-1 MS	BH01A	Total/NA	Solid	5035	
890-1983-1 MSD	BH01A	Total/NA	Solid	5035	

Prep Batch: 20523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-12	BH06	Total/NA	Solid	5035	
MB 880-20523/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20523/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20523/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

GC VOA (Continued)

Prep Batch: 20523 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11814-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-11814-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-12	BH06	Total/NA	Solid	8021B	20523
MB 880-20523/5-A	Method Blank	Total/NA	Solid	8021B	20523
LCS 880-20523/1-A	Lab Control Sample	Total/NA	Solid	8021B	20523
LCSD 880-20523/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20523
880-11814-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	20523
880-11814-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20523

Analysis Batch: 20742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Total/NA	Solid	Total BTEX	
890-1983-2	BH01C	Total/NA	Solid	Total BTEX	
890-1983-3	BH02A	Total/NA	Solid	Total BTEX	
890-1983-4	BH02C	Total/NA	Solid	Total BTEX	
890-1983-5	BH03A	Total/NA	Solid	Total BTEX	
890-1983-6	BH03C	Total/NA	Solid	Total BTEX	
890-1983-7	BH04	Total/NA	Solid	Total BTEX	
890-1983-8	BH04C	Total/NA	Solid	Total BTEX	
890-1983-9	BH05	Total/NA	Solid	Total BTEX	
890-1983-11	BH05C	Total/NA	Solid	Total BTEX	
890-1983-12	BH06	Total/NA	Solid	Total BTEX	
890-1983-13	BH06C	Total/NA	Solid	Total BTEX	
890-1983-14	BH07	Total/NA	Solid	Total BTEX	
890-1983-15	BH07C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 20020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-12	BH06	Total/NA	Solid	8015B NM	20076
890-1983-13	BH06C	Total/NA	Solid	8015B NM	20076
890-1983-14	BH07	Total/NA	Solid	8015B NM	20076
890-1983-15	BH07C	Total/NA	Solid	8015B NM	20076
MB 880-20076/1-A	Method Blank	Total/NA	Solid	8015B NM	20076
LCS 880-20076/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20076
LCSD 880-20076/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20076
890-1985-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	20076
890-1985-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20076

Prep Batch: 20076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-12	BH06	Total/NA	Solid	8015NM Prep	
890-1983-13	BH06C	Total/NA	Solid	8015NM Prep	
890-1983-14	BH07	Total/NA	Solid	8015NM Prep	
890-1983-15	BH07C	Total/NA	Solid	8015NM Prep	
MB 880-20076/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20076/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

GC Semi VOA (Continued)

Prep Batch: 20076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-20076/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1985-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1985-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 20089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Total/NA	Solid	8015NM Prep	
890-1983-2	BH01C	Total/NA	Solid	8015NM Prep	
890-1983-3	BH02A	Total/NA	Solid	8015NM Prep	
890-1983-4	BH02C	Total/NA	Solid	8015NM Prep	
890-1983-5	BH03A	Total/NA	Solid	8015NM Prep	
890-1983-6	BH03C	Total/NA	Solid	8015NM Prep	
890-1983-8	BH04C	Total/NA	Solid	8015NM Prep	
890-1983-11	BH05C	Total/NA	Solid	8015NM Prep	
MB 880-20089/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20089/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20089/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11518-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11518-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Total/NA	Solid	8015B NM	20089
890-1983-2	BH01C	Total/NA	Solid	8015B NM	20089
890-1983-3	BH02A	Total/NA	Solid	8015B NM	20089
890-1983-4	BH02C	Total/NA	Solid	8015B NM	20089
890-1983-5	BH03A	Total/NA	Solid	8015B NM	20089
890-1983-6	BH03C	Total/NA	Solid	8015B NM	20089
890-1983-8	BH04C	Total/NA	Solid	8015B NM	20089
890-1983-11	BH05C	Total/NA	Solid	8015B NM	20089
MB 880-20089/1-A	Method Blank	Total/NA	Solid	8015B NM	20089
LCS 880-20089/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20089
LCSD 880-20089/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20089
880-11518-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	20089
880-11518-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20089

Analysis Batch: 20148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Total/NA	Solid	8015 NM	
890-1983-2	BH01C	Total/NA	Solid	8015 NM	
890-1983-3	BH02A	Total/NA	Solid	8015 NM	
890-1983-4	BH02C	Total/NA	Solid	8015 NM	
890-1983-5	BH03A	Total/NA	Solid	8015 NM	
890-1983-6	BH03C	Total/NA	Solid	8015 NM	
890-1983-7	BH04	Total/NA	Solid	8015 NM	
890-1983-8	BH04C	Total/NA	Solid	8015 NM	
890-1983-9	BH05	Total/NA	Solid	8015 NM	
890-1983-11	BH05C	Total/NA	Solid	8015 NM	
890-1983-12	BH06	Total/NA	Solid	8015 NM	
890-1983-13	BH06C	Total/NA	Solid	8015 NM	
890-1983-14	BH07	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

GC Semi VOA (Continued)

Analysis Batch: 20148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-15	BH07C	Total/NA	Solid	8015 NM	

Analysis Batch: 20583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-7	BH04	Total/NA	Solid	8015B NM	20610
890-1983-9	BH05	Total/NA	Solid	8015B NM	20610
MB 880-20610/1-A	Method Blank	Total/NA	Solid	8015B NM	20610
LCS 880-20610/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20610
LCSD 880-20610/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20610
890-2018-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	20610
890-2018-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20610

Prep Batch: 20610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-7	BH04	Total/NA	Solid	8015NM Prep	
890-1983-9	BH05	Total/NA	Solid	8015NM Prep	
MB 880-20610/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20610/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20610/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2018-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2018-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 20130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Soluble	Solid	DI Leach	
890-1983-2	BH01C	Soluble	Solid	DI Leach	
890-1983-3	BH02A	Soluble	Solid	DI Leach	
890-1983-4	BH02C	Soluble	Solid	DI Leach	
890-1983-5	BH03A	Soluble	Solid	DI Leach	
890-1983-6	BH03C	Soluble	Solid	DI Leach	
890-1983-7	BH04	Soluble	Solid	DI Leach	
MB 880-20130/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20130/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20130/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11518-A-11-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11518-A-11-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 20134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-8	BH04C	Soluble	Solid	DI Leach	
890-1983-9	BH05	Soluble	Solid	DI Leach	
890-1983-11	BH05C	Soluble	Solid	DI Leach	
890-1983-12	BH06	Soluble	Solid	DI Leach	
890-1983-13	BH06C	Soluble	Solid	DI Leach	
890-1983-14	BH07	Soluble	Solid	DI Leach	
890-1983-15	BH07C	Soluble	Solid	DI Leach	
MB 880-20134/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20134/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20134/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

HPLC/IC (Continued)

Leach Batch: 20134 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-8 MS	BH04C	Soluble	Solid	DI Leach	
890-1983-8 MSD	BH04C	Soluble	Solid	DI Leach	

Analysis Batch: 20165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-1	BH01A	Soluble	Solid	300.0	20130
890-1983-2	BH01C	Soluble	Solid	300.0	20130
890-1983-3	BH02A	Soluble	Solid	300.0	20130
890-1983-4	BH02C	Soluble	Solid	300.0	20130
890-1983-5	BH03A	Soluble	Solid	300.0	20130
890-1983-6	BH03C	Soluble	Solid	300.0	20130
890-1983-7	BH04	Soluble	Solid	300.0	20130
MB 880-20130/1-A	Method Blank	Soluble	Solid	300.0	20130
LCS 880-20130/2-A	Lab Control Sample	Soluble	Solid	300.0	20130
LCSD 880-20130/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20130
880-11518-A-11-F MS	Matrix Spike	Soluble	Solid	300.0	20130
880-11518-A-11-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20130

Analysis Batch: 20166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1983-8	BH04C	Soluble	Solid	300.0	20134
890-1983-9	BH05	Soluble	Solid	300.0	20134
890-1983-11	BH05C	Soluble	Solid	300.0	20134
890-1983-12	BH06	Soluble	Solid	300.0	20134
890-1983-13	BH06C	Soluble	Solid	300.0	20134
890-1983-14	BH07	Soluble	Solid	300.0	20134
890-1983-15	BH07C	Soluble	Solid	300.0	20134
MB 880-20134/1-A	Method Blank	Soluble	Solid	300.0	20134
LCS 880-20134/2-A	Lab Control Sample	Soluble	Solid	300.0	20134
LCSD 880-20134/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20134
890-1983-8 MS	BH04C	Soluble	Solid	300.0	20134
890-1983-8 MSD	BH04C	Soluble	Solid	300.0	20134

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH01A
Date Collected: 02/16/22 11:40
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 21:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 02:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/25/22 23:55	SC	XEN MID

Client Sample ID: BH01C
Date Collected: 02/16/22 12:00
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 22:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 02:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/26/22 00:02	SC	XEN MID

Client Sample ID: BH02A
Date Collected: 02/16/22 12:45
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 22:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 05:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/26/22 00:08	SC	XEN MID

Client Sample ID: BH02C
Date Collected: 02/16/22 12:55
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 22:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH02C

Date Collected: 02/16/22 12:55
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-4
Matrix: Solid

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			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 02:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/26/22 00:14	SC	XEN MID

Client Sample ID: BH03A

Date Collected: 02/16/22 13:20
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 23:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 03:09	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/26/22 00:21	SC	XEN MID

Client Sample ID: BH03C

Date Collected: 02/16/22 13:30
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 23:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 03:30	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/26/22 00:27	SC	XEN MID

Client Sample ID: BH04

Date Collected: 02/16/22 14:15
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	20398	03/01/22 00:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20610	03/01/22 13:25	DM	XEN MID
Total/NA	Analysis	8015B NM		5			20583	03/02/22 02:30	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH04
Date Collected: 02/16/22 14:15
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	20130	02/23/22 09:54	CH	XEN MID
Soluble	Analysis	300.0		1			20165	02/26/22 00:33	SC	XEN MID

Client Sample ID: BH04C
Date Collected: 02/16/22 14:30
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 23:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 03:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 18:15	CH	XEN MID

Client Sample ID: BH05
Date Collected: 02/17/22 09:50
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	03/01/22 00:20	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20610	03/01/22 13:25	DM	XEN MID
Total/NA	Analysis	8015B NM		5			20583	03/02/22 02:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 19:00	CH	XEN MID

Client Sample ID: BH05C
Date Collected: 02/17/22 10:00
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	03/01/22 02:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20089	02/22/22 16:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20115	02/24/22 04:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 19:07	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH06

Date Collected: 02/17/22 11:05
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20523	03/02/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	20656	03/02/22 13:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20076	02/22/22 15:52	DM	XEN MID
Total/NA	Analysis	8015B NM		5			20020	02/23/22 03:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 19:13	CH	XEN MID

Client Sample ID: BH06C

Date Collected: 02/17/22 11:20
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	03/01/22 03:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20076	02/22/22 15:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20020	02/23/22 02:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 19:19	CH	XEN MID

Client Sample ID: BH07

Date Collected: 02/17/22 12:20
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	20398	03/01/22 01:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20076	02/22/22 15:52	DM	XEN MID
Total/NA	Analysis	8015B NM		5			20020	02/23/22 03:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 19:39	CH	XEN MID

Client Sample ID: BH07C

Date Collected: 02/17/22 12:35
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	20498	02/28/22 12:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	03/01/22 03:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20742	03/02/22 20:11	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Client Sample ID: BH07C
Date Collected: 02/17/22 12:35
Date Received: 02/21/22 10:14

Lab Sample ID: 890-1983-15
Matrix: Solid

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			20148	02/23/22 11:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20076	02/22/22 15:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20020	02/23/22 02:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20134	02/23/22 10:06	CH	XEN MID
Soluble	Analysis	300.0		1			20166	02/24/22 19:45	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1983-1
Project/Site: EUNICE SDG: 31403551.001 Task 01.02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-1983-1
Project/Site: EUNICE SDG: 31403551.001 Task 01.02

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-1983-1
SDG: 31403551.001 Task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1983-1	BH01A	Solid	02/16/22 11:40	02/21/22 10:14	2
890-1983-2	BH01C	Solid	02/16/22 12:00	02/21/22 10:14	4
890-1983-3	BH02A	Solid	02/16/22 12:45	02/21/22 10:14	2
890-1983-4	BH02C	Solid	02/16/22 12:55	02/21/22 10:14	4
890-1983-5	BH03A	Solid	02/16/22 13:20	02/21/22 10:14	2
890-1983-6	BH03C	Solid	02/16/22 13:30	02/21/22 10:14	4
890-1983-7	BH04	Solid	02/16/22 14:15	02/21/22 10:14	1
890-1983-8	BH04C	Solid	02/16/22 14:30	02/21/22 10:14	4
890-1983-9	BH05	Solid	02/17/22 09:50	02/21/22 10:14	1
890-1983-11	BH05C	Solid	02/17/22 10:00	02/21/22 10:14	4
890-1983-12	BH06	Solid	02/17/22 11:05	02/21/22 10:14	1
890-1983-13	BH06C	Solid	02/17/22 11:20	02/21/22 10:14	4
890-1983-14	BH07	Solid	02/17/22 12:20	02/21/22 10:14	1
890-1983-15	BH07C	Solid	02/17/22 12:35	02/21/22 10:14	4

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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3/2/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	Alexis.Castro@wsp.com; Tacoma.Morrissey@wsp.com

Work Order Comments

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

Project Name:	EUNICE	Turn Around	
Project Number:	31403551.001	Routine	☑
P.O. Number:	2/1/2022	Rush:	
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	1.6/1.4	Thermometer ID	TMH-008	
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA G=8021)	Chloride (EPA 300.0)
BH01A	S	02/16/2022	1140	2'	1	x	x	x
BH01C	S	02/16/2022	1200	4'	1	x	x	x
BH02A	S	02/16/2022	1245	2'	1	x	x	x
BH02C	S	02/16/2022	1255	4'	1	x	x	x
BH03A	S	02/16/2022	1320	2'	1	x	x	x
BH03C	S	02/16/2022	1330	4'	1	x	x	x
BH04	S	02/16/2022	1415	1'	1	x	x	x
BH04C	S	02/16/2022	1430	4'	1	x	x	x
		AC						

ANALYSIS REQUEST

890-1983 Chain of Custody

Work Order Notes

API: 30-025-04297

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		2-21-221014	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

XENCO LABORATORIES
Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Work Order No: _____

3/2/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	Alexis.Castro@wsp.com; Tacoma.Morrissey@wsp.com

Work Order Comments

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

Project Name:	EUNICE	Turn Around	
Project Number:	31403551.001	Routine	☑
P.O. Number:	2/1/2022	Rush:	
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Work Order Notes

API: 30-025-04297

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
BH05	S	02/17/2022	0950	1'	1	x	x	x	
BH05A	S	02/17/2022	0955	2'	1	x	x	x	
BH05C	S	02/17/2022	1000	4'	1	x	x	x	
BH06	S	02/17/2022	1105	1'	1	x	x	x	
BH06C	S	02/17/2022	1120	4'	1	x	x	x	
BH07	S	02/17/2022	1220	1'	1	x	x	x	
BH07C	S	02/17/2022	1235	4'	1	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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1			2-21-22 1019			
3				4		
5				6		

Revised Date 051418 Rev 2018 1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1983-1
SDG Number: 31403551.001 Task 01.02

Login Number: 1983
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1983-1
SDG Number: 31403551.001 Task 01.02

Login Number: 1983
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/22/22 02:59 PM

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

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2012-1
Laboratory Sample Delivery Group: 31403551.001 task 01.02
Client Project/Site: Empire EMSU B Facility

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
2/28/2022 8:29:00 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS
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Have a Question? Ask The Expert
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Job ID: 890-2012-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2012-1

Receipt
The samples were received on 2/24/2022 4:13 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 0.4°C

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

GC Semi VOA
Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-20421 and analytical batch 880-20405 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28)

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

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

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS01 Lab Sample ID: 890-2012-1

Date Collected: 02/24/22 13:35 **Matrix: Solid**
Date Received: 02/24/22 16:13
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/28/22 07:30	02/28/22 11:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/28/22 07:30	02/28/22 11:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/28/22 07:30	02/28/22 11:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/28/22 07:30	02/28/22 11:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/28/22 07:30	02/28/22 11:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/28/22 07:30	02/28/22 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/28/22 07:30*	*02/28/22 11:01*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/28/22 07:30*	*02/28/22 11:01*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/28/22 19:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 15:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/28/22 09:31	02/28/22 15:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*02/28/22 09:31*	*02/28/22 15:55*	*1*
o-Terphenyl	*112*		*70 - 130*	*02/28/22 09:31*	*02/28/22 15:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			02/28/22 15:56	1

Client Sample ID: FS02 Lab Sample ID: 890-2012-2

Date Collected: 02/24/22 13:40 **Matrix: Solid**
Date Received: 02/24/22 16:13
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/28/22 07:30	02/28/22 11:22	1
Toluene	**0.00205**		0.00198		mg/Kg		02/28/22 07:30	02/28/22 11:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/28/22 07:30	02/28/22 11:22	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/28/22 07:30	02/28/22 11:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/28/22 07:30	02/28/22 11:22	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/28/22 07:30	02/28/22 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*02/28/22 07:30*	*02/28/22 11:22*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/28/22 07:30*	*02/28/22 11:22*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS02 — Lab Sample ID: 890-2012-2

Date Collected: 02/24/22 13:40 **Matrix: Solid**
Date Received: 02/24/22 16:13
Sample Depth: 4

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/28/22 18:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/28/22 19:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/28/22 09:31	02/28/22 16:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		02/28/22 09:31	02/28/22 16:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/28/22 09:31	02/28/22 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*02/28/22 09:31*	*02/28/22 16:16*	*1*
o-Terphenyl	*109*		*70 - 130*	*02/28/22 09:31*	*02/28/22 16:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			02/28/22 16:23	1

Client Sample ID: FS03 — Lab Sample ID: 890-2012-3

Date Collected: 02/24/22 13:45 **Matrix: Solid**
Date Received: 02/24/22 16:13
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 11:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 11:42	1
Ethylbenzene	**0.00309**		0.00200		mg/Kg		02/28/22 07:30	02/28/22 11:42	1
m-Xylene & p-Xylene	**0.00692**		0.00400		mg/Kg		02/28/22 07:30	02/28/22 11:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 11:42	1
Xylenes, Total	**0.00692**		0.00400		mg/Kg		02/28/22 07:30	02/28/22 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*191*	*S1+*	*70 - 130*	*02/28/22 07:30*	*02/28/22 11:42*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/28/22 07:30*	*02/28/22 11:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0100**		0.00400		mg/Kg			02/28/22 18:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**200**		49.9		mg/Kg			02/28/22 19:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/28/22 09:31	02/28/22 16:38	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS03 — Lab Sample ID: 890-2012-3

Date Collected: 02/24/22 13:45 **Matrix: Solid**
Date Received: 02/24/22 16:13
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	**200**	***1**	49.9		mg/Kg		02/28/22 09:31	02/28/22 16:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/28/22 09:31	02/28/22 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*02/28/22 09:31*	*02/28/22 16:38*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/28/22 09:31*	*02/28/22 16:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**58.1**		4.96		mg/Kg			02/28/22 16:32	1

Client Sample ID: FS04 — Lab Sample ID: 890-2012-4

Date Collected: 02/24/22 13:50 **Matrix: Solid**
Date Received: 02/24/22 16:13
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/28/22 07:30	02/28/22 12:03	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/28/22 07:30	02/28/22 12:03	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/28/22 07:30	02/28/22 12:03	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/28/22 07:30	02/28/22 12:03	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/28/22 07:30	02/28/22 12:03	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/28/22 07:30	02/28/22 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/28/22 07:30*	*02/28/22 12:03*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/28/22 07:30*	*02/28/22 12:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/28/22 18:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/28/22 19:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 14:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/28/22 09:31	02/28/22 14:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/28/22 09:31*	*02/28/22 14:51*	*1*
o-Terphenyl	*105*		*70 - 130*	*02/28/22 09:31*	*02/28/22 14:51*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Client Sample ID: FS04

Date Collected: 02/24/22 13:50
Date Received: 02/24/22 16:13
Sample Depth: 4

Lab Sample ID: 890-2012-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	286		4.99		mg/Kg			02/28/22 16:41	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2012-1	FS01	105	98
890-2012-1 MS	FS01	104	101
890-2012-1 MSD	FS01	103	100
890-2012-2	FS02	111	100
890-2012-3	FS03	191 S1+	99
890-2012-4	FS04	106	98
LCS 880-20209/1-A	Lab Control Sample	104	91
LCSD 880-20209/2-A	Lab Control Sample Dup	102	100
MB 880-20209/5-A	Method Blank	104	96

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2012-1	FS01	113	112
890-2012-2	FS02	111	109
890-2012-3	FS03	106	106
890-2012-4	FS04	107	105
890-2012-4 MS	FS04	117	99
890-2012-4 MSD	FS04	106	108

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-20421/2-A	Lab Control Sample	491 S1+	482 S1+
LCSD 880-20421/3-A	Lab Control Sample Dup	617 S1+	598 S1+
MB 880-20421/1-A	Method Blank	123	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20209/5-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20209

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/28/22 07:30	02/28/22 10:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/28/22 07:30	02/28/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/28/22 07:30*	*02/28/22 10:40*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/28/22 07:30*	*02/28/22 10:40*	*1*

Lab Sample ID: LCS 880-20209/1-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20209

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1070		mg/Kg		107	70 - 130		
Toluene			0.100	0.1082		mg/Kg		108	70 - 130		
Ethylbenzene			0.100	0.1075		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2239		mg/Kg		112	70 - 130		
o-Xylene			0.100	0.1086		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 880-20209/2-A
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20209

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1053		mg/Kg		105	70 - 130	2	35
Toluene			0.100	0.1040		mg/Kg		104	70 - 130	4	35
Ethylbenzene			0.100	0.1035		mg/Kg		104	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2164		mg/Kg		108	70 - 130	3	35
o-Xylene			0.100	0.1050		mg/Kg		105	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2012-1 MS
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 20209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.101	0.1055		mg/Kg		104	70 - 130		
Toluene	<0.00199	U	0.101	0.1036		mg/Kg		102	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

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

Lab Sample ID: 890-2012-1 MS
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 20209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.101	0.1034		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.2161		mg/Kg		106	70 - 130
o-Xylene	<0.00199	U	0.101	0.1046		mg/Kg		104	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-2012-1 MSD
Matrix: Solid
Analysis Batch: 20398

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 20209

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1087		mg/Kg		108	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.1072		mg/Kg		107	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.100	0.1069		mg/Kg		106	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2227		mg/Kg		111	70 - 130	3	35
o-Xylene	<0.00199	U	0.100	0.1082		mg/Kg		108	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-20421/1-A
Matrix: Solid
Analysis Batch: 20405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20421

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 13:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 13:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/28/22 09:31	02/28/22 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*02/28/22 09:31*	*02/28/22 13:48*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/28/22 09:31*	*02/28/22 13:48*	*1*

Lab Sample ID: LCS 880-20421/2-A
Matrix: Solid
Analysis Batch: 20405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20421

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1031		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)			1000	916.8		mg/Kg		92	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

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

Lab Sample ID: LCS 880-20421/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20405 **Prep Batch: 20421**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	491	S1+	70 - 130
o-Terphenyl	482	S1+	70 - 130

Lab Sample ID: LCSD 880-20421/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20405 **Prep Batch: 20421**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1252		mg/Kg		125	70 - 130	19	20
Diesel Range Organics (Over C10-C28)			1000	1191	*1	mg/Kg		119	70 - 130	26	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	617	S1+	70 - 130
o-Terphenyl	598	S1+	70 - 130

Lab Sample ID: 890-2012-4 MS **Client Sample ID: FS04**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20405 **Prep Batch: 20421**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1295		mg/Kg		128	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *1	1000	1203		mg/Kg		119	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-2012-4 MSD **Client Sample ID: FS04**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20405 **Prep Batch: 20421**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1264		mg/Kg		125	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	998	1166		mg/Kg		115	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	108		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20414/1-A
Matrix: Solid
Analysis Batch: 20532

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/28/22 15:30	1

Lab Sample ID: LCS 880-20414/2-A
Matrix: Solid
Analysis Batch: 20532

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	246.0		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-20414/3-A
Matrix: Solid
Analysis Batch: 20532

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	244.0		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-2012-1 MS
Matrix: Solid
Analysis Batch: 20532

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<5.04	U	252	253.3		mg/Kg		99	90 - 110		

Lab Sample ID: 890-2012-1 MSD
Matrix: Solid
Analysis Batch: 20532

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<5.04	U	252	253.1		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

GC VOA

Prep Batch: 20209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Total/NA	Solid	5035	
890-2012-2	FS02	Total/NA	Solid	5035	
890-2012-3	FS03	Total/NA	Solid	5035	
890-2012-4	FS04	Total/NA	Solid	5035	
MB 880-20209/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20209/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20209/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2012-1 MS	FS01	Total/NA	Solid	5035	
890-2012-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 20398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Total/NA	Solid	8021B	20209
890-2012-2	FS02	Total/NA	Solid	8021B	20209
890-2012-3	FS03	Total/NA	Solid	8021B	20209
890-2012-4	FS04	Total/NA	Solid	8021B	20209
MB 880-20209/5-A	Method Blank	Total/NA	Solid	8021B	20209
LCS 880-20209/1-A	Lab Control Sample	Total/NA	Solid	8021B	20209
LCSD 880-20209/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20209
890-2012-1 MS	FS01	Total/NA	Solid	8021B	20209
890-2012-1 MSD	FS01	Total/NA	Solid	8021B	20209

Analysis Batch: 20558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-2	FS02	Total/NA	Solid	Total BTEX	
890-2012-3	FS03	Total/NA	Solid	Total BTEX	
890-2012-4	FS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 20405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Total/NA	Solid	8015B NM	20421
890-2012-2	FS02	Total/NA	Solid	8015B NM	20421
890-2012-3	FS03	Total/NA	Solid	8015B NM	20421
890-2012-4	FS04	Total/NA	Solid	8015B NM	20421
MB 880-20421/1-A	Method Blank	Total/NA	Solid	8015B NM	20421
LCS 880-20421/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20421
LCSD 880-20421/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20421
890-2012-4 MS	FS04	Total/NA	Solid	8015B NM	20421
890-2012-4 MSD	FS04	Total/NA	Solid	8015B NM	20421

Prep Batch: 20421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Total/NA	Solid	8015NM Prep	
890-2012-2	FS02	Total/NA	Solid	8015NM Prep	
890-2012-3	FS03	Total/NA	Solid	8015NM Prep	
890-2012-4	FS04	Total/NA	Solid	8015NM Prep	
MB 880-20421/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20421/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20421/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

GC Semi VOA (Continued)

Prep Batch: 20421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-4 MS	FS04	Total/NA	Solid	8015NM Prep	
890-2012-4 MSD	FS04	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Total/NA	Solid	8015 NM	
890-2012-2	FS02	Total/NA	Solid	8015 NM	
890-2012-3	FS03	Total/NA	Solid	8015 NM	
890-2012-4	FS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Soluble	Solid	DI Leach	
890-2012-2	FS02	Soluble	Solid	DI Leach	
890-2012-3	FS03	Soluble	Solid	DI Leach	
890-2012-4	FS04	Soluble	Solid	DI Leach	
MB 880-20414/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20414/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20414/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2012-1 MS	FS01	Soluble	Solid	DI Leach	
890-2012-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 20532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2012-1	FS01	Soluble	Solid	300.0	20414
890-2012-2	FS02	Soluble	Solid	300.0	20414
890-2012-3	FS03	Soluble	Solid	300.0	20414
890-2012-4	FS04	Soluble	Solid	300.0	20414
MB 880-20414/1-A	Method Blank	Soluble	Solid	300.0	20414
LCS 880-20414/2-A	Lab Control Sample	Soluble	Solid	300.0	20414
LCSD 880-20414/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20414
890-2012-1 MS	FS01	Soluble	Solid	300.0	20414
890-2012-1 MSD	FS01	Soluble	Solid	300.0	20414

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Client Sample ID: FS01
Date Collected: 02/24/22 13:35
Date Received: 02/24/22 16:13

Lab Sample ID: 890-2012-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20209	02/28/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 11:01	KL	XEN MID
Total/NA	Analysis	8015 NM		1			20563	02/28/22 19:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20421	02/28/22 09:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20405	02/28/22 15:55	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	20414	02/28/22 09:12	CH	XEN MID
Soluble	Analysis	300.0		1			20532	02/28/22 15:56	SC	XEN MID

Client Sample ID: FS02
Date Collected: 02/24/22 13:40
Date Received: 02/24/22 16:13

Lab Sample ID: 890-2012-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	20209	02/28/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 11:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20558	02/28/22 18:56	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20563	02/28/22 19:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20421	02/28/22 09:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20405	02/28/22 16:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	20414	02/28/22 09:12	CH	XEN MID
Soluble	Analysis	300.0		1			20532	02/28/22 16:23	SC	XEN MID

Client Sample ID: FS03
Date Collected: 02/24/22 13:45
Date Received: 02/24/22 16:13

Lab Sample ID: 890-2012-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20209	02/28/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 11:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20558	02/28/22 18:56	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20563	02/28/22 19:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20421	02/28/22 09:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20405	02/28/22 16:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20414	02/28/22 09:12	CH	XEN MID
Soluble	Analysis	300.0		1			20532	02/28/22 16:32	SC	XEN MID

Client Sample ID: FS04
Date Collected: 02/24/22 13:50
Date Received: 02/24/22 16:13

Lab Sample ID: 890-2012-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20209	02/28/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20398	02/28/22 12:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20558	02/28/22 18:56	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20563	02/28/22 19:38	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Client Sample ID: FS04

Date Collected: 02/24/22 13:50
Date Received: 02/24/22 16:13

Lab Sample ID: 890-2012-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20421	02/28/22 09:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20405	02/28/22 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20414	02/28/22 09:12	CH	XEN MID
Soluble	Analysis	300.0		1			20532	02/28/22 16:41	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2012-1
Project/Site: Empire EMSU B Facility SDG: 31403551.001 task 01.02

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Empire EMSU B Facility

Job ID: 890-2012-1
SDG: 31403551.001 task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2012-1	FS01	Solid	02/24/22 13:35	02/24/22 16:13	4
890-2012-2	FS02	Solid	02/24/22 13:40	02/24/22 16:13	4
890-2012-3	FS03	Solid	02/24/22 13:45	02/24/22 16:13	4
890-2012-4	FS04	Solid	02/24/22 13:50	02/24/22 16:13	4

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 1

2/28/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA Inc.	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849 Email:	conner.shore@wsp.com; tacoma.morrissey@wsp.com	

Work Order Comments

Program: UST/PST ☐ RP ☐ rownfields R ☐ C ☐ perfund ☐
State of Project:
Reporting:Level II ☐ evel III ☐ ST/UST ☐ RP ☐ vel IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Empire EMSU B Facility	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine ☐	
P.O. Number:		Rush: 24 hr	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	0.4/0.4	Thermometer ID	IR4-307
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

890-2012 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS01	s	2/24/2022	1335	4'	1	x	x	x	Grab
FS02	s	2/24/2022	1340	4'	1	x	x	x	Grab
FS03	s	2/24/2022	1345	4'	1	x	x	x	Grab
FS04	s	2/24/2022	1350	4'	1	x	x	x	Grab

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Page 21 of 23

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1	2	2.24.22 1613	4		
3			6		

Revised Date 051418 Rev 2018.1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2012-1
SDG Number: 31403551.001 task 01.02

Login Number: 2012
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2012-1
SDG Number: 31403551.001 task 01.02

Login Number: 2012
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 02/28/22 09:02 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").	N/A	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2029-1
Laboratory Sample Delivery Group: 31403551.001
Client Project/Site: EUNICE

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
3/1/2022 9:17:15 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: WSP USA Inc.
Project/Site: EUNICE

Laboratory Job ID: 890-2029-1
SDG: 31403551.001

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2029-1
Project/Site: EUNICE SDG: 31403551.001

Qualifiers

GC 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
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: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Job ID: 890-2029-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2029-1

Receipt
The sample was received on 2/28/2022 9:23 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

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

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

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

Released to Imaging: 10/13/2023 10:56:27 AM

Client Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Client Sample ID: BH05A

Date Collected: 02/17/22 09:55
Date Received: 02/28/22 09:23
Sample Depth: 2

Lab Sample ID: 890-2029-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 21:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 21:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 21:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/01/22 08:30	03/01/22 21:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 21:55	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/01/22 08:30	03/01/22 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/01/22 08:30*	*03/01/22 21:55*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/01/22 08:30*	*03/01/22 21:55*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/01/22 22:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**219**		49.9		mg/Kg			03/01/22 19:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/01/22 13:00	03/01/22 14:55	1
Diesel Range Organics (Over C10-C28)	**219**		49.9		mg/Kg		03/01/22 13:00	03/01/22 14:55	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/01/22 13:00	03/01/22 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/01/22 13:00*	*03/01/22 14:55*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/01/22 13:00*	*03/01/22 14:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.36**		4.97		mg/Kg			03/01/22 14:15	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)									
		BFB1	DFBZ1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-2029-1	BH05A	97	100								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-2029-1	BH05A	97	92								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20600/1-A
Matrix: Solid
Analysis Batch: 20602

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/01/22 10:57	1

Lab Sample ID: LCS 880-20600/2-A
Matrix: Solid
Analysis Batch: 20602

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	242.0		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-20600/3-A
Matrix: Solid
Analysis Batch: 20602

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	241.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-2028-A-4-D MS
Matrix: Solid
Analysis Batch: 20602

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	143		252	395.5		mg/Kg		100	90 - 110		

Lab Sample ID: 890-2028-A-4-E MSD
Matrix: Solid
Analysis Batch: 20602

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	143		252	396.0		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

GC VOA

Prep Batch: 20526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Total/NA	Solid	5035	

Analysis Batch: 20577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Total/NA	Solid	8021B	20526

Analysis Batch: 20649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Total/NA	Solid	8015B NM	20521

Analysis Batch: 20634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Soluble	Solid	DI Leach	
MB 880-20600/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20600/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20600/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2028-A-4-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2028-A-4-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2029-1	BH05A	Soluble	Solid	300.0	20600
MB 880-20600/1-A	Method Blank	Soluble	Solid	300.0	20600
LCS 880-20600/2-A	Lab Control Sample	Soluble	Solid	300.0	20600
LCSD 880-20600/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20600
890-2028-A-4-D MS	Matrix Spike	Soluble	Solid	300.0	20600
890-2028-A-4-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20600

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Client Sample ID: BH05A

Date Collected: 02/17/22 09:55
Date Received: 02/28/22 09:23

Lab Sample ID: 890-2029-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20577	03/01/22 21:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	20649	03/01/22 22:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20634	03/01/22 19:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20521	03/01/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20583	03/01/22 14:55	AJ	XEN MID
Soluble	Leach	DI Leach			20600	03/01/22 12:29	SC	XEN MID
Soluble	Analysis	300.0		1	20602	03/01/22 14:15	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: EUNICE

Job ID: 890-2029-1
SDG: 31403551.001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2029-1	BH05A	Solid	02/17/22 09:55	02/28/22 09:23	2

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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3/1/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	Alexis.Castro@wsp.com; Tacoma.Morrissey@wsp.com

Work Order Comments

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

Project Name:	EUNICE	Turn Around	
Project Number:	31403551.001	Routine ☐	
P.O. Number:	02/01/2022	Rush: 24hr	
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.8 1.4	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.7	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
BH05A	S	2/17/2022	0955	2'	1	x	x	x

ANALYSIS REQUEST

890-2029 Chain of Custody

Work Order Notes

API: 30-025-04297

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		2/18/22 9:23	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2029-1
SDG Number: 31403551.001

Login Number: 2029
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2029-1
SDG Number: 31403551.001

Login Number: 2029
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/01/22 11:15 AM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2046-1
Laboratory Sample Delivery Group: 31403551.001 task 01.02
Client Project/Site: Eunice Monument South Unit B Facility

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
3/7/2022 12:27:59 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS
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Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Released to Imaging: 10/13/2023 10:56:27 AM

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Job ID: 890-2046-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2046-1

Receipt
The samples were received on 3/3/2022 4:55 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 1.6°C

GC VOA
Method 8021B: The following samples were diluted due to the nature of the sample matrix: FS17 (890-2046-1), FS16 (890-2046-2), FS15 (890-2046-3), FS13 (890-2046-4), FS11 (890-2046-5), FS12 (890-2046-6), FS08 (890-2046-7) and FS10 (890-2046-8) at 20.0, 20.0, 20.0, 20.0, 20.0, 20.0, 20.0 and 20.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-20895 and analytical batch 880-20859 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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

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

Released to Imaging: 10/13/2023 10:56:27 AM

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS17 — Lab Sample ID: 890-2046-1

Date Collected: 03/03/22 13:00 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 00:53	20
Toluene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 00:53	20
Ethylbenzene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 00:53	20
m-Xylene & p-Xylene	<0.0800	U	0.0800		mg/Kg		03/04/22 12:01	03/06/22 00:53	20
o-Xylene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 00:53	20
Xylenes, Total	<0.0800	U	0.0800		mg/Kg		03/04/22 12:01	03/06/22 00:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*03/04/22 12:01*	*03/06/22 00:53*	*20*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/04/22 12:01*	*03/06/22 00:53*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0800	U	0.0800		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**395**		50.0		mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:14	1
Diesel Range Organics (Over C10-C28)	**395**		50.0		mg/Kg		03/04/22 14:51	03/06/22 01:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*03/04/22 14:51*	*03/06/22 01:14*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/04/22 14:51*	*03/06/22 01:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			03/05/22 08:05	1

Client Sample ID: FS16 — Lab Sample ID: 890-2046-2

Date Collected: 03/03/22 13:30 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0397	U	0.0397		mg/Kg		03/04/22 12:01	03/06/22 01:13	20
Toluene	<0.0397	U	0.0397		mg/Kg		03/04/22 12:01	03/06/22 01:13	20
Ethylbenzene	<0.0397	U	0.0397		mg/Kg		03/04/22 12:01	03/06/22 01:13	20
m-Xylene & p-Xylene	<0.0794	U	0.0794		mg/Kg		03/04/22 12:01	03/06/22 01:13	20
o-Xylene	<0.0397	U	0.0397		mg/Kg		03/04/22 12:01	03/06/22 01:13	20
Xylenes, Total	<0.0794	U	0.0794		mg/Kg		03/04/22 12:01	03/06/22 01:13	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*03/04/22 12:01*	*03/06/22 01:13*	*20*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS16 — Lab Sample ID: 890-2046-2

Date Collected: 03/03/22 13:30 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/04/22 12:01*	*03/06/22 01:13*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0794	U	0.0794		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**106**		50.0		mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:34	1
Diesel Range Organics (Over C10-C28)	**106**		50.0		mg/Kg		03/04/22 14:51	03/06/22 01:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*99*		*70 - 130*	*03/04/22 14:51*	*03/06/22 01:34*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/04/22 14:51*	*03/06/22 01:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/05/22 08:41	1

Client Sample ID: FS15 — Lab Sample ID: 890-2046-3

Date Collected: 03/03/22 13:35 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:33	20
Toluene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:33	20
Ethylbenzene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:33	20
m-Xylene & p-Xylene	<0.0798	U	0.0798		mg/Kg		03/04/22 12:01	03/06/22 01:33	20
o-Xylene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:33	20
Xylenes, Total	<0.0798	U	0.0798		mg/Kg		03/04/22 12:01	03/06/22 01:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:01*	*03/06/22 01:33*	*20*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/04/22 12:01*	*03/06/22 01:33*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0798	U	0.0798		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/06/22 20:29	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS15 Lab Sample ID: 890-2046-3

Date Collected: 03/03/22 13:35 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/04/22 14:51*	*03/06/22 01:55*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/04/22 14:51*	*03/06/22 01:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			03/05/22 08:53	1

Client Sample ID: FS13 Lab Sample ID: 890-2046-4

Date Collected: 03/03/22 13:40 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:54	20
Toluene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:54	20
Ethylbenzene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:54	20
m-Xylene & p-Xylene	<0.0798	U	0.0798		mg/Kg		03/04/22 12:01	03/06/22 01:54	20
o-Xylene	<0.0399	U	0.0399		mg/Kg		03/04/22 12:01	03/06/22 01:54	20
Xylenes, Total	<0.0798	U	0.0798		mg/Kg		03/04/22 12:01	03/06/22 01:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*03/04/22 12:01*	*03/06/22 01:54*	*20*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*03/04/22 12:01*	*03/06/22 01:54*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0798	U	0.0798		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**163**		50.0		mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 02:15	1
Diesel Range Organics (Over C10-C28)	**163**		50.0		mg/Kg		03/04/22 14:51	03/06/22 02:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/04/22 14:51*	*03/06/22 02:15*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/04/22 14:51*	*03/06/22 02:15*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS13 — Lab Sample ID: 890-2046-4

Date Collected: 03/03/22 13:40 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			03/05/22 09:04	1

Client Sample ID: FS11 — Lab Sample ID: 890-2046-5

Date Collected: 03/03/22 13:45 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402		mg/Kg		03/04/22 12:01	03/06/22 02:14	20
Toluene	<0.0402	U	0.0402		mg/Kg		03/04/22 12:01	03/06/22 02:14	20
Ethylbenzene	**0.0634**		0.0402		mg/Kg		03/04/22 12:01	03/06/22 02:14	20
m-Xylene & p-Xylene	<0.0803	U	0.0803		mg/Kg		03/04/22 12:01	03/06/22 02:14	20
o-Xylene	**0.157**		0.0402		mg/Kg		03/04/22 12:01	03/06/22 02:14	20
Xylenes, Total	**0.157**		0.0803		mg/Kg		03/04/22 12:01	03/06/22 02:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*57*	*S1-*	*70 - 130*	*03/04/22 12:01*	*03/06/22 02:14*	*20*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*03/04/22 12:01*	*03/06/22 02:14*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.220**		0.0803		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**436**		50.0		mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 02:35	1
Diesel Range Organics (Over C10-C28)	**436**		50.0		mg/Kg		03/04/22 14:51	03/06/22 02:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*03/04/22 14:51*	*03/06/22 02:35*	*1*
o-Terphenyl	*124*		*70 - 130*	*03/04/22 14:51*	*03/06/22 02:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.6**		4.97		mg/Kg			03/05/22 09:16	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS12 — Lab Sample ID: 890-2046-6

Date Collected: 03/03/22 13:50 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0403	U	0.0403		mg/Kg		03/04/22 12:01	03/06/22 02:34	20
Toluene	<0.0403	U	0.0403		mg/Kg		03/04/22 12:01	03/06/22 02:34	20
Ethylbenzene	<0.0403	U	0.0403		mg/Kg		03/04/22 12:01	03/06/22 02:34	20
m-Xylene & p-Xylene	<0.0806	U	0.0806		mg/Kg		03/04/22 12:01	03/06/22 02:34	20
o-Xylene	<0.0403	U	0.0403		mg/Kg		03/04/22 12:01	03/06/22 02:34	20
Xylenes, Total	<0.0806	U	0.0806		mg/Kg		03/04/22 12:01	03/06/22 02:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*03/04/22 12:01*	*03/06/22 02:34*	*20*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/04/22 12:01*	*03/06/22 02:34*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0806	U	0.0806		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**68.5**		50.0		mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 03:16	1
Diesel Range Organics (Over C10-C28)	**68.5**		50.0		mg/Kg		03/04/22 14:51	03/06/22 03:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/04/22 14:51*	*03/06/22 03:16*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/04/22 14:51*	*03/06/22 03:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.3**		4.96		mg/Kg			03/05/22 09:52	1

Client Sample ID: FS08 — Lab Sample ID: 890-2046-7

Date Collected: 03/03/22 13:55 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		03/04/22 12:01	03/06/22 02:55	20
Toluene	<0.0398	U	0.0398		mg/Kg		03/04/22 12:01	03/06/22 02:55	20
Ethylbenzene	<0.0398	U	0.0398		mg/Kg		03/04/22 12:01	03/06/22 02:55	20
m-Xylene & p-Xylene	<0.0795	U	0.0795		mg/Kg		03/04/22 12:01	03/06/22 02:55	20
o-Xylene	<0.0398	U	0.0398		mg/Kg		03/04/22 12:01	03/06/22 02:55	20
Xylenes, Total	<0.0795	U	0.0795		mg/Kg		03/04/22 12:01	03/06/22 02:55	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/04/22 12:01*	*03/06/22 02:55*	*20*

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS08 — Lab Sample ID: 890-2046-7

Date Collected: 03/03/22 13:55 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/04/22 12:01*	*03/06/22 02:55*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0795	U	0.0795		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**285**		49.9		mg/Kg			03/06/22 20:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/04/22 14:51	03/06/22 03:37	1
Diesel Range Organics (Over C10-C28)	**285**		49.9		mg/Kg		03/04/22 14:51	03/06/22 03:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 14:51	03/06/22 03:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*116*		*70 - 130*	*03/04/22 14:51*	*03/06/22 03:37*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/04/22 14:51*	*03/06/22 03:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**328**		4.95		mg/Kg			03/05/22 10:04	1

Client Sample ID: FS10 — Lab Sample ID: 890-2046-8

Date Collected: 03/03/22 14:00 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 03:15	20
Toluene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 03:15	20
Ethylbenzene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 03:15	20
m-Xylene & p-Xylene	<0.0800	U	0.0800		mg/Kg		03/04/22 12:01	03/06/22 03:15	20
o-Xylene	<0.0400	U	0.0400		mg/Kg		03/04/22 12:01	03/06/22 03:15	20
Xylenes, Total	<0.0800	U	0.0800		mg/Kg		03/04/22 12:01	03/06/22 03:15	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/04/22 12:01*	*03/06/22 03:15*	*20*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/04/22 12:01*	*03/06/22 03:15*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0800	U	0.0800		mg/Kg			03/06/22 20:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**152**		50.0		mg/Kg			03/06/22 20:29	1

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS10 Lab Sample ID: 890-2046-8

Date Collected: 03/03/22 14:00 **Matrix: Solid**
Date Received: 03/03/22 16:55
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 03:57	1
Diesel Range Organics (Over C10-C28)	**152**		50.0		mg/Kg		03/04/22 14:51	03/06/22 03:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/06/22 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/04/22 14:51*	*03/06/22 03:57*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/04/22 14:51*	*03/06/22 03:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**169**		4.98		mg/Kg			03/05/22 10:15	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2045-A-21-I MS	Matrix Spike	108	98
890-2045-A-21-J MSD	Matrix Spike Duplicate	99	94
890-2046-1	FS17	90	84
890-2046-2	FS16	85	84
890-2046-3	FS15	99	87
890-2046-4	FS13	91	86
890-2046-5	FS11	57 S1-	79
890-2046-6	FS12	85	84
890-2046-7	FS08	87	85
890-2046-8	FS10	92	85
LCS 880-20895/1-A	Lab Control Sample	99	99
LCSD 880-20895/2-A	Lab Control Sample Dup	104	103
MB 880-20684/5-A	Method Blank	97	98
MB 880-20895/5-A	Method Blank	96	99

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2045-A-21-G MS	Matrix Spike	89	76
890-2045-A-21-H MSD	Matrix Spike Duplicate	93	78
890-2046-1	FS17	120	107
890-2046-2	FS16	99	93
890-2046-3	FS15	108	112
890-2046-4	FS13	106	101
890-2046-5	FS11	116	124
890-2046-6	FS12	96	96
890-2046-7	FS08	116	116
890-2046-8	FS10	108	106
LCS 880-20921/2-A	Lab Control Sample	112	98
LCSD 880-20921/3-A	Lab Control Sample Dup	107	99
MB 880-20921/1-A	Method Blank	112	127

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20684/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20684**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:03	03/05/22 12:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:03	03/05/22 12:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:03	03/05/22 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/22 13:03	03/05/22 12:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:03	03/05/22 12:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/22 13:03	03/05/22 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/02/22 13:03*	*03/05/22 12:07*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/02/22 13:03*	*03/05/22 12:07*	*1*

Lab Sample ID: MB 880-20895/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20895**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:01	03/05/22 23:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:01	03/05/22 23:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:01	03/05/22 23:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 12:01	03/05/22 23:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:01	03/05/22 23:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 12:01	03/05/22 23:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/04/22 12:01*	*03/05/22 23:43*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:01*	*03/05/22 23:43*	*1*

Lab Sample ID: LCS 880-20895/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20895**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1032		mg/Kg		103	70 - 130		
Toluene			0.100	0.09577		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09524		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.2226		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1093		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-20895/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20895**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1127		mg/Kg		113	70 - 130	9	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

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

Lab Sample ID: LCSD 880-20895/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20895**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.1019		mg/Kg		102	70 - 130	6	35
Ethylbenzene			0.100	0.1019		mg/Kg		102	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2371		mg/Kg		119	70 - 130	6	35
o-Xylene			0.100	0.1176		mg/Kg		118	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2045-A-21-I MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20895**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F2 F1	0.0996	0.07403		mg/Kg		74	70 - 130
Toluene	<0.00200	U F2 F1	0.0996	0.07609		mg/Kg		76	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.0996	0.07860		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.199	0.1870		mg/Kg		94	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0996	0.09205		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-2045-A-21-J MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20859 **Prep Batch: 20895**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0990	0.04254	F2 F1	mg/Kg		43	70 - 130	54	35
Toluene	<0.00200	U F2 F1	0.0990	0.04508	F2 F1	mg/Kg		45	70 - 130	51	35
Ethylbenzene	<0.00200	U F2 F1	0.0990	0.04799	F2 F1	mg/Kg		47	70 - 130	48	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.198	0.1095	F2 F1	mg/Kg		55	70 - 130	52	35
o-Xylene	<0.00200	U F2 F1	0.0990	0.05716	F2 F1	mg/Kg		58	70 - 130	47	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 880-20921/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20957 **Prep Batch: 20921**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/05/22 21:44	1

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QC Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

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

Lab Sample ID: MB 880-20921/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20957 **Prep Batch: 20921**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/05/22 21:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:51	03/05/22 21:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/04/22 14:51*	*03/05/22 21:44*	*1*
o-Terphenyl	*127*		*70 - 130*	*03/04/22 14:51*	*03/05/22 21:44*	*1*

Lab Sample ID: LCS 880-20921/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20957 **Prep Batch: 20921**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1209		mg/Kg		121	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	948.8		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-20921/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20957 **Prep Batch: 20921**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1203		mg/Kg		120	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	948.1		mg/Kg		95	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*107*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 890-2045-A-21-G MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20957 **Prep Batch: 20921**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1123		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	845.2		mg/Kg		82	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*76*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

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

Lab Sample ID: 890-2045-A-21-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20957 — **Prep Batch: 20921**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1177		mg/Kg		114	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	876.6		mg/Kg		86	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*78*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20872/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20930

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/05/22 07:30	1

Lab Sample ID: LCS 880-20872/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20930

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	254.1		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-20872/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20930

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	257.5		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-2046-1 MS — **Client Sample ID: FS17**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20930

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<4.99	U	250	259.5		mg/Kg		103	90 - 110		

Lab Sample ID: 890-2046-1 MSD — **Client Sample ID: FS17**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20930

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<4.99	U	250	251.3		mg/Kg		100	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

GC VOA

Prep Batch: 20684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20684/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 20859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Total/NA	Solid	8021B	20895
890-2046-2	FS16	Total/NA	Solid	8021B	20895
890-2046-3	FS15	Total/NA	Solid	8021B	20895
890-2046-4	FS13	Total/NA	Solid	8021B	20895
890-2046-5	FS11	Total/NA	Solid	8021B	20895
890-2046-6	FS12	Total/NA	Solid	8021B	20895
890-2046-7	FS08	Total/NA	Solid	8021B	20895
890-2046-8	FS10	Total/NA	Solid	8021B	20895
MB 880-20684/5-A	Method Blank	Total/NA	Solid	8021B	20684
MB 880-20895/5-A	Method Blank	Total/NA	Solid	8021B	20895
LCS 880-20895/1-A	Lab Control Sample	Total/NA	Solid	8021B	20895
LCSD 880-20895/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20895
890-2045-A-21-I MS	Matrix Spike	Total/NA	Solid	8021B	20895
890-2045-A-21-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20895

Prep Batch: 20895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Total/NA	Solid	5035	
890-2046-2	FS16	Total/NA	Solid	5035	
890-2046-3	FS15	Total/NA	Solid	5035	
890-2046-4	FS13	Total/NA	Solid	5035	
890-2046-5	FS11	Total/NA	Solid	5035	
890-2046-6	FS12	Total/NA	Solid	5035	
890-2046-7	FS08	Total/NA	Solid	5035	
890-2046-8	FS10	Total/NA	Solid	5035	
MB 880-20895/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20895/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20895/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2045-A-21-I MS	Matrix Spike	Total/NA	Solid	5035	
890-2045-A-21-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Total/NA	Solid	Total BTEX	
890-2046-2	FS16	Total/NA	Solid	Total BTEX	
890-2046-3	FS15	Total/NA	Solid	Total BTEX	
890-2046-4	FS13	Total/NA	Solid	Total BTEX	
890-2046-5	FS11	Total/NA	Solid	Total BTEX	
890-2046-6	FS12	Total/NA	Solid	Total BTEX	
890-2046-7	FS08	Total/NA	Solid	Total BTEX	
890-2046-8	FS10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

GC Semi VOA (Continued)

Prep Batch: 20921 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-2	FS16	Total/NA	Solid	8015NM Prep	
890-2046-3	FS15	Total/NA	Solid	8015NM Prep	
890-2046-4	FS13	Total/NA	Solid	8015NM Prep	
890-2046-5	FS11	Total/NA	Solid	8015NM Prep	
890-2046-6	FS12	Total/NA	Solid	8015NM Prep	
890-2046-7	FS08	Total/NA	Solid	8015NM Prep	
890-2046-8	FS10	Total/NA	Solid	8015NM Prep	
MB 880-20921/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20921/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20921/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2045-A-21-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2045-A-21-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Total/NA	Solid	8015B NM	20921
890-2046-2	FS16	Total/NA	Solid	8015B NM	20921
890-2046-3	FS15	Total/NA	Solid	8015B NM	20921
890-2046-4	FS13	Total/NA	Solid	8015B NM	20921
890-2046-5	FS11	Total/NA	Solid	8015B NM	20921
890-2046-6	FS12	Total/NA	Solid	8015B NM	20921
890-2046-7	FS08	Total/NA	Solid	8015B NM	20921
890-2046-8	FS10	Total/NA	Solid	8015B NM	20921
MB 880-20921/1-A	Method Blank	Total/NA	Solid	8015B NM	20921
LCS 880-20921/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20921
LCSD 880-20921/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20921
890-2045-A-21-G MS	Matrix Spike	Total/NA	Solid	8015B NM	20921
890-2045-A-21-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20921

Analysis Batch: 20982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Total/NA	Solid	8015 NM	
890-2046-2	FS16	Total/NA	Solid	8015 NM	
890-2046-3	FS15	Total/NA	Solid	8015 NM	
890-2046-4	FS13	Total/NA	Solid	8015 NM	
890-2046-5	FS11	Total/NA	Solid	8015 NM	
890-2046-6	FS12	Total/NA	Solid	8015 NM	
890-2046-7	FS08	Total/NA	Solid	8015 NM	
890-2046-8	FS10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Soluble	Solid	DI Leach	
890-2046-2	FS16	Soluble	Solid	DI Leach	
890-2046-3	FS15	Soluble	Solid	DI Leach	
890-2046-4	FS13	Soluble	Solid	DI Leach	
890-2046-5	FS11	Soluble	Solid	DI Leach	
890-2046-6	FS12	Soluble	Solid	DI Leach	
890-2046-7	FS08	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

HPLC/IC (Continued)

Leach Batch: 20872 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-8	FS10	Soluble	Solid	DI Leach	
MB 880-20872/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20872/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20872/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2046-1 MS	FS17	Soluble	Solid	DI Leach	
890-2046-1 MSD	FS17	Soluble	Solid	DI Leach	

Analysis Batch: 20930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2046-1	FS17	Soluble	Solid	300.0	20872
890-2046-2	FS16	Soluble	Solid	300.0	20872
890-2046-3	FS15	Soluble	Solid	300.0	20872
890-2046-4	FS13	Soluble	Solid	300.0	20872
890-2046-5	FS11	Soluble	Solid	300.0	20872
890-2046-6	FS12	Soluble	Solid	300.0	20872
890-2046-7	FS08	Soluble	Solid	300.0	20872
890-2046-8	FS10	Soluble	Solid	300.0	20872
MB 880-20872/1-A	Method Blank	Soluble	Solid	300.0	20872
LCS 880-20872/2-A	Lab Control Sample	Soluble	Solid	300.0	20872
LCSD 880-20872/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20872
890-2046-1 MS	FS17	Soluble	Solid	300.0	20872
890-2046-1 MSD	FS17	Soluble	Solid	300.0	20872

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS17 — Lab Sample ID: 890-2046-1
Date Collected: 03/03/22 13:00 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 00:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 01:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 08:05	SC	XEN MID

Client Sample ID: FS16 — Lab Sample ID: 890-2046-2
Date Collected: 03/03/22 13:30 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 01:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 01:34	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 08:41	SC	XEN MID

Client Sample ID: FS15 — Lab Sample ID: 890-2046-3
Date Collected: 03/03/22 13:35 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 01:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 01:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 08:53	SC	XEN MID

Client Sample ID: FS13 — Lab Sample ID: 890-2046-4
Date Collected: 03/03/22 13:40 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 01:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS13 Lab Sample ID: 890-2046-4
Date Collected: 03/03/22 13:40 **Matrix: Solid**
Date Received: 03/03/22 16:55

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			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 02:15	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 09:04	SC	XEN MID

Client Sample ID: FS11 Lab Sample ID: 890-2046-5
Date Collected: 03/03/22 13:45 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 02:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 02:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 09:16	SC	XEN MID

Client Sample ID: FS12 Lab Sample ID: 890-2046-6
Date Collected: 03/03/22 13:50 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 02:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 03:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 09:52	SC	XEN MID

Client Sample ID: FS08 Lab Sample ID: 890-2046-7
Date Collected: 03/03/22 13:55 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 02:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 03:37	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: FS08 Lab Sample ID: 890-2046-7

Date Collected: 03/03/22 13:55 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 10:04	SC	XEN MID

Client Sample ID: FS10 Lab Sample ID: 890-2046-8

Date Collected: 03/03/22 14:00 **Matrix: Solid**
Date Received: 03/03/22 16:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20895	03/04/22 12:01	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	20859	03/06/22 03:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20990	03/06/22 20:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20982	03/06/22 20:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20921	03/04/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20957	03/06/22 03:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20872	03/04/22 10:31	CH	XEN MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	20930	03/05/22 10:15	SC	XEN MID

Laboratory References:
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2046-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Eunice Monument South Unit B Facility

Job ID: 890-2046-1
SDG: 31403551.001 task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2046-1	FS17	Solid	03/03/22 13:00	03/03/22 16:55	4
890-2046-2	FS16	Solid	03/03/22 13:30	03/03/22 16:55	4
890-2046-3	FS15	Solid	03/03/22 13:35	03/03/22 16:55	4
890-2046-4	FS13	Solid	03/03/22 13:40	03/03/22 16:55	4
890-2046-5	FS11	Solid	03/03/22 13:45	03/03/22 16:55	4
890-2046-6	FS12	Solid	03/03/22 13:50	03/03/22 16:55	4
890-2046-7	FS08	Solid	03/03/22 13:55	03/03/22 16:55	4
890-2046-8	FS10	Solid	03/03/22 14:00	03/03/22 16:55	4

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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3/7/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA Inc.	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	conner.shore@wsp.com ; tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:		Turn Around	
Project Number:	31403551.001 Task 01.02	Routine ☐	
P.O. Number:		Rush: 24 Hr	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.8/1.6	Thermometer ID		
Received Intact:	(Yes) No	TWM-007		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Work Order Notes

890-2046 Chain of Custody

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS17	s	3/3/2022	1300	4'	1	x	x	x	Composite
FS16	s	3/3/2022	1330	4'	1	x	x	x	Composite
FS15	s	3/3/2022	1335	4'	1	x	x	x	Composite
FS13	s	3/3/2022	1340	4'	1	x	x	x	Composite
FS11	s	3/3/2022	1345	4'	1	x	x	x	Composite
FS12	s	3/3/2022	1350	4'	1	x	x	x	Composite
FS08	s	3/3/2022	1355	4'	1	x	x	x	Composite
FS10	s	3/3/2022	1400	4'	1	x	x	x	Composite

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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1	1	3.3.221655	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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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

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-653 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2046-1
Address: 1211 W Florida Ave,	Due Date Requested: 3/7/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes.

A HCL	M Hexane
B - NaOH	N None
C Zn Acetate	O - AsNaO2
D Nitric Acid	P Na2O4S
E NaHSO4	Q - Na2SO3
F MeOH	R Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I Ice	U Acetone
J DI Water	V - MCAA
K EDTA	W pH 4-5
L EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note
			Preservation Code:										
FS17 (890-2046-1)	3/3/22	13 00 Mountain		Solid			X	X	X	X	X	1	
FS16 (890-2046-2)	3/3/22	13 30 Mountain		Solid			X	X	X	X	X	1	
FS15 (890-2046-3)	3/3/22	13 35 Mountain		Solid			X	X	X	X	X	1	
FS13 (890-2046-4)	3/3/22	13 40 Mountain		Solid			X	X	X	X	X	1	
FS11 (890-2046-5)	3/3/22	13 45 Mountain		Solid			X	X	X	X	X	1	
FS12 (890-2046-6)	3/3/22	13 50 Mountain		Solid			X	X	X	X	X	1	
FS08 (890-2046-7)	3/3/22	13 55 Mountain		Solid			X	X	X	X	X	1	
FS10 (890-2046-8)	3/3/22	14 00 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:
Relinquished by: Clue Cup 3-4-22	Date/Time:	Company	Received by:	Date/Time: 3/4/22 13 00	Company: Xenco
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Received by OCD: 7/19/2023 1:46:39 PM

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3/7/2022

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2046-1
SDG Number: 31403551.001 task 01.02

Login Number: 2046
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2046-1
SDG Number: 31403551.001 task 01.02

Login Number: 2046
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 03/04/22 01:20 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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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2057-1
Laboratory Sample Delivery Group: 31403551.001.TASK.0102
Client Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
3/11/2022 9:57:32 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: WSP USA Inc.
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY

Laboratory Job ID: 890-2057-1
SDG: 31403551.001.TASK.0102

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Qualifiers

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Job ID: 890-2057-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2057-1

Receipt
The samples were received on 3/8/2022 2:10 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 5.6°C

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

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-21235 and analytical batch 880-21319 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Released to Imaging: 10/13/2023 10:56:27 AM

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS06 Lab Sample ID: 890-2057-1

Date Collected: 03/07/22 14:00 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		03/10/22 07:30	03/10/22 14:14	20
Toluene	<0.0398	U	0.0398		mg/Kg		03/10/22 07:30	03/10/22 14:14	20
Ethylbenzene	<0.0398	U	0.0398		mg/Kg		03/10/22 07:30	03/10/22 14:14	20
m-Xylene & p-Xylene	<0.0797	U	0.0797		mg/Kg		03/10/22 07:30	03/10/22 14:14	20
o-Xylene	<0.0398	U	0.0398		mg/Kg		03/10/22 07:30	03/10/22 14:14	20
Xylenes, Total	<0.0797	U	0.0797		mg/Kg		03/10/22 07:30	03/10/22 14:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*03/10/22 07:30*	*03/10/22 14:14*	*20*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/10/22 07:30*	*03/10/22 14:14*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0797	U	0.0797		mg/Kg			03/10/22 16:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**153**		50.0		mg/Kg			03/11/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/10/22 14:00	03/11/22 06:39	1
Diesel Range Organics (Over C10-C28)	**153**		50.0		mg/Kg		03/10/22 14:00	03/11/22 06:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/10/22 14:00	03/11/22 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/10/22 14:00*	*03/11/22 06:39*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/10/22 14:00*	*03/11/22 06:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**247**		5.04		mg/Kg			03/10/22 16:42	1

Client Sample ID: FS07 Lab Sample ID: 890-2057-2

Date Collected: 03/07/22 14:05 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402		mg/Kg		03/10/22 07:30	03/10/22 14:34	20
Toluene	<0.0402	U	0.0402		mg/Kg		03/10/22 07:30	03/10/22 14:34	20
Ethylbenzene	**0.0487**		0.0402		mg/Kg		03/10/22 07:30	03/10/22 14:34	20
m-Xylene & p-Xylene	<0.0805	U	0.0805		mg/Kg		03/10/22 07:30	03/10/22 14:34	20
o-Xylene	<0.0402	U	0.0402		mg/Kg		03/10/22 07:30	03/10/22 14:34	20
Xylenes, Total	<0.0805	U	0.0805		mg/Kg		03/10/22 07:30	03/10/22 14:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*03/10/22 07:30*	*03/10/22 14:34*	*20*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS07 — Lab Sample ID: 890-2057-2

Date Collected: 03/07/22 14:05 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*03/10/22 07:30*	*03/10/22 14:34*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0805	U	0.0805	mg/Kg			03/10/22 16:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**974**		50.0	mg/Kg			03/11/22 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/10/22 14:00	03/11/22 05:35	1
Diesel Range Organics (Over C10-C28)	**974**		50.0	mg/Kg		03/10/22 14:00	03/11/22 05:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/10/22 14:00	03/11/22 05:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*112*		*70 - 130*	*03/10/22 14:00*	*03/11/22 05:35*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/10/22 14:00*	*03/11/22 05:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**209**		4.99	mg/Kg			03/10/22 17:17	1

Client Sample ID: FS09 — Lab Sample ID: 890-2057-3

Date Collected: 03/07/22 14:10 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0403	U	0.0403	mg/Kg		03/10/22 07:30	03/10/22 14:55	20
Toluene	<0.0403	U	0.0403	mg/Kg		03/10/22 07:30	03/10/22 14:55	20
Ethylbenzene	**0.108**		0.0403	mg/Kg		03/10/22 07:30	03/10/22 14:55	20
m-Xylene & p-Xylene	**0.176**		0.0806	mg/Kg		03/10/22 07:30	03/10/22 14:55	20
o-Xylene	<0.0403	U	0.0403	mg/Kg		03/10/22 07:30	03/10/22 14:55	20
Xylenes, Total	**0.176**		0.0806	mg/Kg		03/10/22 07:30	03/10/22 14:55	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*03/10/22 07:30*	*03/10/22 14:55*	*20*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*03/10/22 07:30*	*03/10/22 14:55*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.284**		0.0806	mg/Kg			03/10/22 16:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**730**		49.9	mg/Kg			03/11/22 09:47	1

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS09 — Lab Sample ID: 890-2057-3

Date Collected: 03/07/22 14:10 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/10/22 14:00	03/11/22 05:56	1
Diesel Range Organics (Over C10-C28)	**730**		49.9		mg/Kg		03/10/22 14:00	03/11/22 05:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/10/22 14:00	03/11/22 05:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/10/22 14:00*	*03/11/22 05:56*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/10/22 14:00*	*03/11/22 05:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**386**		5.01		mg/Kg			03/10/22 17:29	1

Client Sample ID: FS05 — Lab Sample ID: 890-2057-4

Date Collected: 03/07/22 14:30 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/10/22 07:30	03/10/22 13:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/10/22 07:30	03/10/22 13:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/10/22 07:30	03/10/22 13:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/10/22 07:30	03/10/22 13:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/10/22 07:30	03/10/22 13:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/10/22 07:30	03/10/22 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/10/22 07:30*	*03/10/22 13:13*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/10/22 07:30*	*03/10/22 13:13*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/10/22 16:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**452**		50.0		mg/Kg			03/11/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/10/22 14:00	03/11/22 06:17	1
Diesel Range Organics (Over C10-C28)	**452**		50.0		mg/Kg		03/10/22 14:00	03/11/22 06:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/10/22 14:00	03/11/22 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/10/22 14:00*	*03/11/22 06:17*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/10/22 14:00*	*03/11/22 06:17*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS05 — Lab Sample ID: 890-2057-4

Date Collected: 03/07/22 14:30 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.9**		4.98		mg/Kg			03/10/22 17:41	1

Client Sample ID: FS14 — Lab Sample ID: 890-2057-5

Date Collected: 03/07/22 14:35 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/10/22 07:30	03/10/22 13:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/10/22 07:30	03/10/22 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/10/22 07:30*	*03/10/22 13:33*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/10/22 07:30*	*03/10/22 13:33*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/10/22 16:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.3**		50.0		mg/Kg			03/11/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/10/22 14:00	03/11/22 04:52	1
Diesel Range Organics (Over C10-C28)	**52.3**		50.0		mg/Kg		03/10/22 14:00	03/11/22 04:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/10/22 14:00	03/11/22 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/10/22 14:00*	*03/11/22 04:52*	*1*
o-Terphenyl	*103*		*70 - 130*	*03/10/22 14:00*	*03/11/22 04:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**444**		4.95		mg/Kg			03/10/22 17:53	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS18 Lab Sample ID: 890-2057-6

Date Collected: 03/07/22 14:40 **Matrix: Solid**
Date Received: 03/08/22 14:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/10/22 07:30	03/10/22 13:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 13:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/10/22 07:30	03/10/22 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/10/22 07:30*	*03/10/22 13:53*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/10/22 07:30*	*03/10/22 13:53*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/10/22 16:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**101**		49.9		mg/Kg			03/11/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/10/22 14:00	03/11/22 05:14	1
Diesel Range Organics (Over C10-C28)	**101**		49.9		mg/Kg		03/10/22 14:00	03/11/22 05:14	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/10/22 14:00	03/11/22 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/10/22 14:00*	*03/11/22 05:14*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/10/22 14:00*	*03/11/22 05:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**365**		4.95		mg/Kg			03/10/22 18:05	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12068-A-1-K MS	Matrix Spike	95	100
880-12068-A-1-L MSD	Matrix Spike Duplicate	101	98
890-2057-1	FS06	81	81
890-2057-2	FS07	80	76
890-2057-3	FS09	78	75
890-2057-4	FS05	98	97
890-2057-5	FS14	114	103
890-2057-6	FS18	103	100
LCS 880-21130/1-A	Lab Control Sample	100	102
LCSD 880-21130/2-A	Lab Control Sample Dup	100	100
MB 880-21130/5-A	Method Blank	97	99

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11984-A-1-I MS	Matrix Spike	109	100
880-11984-A-1-J MSD	Matrix Spike Duplicate	107	96
890-2057-1	FS06	97	102
890-2057-2	FS07	112	106
890-2057-3	FS09	113	106
890-2057-4	FS05	99	97
890-2057-5	FS14	103	103
890-2057-6	FS18	104	105
LCS 880-21230/2-A	Lab Control Sample	92	87
LCSD 880-21230/3-A	Lab Control Sample Dup	95	88
MB 880-21230/1-A	Method Blank	96	98

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21130/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21274 **Prep Batch: 21130**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 12:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/10/22 07:30	03/10/22 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/10/22 07:30	03/10/22 12:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/10/22 07:30	03/10/22 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/10/22 07:30*	*03/10/22 12:03*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/10/22 07:30*	*03/10/22 12:03*	*1*

Lab Sample ID: LCS 880-21130/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21274 **Prep Batch: 21130**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1017		mg/Kg		102	70 - 130		
Toluene			0.100	0.09658		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.09798		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.2291		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1114		mg/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-21130/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21274 **Prep Batch: 21130**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1002		mg/Kg		100	70 - 130	1	35
Toluene			0.100	0.09683		mg/Kg		97	70 - 130	0	35
Ethylbenzene			0.100	0.09849		mg/Kg		98	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2315		mg/Kg		116	70 - 130	1	35
o-Xylene			0.100	0.1123		mg/Kg		112	70 - 130	1	35

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

Lab Sample ID: 880-12068-A-1-K MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21274 **Prep Batch: 21130**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.101	0.09449		mg/Kg		94	70 - 130		
Toluene	<0.00198	U	0.101	0.08971		mg/Kg		89	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

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

Lab Sample ID: 880-12068-A-1-K MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21274 **Prep Batch: 21130**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U	0.101	0.09035		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	<0.00397	U	0.201	0.2117		mg/Kg		105	70 - 130
o-Xylene	<0.00198	U	0.101	0.1026		mg/Kg		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-12068-A-1-L MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21274 **Prep Batch: 21130**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.08764		mg/Kg		87	70 - 130	8	35
Toluene	<0.00198	U	0.100	0.08647		mg/Kg		86	70 - 130	4	35
Ethylbenzene	<0.00198	U	0.100	0.09413		mg/Kg		94	70 - 130	4	35
m-Xylene & p-Xylene	<0.00397	U	0.201	0.2119		mg/Kg		106	70 - 130	0	35
o-Xylene	<0.00198	U	0.100	0.1036		mg/Kg		103	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-21230/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21299 **Prep Batch: 21230**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/09/22 15:42	03/11/22 02:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/09/22 15:42	03/11/22 02:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/09/22 15:42	03/11/22 02:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/09/22 15:42*	*03/11/22 02:22*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/09/22 15:42*	*03/11/22 02:22*	*1*

Lab Sample ID: LCS 880-21230/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21299 **Prep Batch: 21230**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	825.0		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)			1000	871.2		mg/Kg		87	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

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

Lab Sample ID: LCS 880-21230/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21299 **Prep Batch: 21230**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: LCSD 880-21230/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21299 **Prep Batch: 21230**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	822.5		mg/Kg		82	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	848.0		mg/Kg		85	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-11984-A-1-I MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21299 **Prep Batch: 21230**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1227		mg/Kg		123	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1246		mg/Kg		125	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 880-11984-A-1-J MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21299 **Prep Batch: 21230**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1290		mg/Kg		129	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1202		mg/Kg		120	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	96		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21235/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 21319

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/10/22 08:42	1

Lab Sample ID: LCS 880-21235/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 21319

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	252.8		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-21235/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 21319

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	251.3		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 880-12261-B-3-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 21319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<4.95	U F1	248	283.8	F1	mg/Kg		113	90 - 110		

Lab Sample ID: 880-12261-B-3-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 21319

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<4.95	U F1	248	287.0	F1	mg/Kg		114	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

GC VOA

Prep Batch: 21130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Total/NA	Solid	5035	
890-2057-2	FS07	Total/NA	Solid	5035	
890-2057-3	FS09	Total/NA	Solid	5035	
890-2057-4	FS05	Total/NA	Solid	5035	
890-2057-5	FS14	Total/NA	Solid	5035	
890-2057-6	FS18	Total/NA	Solid	5035	
MB 880-21130/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21130/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21130/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12068-A-1-K MS	Matrix Spike	Total/NA	Solid	5035	
880-12068-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Total/NA	Solid	8021B	21130
890-2057-2	FS07	Total/NA	Solid	8021B	21130
890-2057-3	FS09	Total/NA	Solid	8021B	21130
890-2057-4	FS05	Total/NA	Solid	8021B	21130
890-2057-5	FS14	Total/NA	Solid	8021B	21130
890-2057-6	FS18	Total/NA	Solid	8021B	21130
MB 880-21130/5-A	Method Blank	Total/NA	Solid	8021B	21130
LCS 880-21130/1-A	Lab Control Sample	Total/NA	Solid	8021B	21130
LCSD 880-21130/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21130
880-12068-A-1-K MS	Matrix Spike	Total/NA	Solid	8021B	21130
880-12068-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21130

Analysis Batch: 21341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Total/NA	Solid	Total BTEX	
890-2057-2	FS07	Total/NA	Solid	Total BTEX	
890-2057-3	FS09	Total/NA	Solid	Total BTEX	
890-2057-4	FS05	Total/NA	Solid	Total BTEX	
890-2057-5	FS14	Total/NA	Solid	Total BTEX	
890-2057-6	FS18	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Total/NA	Solid	8015NM Prep	
890-2057-2	FS07	Total/NA	Solid	8015NM Prep	
890-2057-3	FS09	Total/NA	Solid	8015NM Prep	
890-2057-4	FS05	Total/NA	Solid	8015NM Prep	
890-2057-5	FS14	Total/NA	Solid	8015NM Prep	
890-2057-6	FS18	Total/NA	Solid	8015NM Prep	
MB 880-21230/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21230/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21230/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11984-A-1-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11984-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

GC Semi VOA

Analysis Batch: 21299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Total/NA	Solid	8015B NM	21230
MB 880-21230/1-A	Method Blank	Total/NA	Solid	8015B NM	21230
LCS 880-21230/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21230
LCSD 880-21230/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21230
880-11984-A-1-I MS	Matrix Spike	Total/NA	Solid	8015B NM	21230
880-11984-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21230

Analysis Batch: 21302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-2	FS07	Total/NA	Solid	8015B NM	21230
890-2057-3	FS09	Total/NA	Solid	8015B NM	21230
890-2057-4	FS05	Total/NA	Solid	8015B NM	21230
890-2057-5	FS14	Total/NA	Solid	8015B NM	21230
890-2057-6	FS18	Total/NA	Solid	8015B NM	21230

Analysis Batch: 21370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Total/NA	Solid	8015 NM	
890-2057-2	FS07	Total/NA	Solid	8015 NM	
890-2057-3	FS09	Total/NA	Solid	8015 NM	
890-2057-4	FS05	Total/NA	Solid	8015 NM	
890-2057-5	FS14	Total/NA	Solid	8015 NM	
890-2057-6	FS18	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Soluble	Solid	DI Leach	
890-2057-2	FS07	Soluble	Solid	DI Leach	
890-2057-3	FS09	Soluble	Solid	DI Leach	
890-2057-4	FS05	Soluble	Solid	DI Leach	
890-2057-5	FS14	Soluble	Solid	DI Leach	
890-2057-6	FS18	Soluble	Solid	DI Leach	
MB 880-21235/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21235/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21235/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12261-B-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12261-B-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 21319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2057-1	FS06	Soluble	Solid	300.0	21235
890-2057-2	FS07	Soluble	Solid	300.0	21235
890-2057-3	FS09	Soluble	Solid	300.0	21235
890-2057-4	FS05	Soluble	Solid	300.0	21235
890-2057-5	FS14	Soluble	Solid	300.0	21235
890-2057-6	FS18	Soluble	Solid	300.0	21235
MB 880-21235/1-A	Method Blank	Soluble	Solid	300.0	21235
LCS 880-21235/2-A	Lab Control Sample	Soluble	Solid	300.0	21235
LCSD 880-21235/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21235

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

HPLC/IC (Continued)

Analysis Batch: 21319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12261-B-3-D MS	Matrix Spike	Soluble	Solid	300.0	21235
880-12261-B-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21235

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS06 Lab Sample ID: 890-2057-1

Date Collected: 03/07/22 14:00 **Matrix: Solid**
Date Received: 03/08/22 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21130	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21274	03/10/22 14:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21341	03/10/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21370	03/11/22 09:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21299	03/11/22 06:39	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		1			21319	03/10/22 16:42	SC	XEN MID

Client Sample ID: FS07 Lab Sample ID: 890-2057-2

Date Collected: 03/07/22 14:05 **Matrix: Solid**
Date Received: 03/08/22 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	21130	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21274	03/10/22 14:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21341	03/10/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21370	03/11/22 09:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21302	03/11/22 05:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		1			21319	03/10/22 17:17	SC	XEN MID

Client Sample ID: FS09 Lab Sample ID: 890-2057-3

Date Collected: 03/07/22 14:10 **Matrix: Solid**
Date Received: 03/08/22 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21130	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21274	03/10/22 14:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21341	03/10/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21370	03/11/22 09:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21302	03/11/22 05:56	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		1			21319	03/10/22 17:29	SC	XEN MID

Client Sample ID: FS05 Lab Sample ID: 890-2057-4

Date Collected: 03/07/22 14:30 **Matrix: Solid**
Date Received: 03/08/22 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21130	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21274	03/10/22 13:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21341	03/10/22 16:36	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Client Sample ID: FS05 Lab Sample ID: 890-2057-4

Date Collected: 03/07/22 14:30 **Matrix: Solid**
Date Received: 03/08/22 14:10

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			21370	03/11/22 09:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21302	03/11/22 06:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		1			21319	03/10/22 17:41	SC	XEN MID

Client Sample ID: FS14 Lab Sample ID: 890-2057-5

Date Collected: 03/07/22 14:35 **Matrix: Solid**
Date Received: 03/08/22 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21130	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21274	03/10/22 13:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21341	03/10/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21370	03/11/22 09:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21302	03/11/22 04:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		1			21319	03/10/22 17:53	SC	XEN MID

Client Sample ID: FS18 Lab Sample ID: 890-2057-6

Date Collected: 03/07/22 14:40 **Matrix: Solid**
Date Received: 03/08/22 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21130	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21274	03/10/22 13:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21341	03/10/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21370	03/11/22 09:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21302	03/11/22 05:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		1			21319	03/10/22 18:05	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc. Job ID: 890-2057-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001.TASK.0102

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2057-1	FS06	Solid	03/07/22 14:00	03/08/22 14:10	4
890-2057-2	FS07	Solid	03/07/22 14:05	03/08/22 14:10	4
890-2057-3	FS09	Solid	03/07/22 14:10	03/08/22 14:10	4
890-2057-4	FS05	Solid	03/07/22 14:30	03/08/22 14:10	4
890-2057-5	FS14	Solid	03/07/22 14:35	03/08/22 14:10	4
890-2057-6	FS18	Solid	03/07/22 14:40	03/08/22 14:10	4

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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3/11/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA Inc.	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	conner.shore@wsp.com ; tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine ☐	
P.O. Number:		Rush: 24 Hr	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	5.8/5.6	Thermometer ID	TWM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

890-2057 Chain of Custody

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS06	s	3/7/2022	1400	4'	1	x	x	x	Composite
FS07	s	3/7/2022	1405	4'	1	x	x	x	Composite
FS09	s	3/7/2022	1410	4'	1	x	x	x	Composite
FS05	s	3/7/2022	1430	4'	1	x	x	x	Composite
FS14	s	3/7/2022	1435	4'	1	x	x	x	Composite
FS18	s	3/7/2022	1440	4'	1	x	x	x	Composite

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 Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		3.522 1410	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2057-1
SDG Number: 31403551.001.TASK.0102

Login Number: 2057
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2057-1
SDG Number: 31403551.001.TASK.0102

Login Number: 2057
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/10/22 11:27 AM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2063-1
Laboratory Sample Delivery Group: 31403551.001 Task 01.02
Client Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
3/17/2022 6:42:45 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS
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Have a Question? Ask The Expert
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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)

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Job ID: 890-2063-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2063-1

Receipt
The samples were received on 3/10/2022 4:50 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 14.2°C

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-21477 and analytical batch 880-21466 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: FS20 (890-2063-2), FS21 (890-2063-3), FS22 (890-2063-4), FS23 (890-2063-5), FS24 (890-2063-6), FS27 (890-2063-9), FS28 (890-2063-10), FS29 (890-2063-11), FS30 (890-2063-12), FS31 (890-2063-13), FS32 (890-2063-14), FS33 (890-2063-15), FS38 (890-2063-20), FS39 (890-2063-21) and FS40 (890-2063-22). Elevated reporting limits (RLs) are provided.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: FS36 (890-2063-18), FS37 (890-2063-19) and SW06 (890-2063-30). Elevated reporting limits (RLs) are provided.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS35 (890-2063-17). Evidence of matrix interferences is not obvious.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: FS35 (890-2063-17) at 25.0. 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.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-21501/3-A) and (MB 880-21501/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21504 and analytical batch 880-21462 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS19 Lab Sample ID: 890-2063-1

Date Collected: 03/10/22 11:35 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:03	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		03/14/22 08:50	03/14/22 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/14/22 08:50	03/14/22 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/14/22 08:50*	*03/14/22 12:03*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/14/22 08:50*	*03/14/22 12:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.1**		49.8		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/22 09:23	03/14/22 12:34	1
Diesel Range Organics (Over C10-C28)	**50.1**		49.8		mg/Kg		03/14/22 09:23	03/14/22 12:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 09:23	03/14/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/14/22 09:23*	*03/14/22 12:34*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/14/22 09:23*	*03/14/22 12:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.7**		5.00		mg/Kg			03/17/22 01:56	1

Client Sample ID: FS20 Lab Sample ID: 890-2063-2

Date Collected: 03/10/22 11:40 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U	0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:04	10
Toluene	**2.77**		0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:04	10
Ethylbenzene	**0.124**		0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:04	10
m-Xylene & p-Xylene	**3.52**	*+	0.0398		mg/Kg		03/14/22 08:50	03/14/22 13:04	10
o-Xylene	**1.97**		0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:04	10
Xylenes, Total	**5.49**		0.0398		mg/Kg		03/14/22 08:50	03/14/22 13:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/14/22 08:50*	*03/14/22 13:04*	*10*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS20 — Lab Sample ID: 890-2063-2

Date Collected: 03/10/22 11:40 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*03/14/22 08:50*	*03/14/22 13:04*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**8.38**		0.0398		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3070**		250		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**543**		250		mg/Kg		03/14/22 09:23	03/14/22 13:35	5
Diesel Range Organics (Over C10-C28)	**2210**		250		mg/Kg		03/14/22 09:23	03/14/22 13:35	5
Oil Range Organics (Over C28-C36)	**319**		250		mg/Kg		03/14/22 09:23	03/14/22 13:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*102*		*70 - 130*	*03/14/22 09:23*	*03/14/22 13:35*	*5*
o-Terphenyl	*84*		*70 - 130*	*03/14/22 09:23*	*03/14/22 13:35*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23.3**		4.99		mg/Kg			03/17/22 02:27	1

Client Sample ID: FS21 — Lab Sample ID: 890-2063-3

Date Collected: 03/10/22 11:45 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 13:24	10
Toluene	**1.56**		0.0200		mg/Kg		03/14/22 08:50	03/14/22 13:24	10
Ethylbenzene	**1.13**		0.0200		mg/Kg		03/14/22 08:50	03/14/22 13:24	10
m-Xylene & p-Xylene	**2.87**	*+	0.0399		mg/Kg		03/14/22 08:50	03/14/22 13:24	10
o-Xylene	**1.44**		0.0200		mg/Kg		03/14/22 08:50	03/14/22 13:24	10
Xylenes, Total	**4.31**		0.0399		mg/Kg		03/14/22 08:50	03/14/22 13:24	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*1087*	*S1+*	*70 - 130*	*03/14/22 08:50*	*03/14/22 13:24*	*10*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/14/22 08:50*	*03/14/22 13:24*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**7.00**		0.0399		mg/Kg			03/14/22 19:47	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS21 — Lab Sample ID: 890-2063-3

Date Collected: 03/10/22 11:45 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**194**		49.9		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 13:56	1
Diesel Range Organics (Over C10-C28)	**194**		49.9		mg/Kg		03/14/22 09:23	03/14/22 13:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/14/22 09:23*	*03/14/22 13:56*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/14/22 09:23*	*03/14/22 13:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.1**		4.97		mg/Kg			03/17/22 02:37	1

Client Sample ID: FS22 — Lab Sample ID: 890-2063-4

Date Collected: 03/10/22 11:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U	0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:45	10
Toluene	**0.368**		0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:45	10
Ethylbenzene	**0.277**		0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:45	10
m-Xylene & p-Xylene	**0.0482**	*+	0.0398		mg/Kg		03/14/22 08:50	03/14/22 13:45	10
o-Xylene	**0.0397**		0.0199		mg/Kg		03/14/22 08:50	03/14/22 13:45	10
Xylenes, Total	**0.0879**		0.0398		mg/Kg		03/14/22 08:50	03/14/22 13:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*954*	*S1+*	*70 - 130*	*03/14/22 08:50*	*03/14/22 13:45*	*10*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/14/22 08:50*	*03/14/22 13:45*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.733**		0.0398		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**227**		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 14:17	1
Diesel Range Organics (Over C10-C28)	**227**		50.0		mg/Kg		03/14/22 09:23	03/14/22 14:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 14:17	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS22 — Lab Sample ID: 890-2063-4

Date Collected: 03/10/22 11:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/14/22 09:23	03/14/22 14:17	1
o-Terphenyl	103		70 - 130	03/14/22 09:23	03/14/22 14:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**248**		5.00	mg/Kg			03/17/22 02:48	1

Client Sample ID: FS23 — Lab Sample ID: 890-2063-5

Date Collected: 03/10/22 12:00 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200	mg/Kg		03/14/22 08:50	03/14/22 14:05	10
Toluene	**0.101**		0.0200	mg/Kg		03/14/22 08:50	03/14/22 14:05	10
Ethylbenzene	**0.213**		0.0200	mg/Kg		03/14/22 08:50	03/14/22 14:05	10
m-Xylene & p-Xylene	<0.0399	U *+	0.0399	mg/Kg		03/14/22 08:50	03/14/22 14:05	10
o-Xylene	<0.0200	U	0.0200	mg/Kg		03/14/22 08:50	03/14/22 14:05	10
Xylenes, Total	<0.0399	U	0.0399	mg/Kg		03/14/22 08:50	03/14/22 14:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	636	S1+	70 - 130	03/14/22 08:50	03/14/22 14:05	10
1,4-Difluorobenzene (Surr)	103		70 - 130	03/14/22 08:50	03/14/22 14:05	10

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.314**		0.0399	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**225**		50.0	mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/14/22 09:23	03/14/22 14:37	1
Diesel Range Organics (Over C10-C28)	**225**		50.0	mg/Kg		03/14/22 09:23	03/14/22 14:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/22 09:23	03/14/22 14:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/14/22 09:23	03/14/22 14:37	1
o-Terphenyl	97		70 - 130	03/14/22 09:23	03/14/22 14:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.9**		4.95	mg/Kg			03/17/22 02:58	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS24 — Lab Sample ID: 890-2063-6

Date Collected: 03/10/22 12:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 14:25	10
Toluene	**0.0748**		0.0200		mg/Kg		03/14/22 08:50	03/14/22 14:25	10
Ethylbenzene	**0.143**		0.0200		mg/Kg		03/14/22 08:50	03/14/22 14:25	10
m-Xylene & p-Xylene	<0.0400	U *+	0.0400		mg/Kg		03/14/22 08:50	03/14/22 14:25	10
o-Xylene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 14:25	10
Xylenes, Total	<0.0400	U	0.0400		mg/Kg		03/14/22 08:50	03/14/22 14:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*1026*	*S1+*	*70 - 130*	*03/14/22 08:50*	*03/14/22 14:25*	*10*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/14/22 08:50*	*03/14/22 14:25*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.218**		0.0400		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**183**		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 14:58	1
Diesel Range Organics (Over C10-C28)	**183**		50.0		mg/Kg		03/14/22 09:23	03/14/22 14:58	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/14/22 09:23*	*03/14/22 14:58*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/14/22 09:23*	*03/14/22 14:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**325**		5.04		mg/Kg			03/17/22 03:29	1

Client Sample ID: FS25 — Lab Sample ID: 890-2063-7

Date Collected: 03/10/22 12:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:23	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		03/14/22 08:50	03/14/22 12:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 12:23	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/14/22 08:50	03/14/22 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/14/22 08:50*	*03/14/22 12:23*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS25 Lab Sample ID: 890-2063-7

Date Collected: 03/10/22 12:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/14/22 08:50*	*03/14/22 12:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/14/22 09:23	03/14/22 15:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/14/22 09:23	03/14/22 15:19	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/14/22 09:23	03/14/22 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*96*		*70 - 130*	*03/14/22 09:23*	*03/14/22 15:19*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/14/22 09:23*	*03/14/22 15:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98	mg/Kg			03/17/22 03:40	1

Client Sample ID: FS26 Lab Sample ID: 890-2063-8

Date Collected: 03/10/22 12:15 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/14/22 08:50	03/14/22 12:44	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/14/22 08:50	03/14/22 12:44	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/14/22 08:50	03/14/22 12:44	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402	mg/Kg		03/14/22 08:50	03/14/22 12:44	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/14/22 08:50	03/14/22 12:44	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/14/22 08:50	03/14/22 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/14/22 08:50*	*03/14/22 12:44*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/14/22 08:50*	*03/14/22 12:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/14/22 19:54	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS26 — Lab Sample ID: 890-2063-8

Date Collected: 03/10/22 12:15 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 15:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 15:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/14/22 09:23*	*03/14/22 15:39*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/14/22 09:23*	*03/14/22 15:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**277**		4.99		mg/Kg			03/17/22 03:50	1

Client Sample ID: FS27 — Lab Sample ID: 890-2063-9

Date Collected: 03/10/22 12:35 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 14:46	20
Toluene	**0.0476**		0.0398		mg/Kg		03/14/22 08:50	03/14/22 14:46	20
Ethylbenzene	**0.393**		0.0398		mg/Kg		03/14/22 08:50	03/14/22 14:46	20
m-Xylene & p-Xylene	**0.161**	*+	0.0797		mg/Kg		03/14/22 08:50	03/14/22 14:46	20
o-Xylene	**0.0914**		0.0398		mg/Kg		03/14/22 08:50	03/14/22 14:46	20
Xylenes, Total	**0.252**		0.0797		mg/Kg		03/14/22 08:50	03/14/22 14:46	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*927*	*S1+*	*70 - 130*	*03/14/22 08:50*	*03/14/22 14:46*	*20*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/14/22 08:50*	*03/14/22 14:46*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.693**		0.0797		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**669**		49.9		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 16:00	1
Diesel Range Organics (Over C10-C28)	**587**		49.9		mg/Kg		03/14/22 09:23	03/14/22 16:00	1
Oil Range Organics (Over C28-C36)	**81.6**		49.9		mg/Kg		03/14/22 09:23	03/14/22 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/14/22 09:23*	*03/14/22 16:00*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/14/22 09:23*	*03/14/22 16:00*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS27 — Lab Sample ID: 890-2063-9

Date Collected: 03/10/22 12:35 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**275**		4.97		mg/Kg			03/17/22 04:00	1

Client Sample ID: FS28 — Lab Sample ID: 890-2063-10

Date Collected: 03/10/22 12:40 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 15:06	20
Toluene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 15:06	20
Ethylbenzene	**0.0609**		0.0398		mg/Kg		03/14/22 08:50	03/14/22 15:06	20
m-Xylene & p-Xylene	<0.0797	U *+	0.0797		mg/Kg		03/14/22 08:50	03/14/22 15:06	20
o-Xylene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 15:06	20
Xylenes, Total	<0.0797	U	0.0797		mg/Kg		03/14/22 08:50	03/14/22 15:06	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*03/14/22 08:50*	*03/14/22 15:06*	*20*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/14/22 08:50*	*03/14/22 15:06*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0797	U	0.0797		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3190**		49.8		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**89.4**		49.8		mg/Kg		03/14/22 09:23	03/14/22 16:21	1
Diesel Range Organics (Over C10-C28)	**2700**		49.8		mg/Kg		03/14/22 09:23	03/14/22 16:21	1
Oil Range Organics (Over C28-C36)	**401**		49.8		mg/Kg		03/14/22 09:23	03/14/22 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/14/22 09:23*	*03/14/22 16:21*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/14/22 09:23*	*03/14/22 16:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		5.00		mg/Kg			03/17/22 04:11	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS29 — Lab Sample ID: 890-2063-11

Date Collected: 03/10/22 12:45 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 16:56	10
Toluene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 16:56	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 16:56	10
m-Xylene & p-Xylene	<0.0401	U *+	0.0401		mg/Kg		03/14/22 08:50	03/14/22 16:56	10
o-Xylene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 16:56	10
Xylenes, Total	<0.0401	U	0.0401		mg/Kg		03/14/22 08:50	03/14/22 16:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/14/22 08:50*	*03/14/22 16:56*	*10*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/14/22 08:50*	*03/14/22 16:56*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0401	U	0.0401		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**467**		49.8		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/22 09:30	03/14/22 13:07	1
Diesel Range Organics (Over C10-C28)	**404**		49.8		mg/Kg		03/14/22 09:30	03/14/22 13:07	1
Oil Range Organics (Over C28-C36)	**62.8**		49.8		mg/Kg		03/14/22 09:30	03/14/22 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/14/22 09:30*	*03/14/22 13:07*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/14/22 09:30*	*03/14/22 13:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**225**		4.98		mg/Kg			03/17/22 04:21	1

Client Sample ID: FS30 — Lab Sample ID: 890-2063-12

Date Collected: 03/10/22 12:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 17:17	10
Toluene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 17:17	10
Ethylbenzene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 17:17	10
m-Xylene & p-Xylene	<0.0402	U *+	0.0402		mg/Kg		03/14/22 08:50	03/14/22 17:17	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 17:17	10
Xylenes, Total	<0.0402	U	0.0402		mg/Kg		03/14/22 08:50	03/14/22 17:17	10

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS30 — Lab Sample ID: 890-2063-12

Date Collected: 03/10/22 12:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*03/14/22 08:50*	*03/14/22 17:17*	*10*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/14/22 08:50*	*03/14/22 17:17*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0402	U	0.0402		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	50.0		mg/Kg		03/14/22 09:30	03/14/22 12:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0		mg/Kg		03/14/22 09:30	03/14/22 12:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 12:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*103*		*70 - 130*	*03/14/22 09:30*	*03/14/22 12:04*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/14/22 09:30*	*03/14/22 12:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**225**		5.00		mg/Kg			03/17/22 04:52	1

Client Sample ID: FS31 — Lab Sample ID: 890-2063-13

Date Collected: 03/10/22 13:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 17:37	10
Toluene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 17:37	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 17:37	10
m-Xylene & p-Xylene	<0.0399	U *+	0.0399		mg/Kg		03/14/22 08:50	03/14/22 17:37	10
o-Xylene	<0.0200	U	0.0200		mg/Kg		03/14/22 08:50	03/14/22 17:37	10
Xylenes, Total	<0.0399	U	0.0399		mg/Kg		03/14/22 08:50	03/14/22 17:37	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*03/14/22 08:50*	*03/14/22 17:37*	*10*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/14/22 08:50*	*03/14/22 17:37*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0399	U	0.0399		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 19:54	1

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS31 — Lab Sample ID: 890-2063-13

Date Collected: 03/10/22 13:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:30	03/14/22 13:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 09:30	03/14/22 13:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 09:30	03/14/22 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*03/14/22 09:30*	*03/14/22 13:28*	*1*
o-Terphenyl	*84*		*70 - 130*	*03/14/22 09:30*	*03/14/22 13:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**		4.96		mg/Kg			03/17/22 05:02	1

Client Sample ID: FS32 — Lab Sample ID: 890-2063-14

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 17:57	20
Toluene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 17:57	20
Ethylbenzene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 17:57	20
m-Xylene & p-Xylene	<0.0795	U *+	0.0795		mg/Kg		03/14/22 08:50	03/14/22 17:57	20
o-Xylene	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 17:57	20
Xylenes, Total	<0.0795	U	0.0795		mg/Kg		03/14/22 08:50	03/14/22 17:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/14/22 08:50*	*03/14/22 17:57*	*20*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/14/22 08:50*	*03/14/22 17:57*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0795	U	0.0795		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.1**		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 13:49	1
Diesel Range Organics (Over C10-C28)	**50.1**		50.0		mg/Kg		03/14/22 09:30	03/14/22 13:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*03/14/22 09:30*	*03/14/22 13:49*	*1*
o-Terphenyl	*85*		*70 - 130*	*03/14/22 09:30*	*03/14/22 13:49*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS32 — Lab Sample ID: 890-2063-14

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**185**		5.01		mg/Kg			03/17/22 05:33	1

Client Sample ID: FS33 — Lab Sample ID: 890-2063-15

Date Collected: 03/10/22 13:15 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0196	U	0.0196		mg/Kg		03/14/22 08:50	03/14/22 18:18	10
Toluene	**0.126**		0.0196		mg/Kg		03/14/22 08:50	03/14/22 18:18	10
Ethylbenzene	<0.0196	U	0.0196		mg/Kg		03/14/22 08:50	03/14/22 18:18	10
m-Xylene & p-Xylene	<0.0392	U *+	0.0392		mg/Kg		03/14/22 08:50	03/14/22 18:18	10
o-Xylene	**0.0395**		0.0196		mg/Kg		03/14/22 08:50	03/14/22 18:18	10
Xylenes, Total	**0.0395**		0.0392		mg/Kg		03/14/22 08:50	03/14/22 18:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*839*	*S1+*	*70 - 130*	*03/14/22 08:50*	*03/14/22 18:18*	*10*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/14/22 08:50*	*03/14/22 18:18*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.166**		0.0392		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**121**		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 14:10	1
Diesel Range Organics (Over C10-C28)	**121**		50.0		mg/Kg		03/14/22 09:30	03/14/22 14:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/14/22 09:30*	*03/14/22 14:10*	*1*
o-Terphenyl	*89*		*70 - 130*	*03/14/22 09:30*	*03/14/22 14:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**243**		4.97		mg/Kg			03/17/22 05:44	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS34 — Lab Sample ID: 890-2063-16

Date Collected: 03/10/22 13:20 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/13/22 12:38	03/14/22 17:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/13/22 12:38	03/14/22 17:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/13/22 12:38	03/14/22 17:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/13/22 12:38	03/14/22 17:50	1
o-Xylene	**0.00305**		0.00201		mg/Kg		03/13/22 12:38	03/14/22 17:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/13/22 12:38	03/14/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/13/22 12:38*	*03/14/22 17:50*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/13/22 12:38*	*03/14/22 17:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**61.3**		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 14:31	1
Diesel Range Organics (Over C10-C28)	**61.3**		50.0		mg/Kg		03/14/22 09:30	03/14/22 14:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/14/22 09:30*	*03/14/22 14:31*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/14/22 09:30*	*03/14/22 14:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**241**		4.95		mg/Kg			03/17/22 05:54	1

Client Sample ID: FS35 — Lab Sample ID: 890-2063-17

Date Collected: 03/10/22 13:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.117**		0.0500		mg/Kg		03/14/22 17:00	03/15/22 15:43	25
Toluene	**0.315**		0.0500		mg/Kg		03/14/22 17:00	03/15/22 15:43	25
Ethylbenzene	**0.372**		0.0500		mg/Kg		03/14/22 17:00	03/15/22 15:43	25
m-Xylene & p-Xylene	**0.564**		0.100		mg/Kg		03/14/22 17:00	03/15/22 15:43	25
o-Xylene	**0.272**		0.0500		mg/Kg		03/14/22 17:00	03/15/22 15:43	25
Xylenes, Total	**0.836**		0.100		mg/Kg		03/14/22 17:00	03/15/22 15:43	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*61*	*S1-*	*70 - 130*	*03/14/22 17:00*	*03/15/22 15:43*	*25*

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS35 Lab Sample ID: 890-2063-17

Date Collected: 03/10/22 13:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/14/22 17:00*	*03/15/22 15:43*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**1.64**		0.100	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3390**		49.9	mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/14/22 09:30	03/14/22 14:53	1
Diesel Range Organics (Over C10-C28)	**2690**		49.9	mg/Kg		03/14/22 09:30	03/14/22 14:53	1
Oil Range Organics (Over C28-C36)	**696**		49.9	mg/Kg		03/14/22 09:30	03/14/22 14:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*90*		*70 - 130*	*03/14/22 09:30*	*03/14/22 14:53*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/14/22 09:30*	*03/14/22 14:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**169**		4.99	mg/Kg			03/17/22 06:04	1

Client Sample ID: FS36 Lab Sample ID: 890-2063-18

Date Collected: 03/10/22 13:55 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.202**		0.0998	mg/Kg		03/13/22 12:38	03/14/22 18:52	50
Toluene	<0.0998	U	0.0998	mg/Kg		03/13/22 12:38	03/14/22 18:52	50
Ethylbenzene	<0.0998	U	0.0998	mg/Kg		03/13/22 12:38	03/14/22 18:52	50
m-Xylene & p-Xylene	<0.200	U	0.200	mg/Kg		03/13/22 12:38	03/14/22 18:52	50
o-Xylene	<0.0998	U	0.0998	mg/Kg		03/13/22 12:38	03/14/22 18:52	50
Xylenes, Total	<0.200	U	0.200	mg/Kg		03/13/22 12:38	03/14/22 18:52	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/13/22 12:38*	*03/14/22 18:52*	*50*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/13/22 12:38*	*03/14/22 18:52*	*50*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.202**		0.200	mg/Kg			03/14/22 19:47	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS36 — Lab Sample ID: 890-2063-18

Date Collected: 03/10/22 13:55 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**361**		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 15:14	1
Diesel Range Organics (Over C10-C28)	**250**		50.0		mg/Kg		03/14/22 09:30	03/14/22 15:14	1
Oil Range Organics (Over C28-C36)	**111**		50.0		mg/Kg		03/14/22 09:30	03/14/22 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/14/22 09:30*	*03/14/22 15:14*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/14/22 09:30*	*03/14/22 15:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/17/22 08:04	1

Client Sample ID: FS37 — Lab Sample ID: 890-2063-19

Date Collected: 03/10/22 14:00 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0901**		0.0401		mg/Kg		03/13/22 12:38	03/14/22 19:12	20
Toluene	<0.0401	U	0.0401		mg/Kg		03/13/22 12:38	03/14/22 19:12	20
Ethylbenzene	<0.0401	U	0.0401		mg/Kg		03/13/22 12:38	03/14/22 19:12	20
m-Xylene & p-Xylene	<0.0802	U	0.0802		mg/Kg		03/13/22 12:38	03/14/22 19:12	20
o-Xylene	<0.0401	U	0.0401		mg/Kg		03/13/22 12:38	03/14/22 19:12	20
Xylenes, Total	<0.0802	U	0.0802		mg/Kg		03/13/22 12:38	03/14/22 19:12	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*49*	*S1-*	*70 - 130*	*03/13/22 12:38*	*03/14/22 19:12*	*20*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/13/22 12:38*	*03/14/22 19:12*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0901**		0.0802		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**395**		49.9		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:30	03/14/22 15:35	1
Diesel Range Organics (Over C10-C28)	**311**		49.9		mg/Kg		03/14/22 09:30	03/14/22 15:35	1

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS37 Lab Sample ID: 890-2063-19

Date Collected: 03/10/22 14:00 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	**84.4**		49.9		mg/Kg		03/14/22 09:30	03/14/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*03/14/22 09:30*	*03/14/22 15:35*	*1*
o-Terphenyl	*108*		*70 - 130*	*03/14/22 09:30*	*03/14/22 15:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.3**		5.05		mg/Kg			03/17/22 08:15	1

Client Sample ID: FS38 Lab Sample ID: 890-2063-20

Date Collected: 03/10/22 14:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0498	U	0.0498		mg/Kg		03/14/22 08:50	03/14/22 18:38	25
Toluene	<0.0498	U	0.0498		mg/Kg		03/14/22 08:50	03/14/22 18:38	25
Ethylbenzene	<0.0498	U	0.0498		mg/Kg		03/14/22 08:50	03/14/22 18:38	25
m-Xylene & p-Xylene	<0.0996	U *+	0.0996		mg/Kg		03/14/22 08:50	03/14/22 18:38	25
o-Xylene	<0.0498	U	0.0498		mg/Kg		03/14/22 08:50	03/14/22 18:38	25
Xylenes, Total	<0.0996	U	0.0996		mg/Kg		03/14/22 08:50	03/14/22 18:38	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*03/14/22 08:50*	*03/14/22 18:38*	*25*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/14/22 08:50*	*03/14/22 18:38*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0996	U	0.0996		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1970**		49.8		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/22 09:30	03/14/22 15:56	1
Diesel Range Organics (Over C10-C28)	**1530**		49.8		mg/Kg		03/14/22 09:30	03/14/22 15:56	1
Oll Range Organics (Over C28-C36)	**436**		49.8		mg/Kg		03/14/22 09:30	03/14/22 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/14/22 09:30*	*03/14/22 15:56*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/14/22 09:30*	*03/14/22 15:56*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS38 — Lab Sample ID: 890-2063-20

Date Collected: 03/10/22 14:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**101**		4.97		mg/Kg			03/17/22 08:25	1

Client Sample ID: FS39 — Lab Sample ID: 890-2063-21

Date Collected: 03/10/22 12:45 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U	0.0199		mg/Kg		03/14/22 08:50	03/14/22 18:59	10
Toluene	<0.0199	U	0.0199		mg/Kg		03/14/22 08:50	03/14/22 18:59	10
Ethylbenzene	<0.0199	U	0.0199		mg/Kg		03/14/22 08:50	03/14/22 18:59	10
m-Xylene & p-Xylene	<0.0398	U *+	0.0398		mg/Kg		03/14/22 08:50	03/14/22 18:59	10
o-Xylene	<0.0199	U	0.0199		mg/Kg		03/14/22 08:50	03/14/22 18:59	10
Xylenes, Total	<0.0398	U	0.0398		mg/Kg		03/14/22 08:50	03/14/22 18:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*41*	*S1-*	*70 - 130*	*03/14/22 08:50*	*03/14/22 18:59*	*10*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*03/14/22 08:50*	*03/14/22 18:59*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0398	U	0.0398		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**82.5**		49.8		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1 F2	49.8		mg/Kg		03/14/22 09:26	03/14/22 12:34	1
Diesel Range Organics (Over C10-C28)	**82.5**	***1**	49.8		mg/Kg		03/14/22 09:26	03/14/22 12:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 09:26	03/14/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*03/14/22 09:26*	*03/14/22 12:34*	*1*
o-Terphenyl	*126*		*70 - 130*	*03/14/22 09:26*	*03/14/22 12:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.4**		5.00		mg/Kg			03/16/22 14:22	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS40 — Lab Sample ID: 890-2063-22

Date Collected: 03/10/22 12:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.148		0.0200		mg/Kg		03/14/22 08:50	03/14/22 19:19	10
Toluene	0.218		0.0200		mg/Kg		03/14/22 08:50	03/14/22 19:19	10
Ethylbenzene	0.0413		0.0200		mg/Kg		03/14/22 08:50	03/14/22 19:19	10
m-Xylene & p-Xylene	0.143	*+	0.0401		mg/Kg		03/14/22 08:50	03/14/22 19:19	10
o-Xylene	1.44		0.0200		mg/Kg		03/14/22 08:50	03/14/22 19:19	10
Xylenes, Total	1.58		0.0401		mg/Kg		03/14/22 08:50	03/14/22 19:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*384*	*S1+*	*70 - 130*	*03/14/22 08:50*	*03/14/22 19:19*	*10*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*03/14/22 08:50*	*03/14/22 19:19*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.99		0.0401		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	635		50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 13:35	1
Diesel Range Organics (Over C10-C28)	635	*1	50.0		mg/Kg		03/14/22 09:26	03/14/22 13:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/14/22 09:26*	*03/14/22 13:35*	*1*
o-Terphenyl	*118*		*70 - 130*	*03/14/22 09:26*	*03/14/22 13:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		4.99		mg/Kg			03/16/22 14:53	1

Client Sample ID: FS41 — Lab Sample ID: 890-2063-23

Date Collected: 03/10/22 13:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 19:39	10
Toluene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 19:39	10
Ethylbenzene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 19:39	10
m-Xylene & p-Xylene	<0.0402	U *+	0.0402		mg/Kg		03/14/22 08:50	03/14/22 19:39	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		03/14/22 08:50	03/14/22 19:39	10
Xylenes, Total	<0.0402	U	0.0402		mg/Kg		03/14/22 08:50	03/14/22 19:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*35*	*S1-*	*70 - 130*	*03/14/22 08:50*	*03/14/22 19:39*	*10*

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS41 — Lab Sample ID: 890-2063-23

Date Collected: 03/10/22 13:05 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*03/14/22 08:50*	*03/14/22 19:39*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0402	U	0.0402	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**203**		49.9	mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/14/22 09:26	03/14/22 13:56	1
Diesel Range Organics (Over C10-C28)	**203**	***1**	49.9	mg/Kg		03/14/22 09:26	03/14/22 13:56	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/14/22 09:26	03/14/22 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*113*		*70 - 130*	*03/14/22 09:26*	*03/14/22 13:56*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/14/22 09:26*	*03/14/22 13:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**192**		4.97	mg/Kg			03/16/22 15:03	1

Client Sample ID: FS42 — Lab Sample ID: 890-2063-24

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200	mg/Kg		03/14/22 08:50	03/14/22 20:00	10
Toluene	<0.0200	U	0.0200	mg/Kg		03/14/22 08:50	03/14/22 20:00	10
Ethylbenzene	<0.0200	U	0.0200	mg/Kg		03/14/22 08:50	03/14/22 20:00	10
m-Xylene & p-Xylene	<0.0401	U *+	0.0401	mg/Kg		03/14/22 08:50	03/14/22 20:00	10
o-Xylene	<0.0200	U	0.0200	mg/Kg		03/14/22 08:50	03/14/22 20:00	10
Xylenes, Total	<0.0401	U	0.0401	mg/Kg		03/14/22 08:50	03/14/22 20:00	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*40*	*S1-*	*70 - 130*	*03/14/22 08:50*	*03/14/22 20:00*	*10*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/14/22 08:50*	*03/14/22 20:00*	*10*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0401	U	0.0401	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**133**		50.0	mg/Kg			03/14/22 19:54	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS42 — Lab Sample ID: 890-2063-24

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:17	1
Diesel Range Organics (Over C10-C28)	**133**	***1**	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/14/22 09:26*	*03/14/22 14:17*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/14/22 09:26*	*03/14/22 14:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.3**		5.00		mg/Kg			03/16/22 15:34	1

Client Sample ID: SW01 — Lab Sample ID: 890-2063-25

Date Collected: 03/10/22 09:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/13/22 12:38	03/14/22 18:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/13/22 12:38	03/14/22 18:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/13/22 12:38	03/14/22 18:11	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/13/22 12:38	03/14/22 18:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/13/22 12:38	03/14/22 18:11	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/13/22 12:38	03/14/22 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*03/13/22 12:38*	*03/14/22 18:11*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/13/22 12:38*	*03/14/22 18:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/14/22 09:26*	*03/14/22 14:37*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/14/22 09:26*	*03/14/22 14:37*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: SW01 Lab Sample ID: 890-2063-25

Date Collected: 03/10/22 09:50 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			03/16/22 15:45	1

Client Sample ID: SW02 Lab Sample ID: 890-2063-26

Date Collected: 03/10/22 09:55 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/13/22 12:38	03/14/22 16:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/13/22 12:38	03/14/22 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/13/22 12:38*	*03/14/22 16:08*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/13/22 12:38*	*03/14/22 16:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/14/22 09:26*	*03/14/22 14:58*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/14/22 09:26*	*03/14/22 14:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			03/16/22 15:55	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: SW03 Lab Sample ID: 890-2063-27

Date Collected: 03/10/22 10:00 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/13/22 12:38	03/14/22 16:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/13/22 12:38	03/14/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/13/22 12:38*	*03/14/22 16:28*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*03/13/22 12:38*	*03/14/22 16:28*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:26	03/14/22 15:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/14/22 09:26	03/14/22 15:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 09:26	03/14/22 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/14/22 09:26*	*03/14/22 15:19*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/14/22 09:26*	*03/14/22 15:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			03/16/22 16:05	1

Client Sample ID: SW04 Lab Sample ID: 890-2063-28

Date Collected: 03/10/22 10:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:49	1
Toluene	**0.00811**		0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:49	1
Ethylbenzene	**0.00544**		0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:49	1
m-Xylene & p-Xylene	**0.00826**		0.00399		mg/Kg		03/13/22 12:38	03/14/22 16:49	1
o-Xylene	**0.0744**		0.00200		mg/Kg		03/13/22 12:38	03/14/22 16:49	1
Xylenes, Total	**0.0827**		0.00399		mg/Kg		03/13/22 12:38	03/14/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*03/13/22 12:38*	*03/14/22 16:49*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: SW04 — Lab Sample ID: 890-2063-28

Date Collected: 03/10/22 10:10 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/13/22 12:38*	*03/14/22 16:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0962**		0.00399	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/14/22 09:26	03/14/22 15:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		03/14/22 09:26	03/14/22 15:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/22 09:26	03/14/22 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*103*		*70 - 130*	*03/14/22 09:26*	*03/14/22 15:39*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/14/22 09:26*	*03/14/22 15:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			03/16/22 16:16	1

Client Sample ID: SW05 — Lab Sample ID: 890-2063-29

Date Collected: 03/10/22 10:15 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/13/22 12:38	03/14/22 17:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/13/22 12:38	03/14/22 17:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/13/22 12:38	03/14/22 17:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/13/22 12:38	03/14/22 17:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/13/22 12:38	03/14/22 17:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/13/22 12:38	03/14/22 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/13/22 12:38*	*03/14/22 17:09*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*03/13/22 12:38*	*03/14/22 17:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/14/22 19:54	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: SW05 Lab Sample ID: 890-2063-29

Date Collected: 03/10/22 10:15 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:26	03/14/22 16:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/14/22 09:26	03/14/22 16:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 09:26	03/14/22 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/14/22 09:26*	*03/14/22 16:00*	*1*
o-Terphenyl	*89*		*70 - 130*	*03/14/22 09:26*	*03/14/22 16:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			03/16/22 16:26	1

Client Sample ID: SW06 Lab Sample ID: 890-2063-30

Date Collected: 03/10/22 10:20 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.127**		0.0501		mg/Kg		03/13/22 12:38	03/14/22 17:30	25
Toluene	<0.0501	U	0.0501		mg/Kg		03/13/22 12:38	03/14/22 17:30	25
Ethylbenzene	<0.0501	U	0.0501		mg/Kg		03/13/22 12:38	03/14/22 17:30	25
m-Xylene & p-Xylene	<0.100	U	0.100		mg/Kg		03/13/22 12:38	03/14/22 17:30	25
o-Xylene	<0.0501	U	0.0501		mg/Kg		03/13/22 12:38	03/14/22 17:30	25
Xylenes, Total	<0.100	U	0.100		mg/Kg		03/13/22 12:38	03/14/22 17:30	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*50*	*S1-*	*70 - 130*	*03/13/22 12:38*	*03/14/22 17:30*	*25*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/13/22 12:38*	*03/14/22 17:30*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.127**		0.100		mg/Kg			03/14/22 19:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 19:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/14/22 09:26	03/14/22 16:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		03/14/22 09:26	03/14/22 16:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 09:26	03/14/22 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*03/14/22 09:26*	*03/14/22 16:21*	*1*
o-Terphenyl	*81*		*70 - 130*	*03/14/22 09:26*	*03/14/22 16:21*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: SW06 **Lab Sample ID: 890-2063-30**
Date Collected: 03/10/22 10:20 **Matrix: Solid**
Date Received: 03/10/22 16:50
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			03/16/22 16:36	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12274-A-11-D MS	Matrix Spike	103	110
880-12274-A-11-E MSD	Matrix Spike Duplicate	104	112
890-2056-A-1-J MS	Matrix Spike	107	101
890-2056-A-1-K MSD	Matrix Spike Duplicate	107	108
890-2063-1	FS19	107	107
890-2063-1 MS	FS19	103	104
890-2063-1 MSD	FS19	122	95
890-2063-2	FS20	98	72
890-2063-3	FS21	1087 S1+	101
890-2063-4	FS22	954 S1+	88
890-2063-5	FS23	636 S1+	103
890-2063-6	FS24	1026 S1+	102
890-2063-7	FS25	109	95
890-2063-8	FS26	100	102
890-2063-9	FS27	927 S1+	103
890-2063-10	FS28	84	81
890-2063-11	FS29	92	110
890-2063-12	FS30	72	88
890-2063-13	FS31	81	91
890-2063-14	FS32	88	87
890-2063-15	FS33	839 S1+	106
890-2063-16	FS34	111	103
890-2063-17	FS35	61 S1-	111
890-2063-18	FS36	112	111
890-2063-19	FS37	49 S1-	107
890-2063-20	FS38	84	85
890-2063-21	FS39	41 S1-	120
890-2063-22	FS40	384 S1+	115
890-2063-23	FS41	35 S1-	115
890-2063-24	FS42	40 S1-	95
890-2063-25	SW01	123	98
890-2063-26	SW02	108	111
890-2063-27	SW03	109	112
890-2063-28	SW04	123	109
890-2063-29	SW05	109	112
890-2063-30	SW06	50 S1-	103
LCS 880-21301/1-A	Lab Control Sample	105	113
LCS 880-21455/1-A	Lab Control Sample	102	109
LCS 880-21477/1-A	Lab Control Sample	106	103
LCSD 880-21301/2-A	Lab Control Sample Dup	105	113
LCSD 880-21455/2-A	Lab Control Sample Dup	103	112
LCSD 880-21477/2-A	Lab Control Sample Dup	112	98
MB 880-21301/5-A	Method Blank	101	104
MB 880-21455/5-A	Method Blank	100	103
MB 880-21477/5-B	Method Blank	97	100

Surrogate Legend

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

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-2063-1	FS19	93	91								
890-2063-1 MS	FS19	86	75								
890-2063-1 MSD	FS19	86	72								
890-2063-2	FS20	102	84								
890-2063-3	FS21	94	86								
890-2063-4	FS22	106	103								
890-2063-5	FS23	104	97								
890-2063-6	FS24	109	107								
890-2063-7	FS25	96	92								
890-2063-8	FS26	112	104								
890-2063-9	FS27	101	96								
890-2063-10	FS28	102	86								
890-2063-11	FS29	94	93								
890-2063-12	FS30	103	97								
890-2063-12 MS	FS30	94	82								
890-2063-12 MSD	FS30	76	68 S1-								
890-2063-13	FS31	84	84								
890-2063-14	FS32	85	85								
890-2063-15	FS33	88	89								
890-2063-16	FS34	88	88								
890-2063-17	FS35	90	88								
890-2063-18	FS36	94	92								
890-2063-19	FS37	111	108								
890-2063-20	FS38	103	100								
890-2063-21	FS39	122	126								
890-2063-21 MS	FS39	112	93								
890-2063-21 MSD	FS39	109	90								
890-2063-22	FS40	118	118								
890-2063-23	FS41	113	114								
890-2063-24	FS42	109	109								
890-2063-25	SW01	102	98								
890-2063-26	SW02	97	94								
890-2063-27	SW03	94	92								
890-2063-28	SW04	103	98								
890-2063-29	SW05	96	89								
890-2063-30	SW06	89	81								
LCS 880-21500/2-A	Lab Control Sample	120	121								
LCS 880-21501/2-A	Lab Control Sample	100	92								
LCS 880-21504/2-A	Lab Control Sample	109	110								
LCSD 880-21500/3-A	Lab Control Sample Dup	124	124								
LCSD 880-21501/3-A	Lab Control Sample Dup	142 S1+	126								
LCSD 880-21504/3-A	Lab Control Sample Dup	107	107								
MB 880-21500/1-A	Method Blank	113	116								
MB 880-21501/1-A	Method Blank	126	135 S1+								
MB 880-21504/1-A	Method Blank	102	111								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21301/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21616 **Prep Batch: 21301**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/14/22 17:00	03/15/22 12:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/22 17:00	03/15/22 12:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/22 17:00	03/15/22 12:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/14/22 17:00	03/15/22 12:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/22 17:00	03/15/22 12:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/14/22 17:00	03/15/22 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/14/22 17:00*	*03/15/22 12:00*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/14/22 17:00*	*03/15/22 12:00*	*1*

Lab Sample ID: LCS 880-21301/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21616 **Prep Batch: 21301**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1156		mg/Kg		116	70 - 130		
Toluene			0.100	0.1138		mg/Kg		114	70 - 130		
Ethylbenzene			0.100	0.1135		mg/Kg		113	70 - 130		
m-Xylene & p-Xylene			0.200	0.2358		mg/Kg		118	70 - 130		
o-Xylene			0.100	0.1139		mg/Kg		114	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-21301/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21616 **Prep Batch: 21301**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1199		mg/Kg		120	70 - 130	4	35
Toluene			0.100	0.1164		mg/Kg		116	70 - 130	2	35
Ethylbenzene			0.100	0.1167		mg/Kg		117	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2424		mg/Kg		121	70 - 130	3	35
o-Xylene			0.100	0.1168		mg/Kg		117	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: 890-2056-A-1-J MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21616 **Prep Batch: 21301**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00202	U	0.100	0.09586		mg/Kg		96	70 - 130		
Toluene	<0.00202	U	0.100	0.09995		mg/Kg		99	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 890-2056-A-1-J MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21616 — **Prep Batch: 21301**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00202	U	0.100	0.1044		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2163		mg/Kg		108	70 - 130
o-Xylene	<0.00202	U	0.100	0.1053		mg/Kg		105	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-2056-A-1-K MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21616 — **Prep Batch: 21301**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0992	0.08561		mg/Kg		86	70 - 130	11	35
Toluene	<0.00202	U	0.0992	0.08397		mg/Kg		84	70 - 130	17	35
Ethylbenzene	<0.00202	U	0.0992	0.08329		mg/Kg		83	70 - 130	22	35
m-Xylene & p-Xylene	<0.00403	U	0.198	0.1752		mg/Kg		88	70 - 130	21	35
o-Xylene	<0.00202	U	0.0992	0.08560		mg/Kg		86	70 - 130	21	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 880-21455/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21464 — **Prep Batch: 21455**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/13/22 12:38	03/14/22 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/13/22 12:38	03/14/22 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/13/22 12:38	03/14/22 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/13/22 12:38*	*03/14/22 11:20*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/13/22 12:38*	*03/14/22 11:20*	*1*

Lab Sample ID: LCS 880-21455/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21464 — **Prep Batch: 21455**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1068		mg/Kg		107	70 - 130
Toluene	0.100	0.1051		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1048		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2174		mg/Kg		109	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCS 880-21455/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21464 **Prep Batch: 21455**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.1062		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 880-21455/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21464 **Prep Batch: 21455**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1030		mg/Kg		103	70 - 130	4	35
Toluene			0.100	0.1004		mg/Kg		100	70 - 130	5	35
Ethylbenzene			0.100	0.1009		mg/Kg		101	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2097		mg/Kg		105	70 - 130	4	35
o-Xylene			0.100	0.1020		mg/Kg		102	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: 880-12274-A-11-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21464 **Prep Batch: 21455**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U F1	0.0996	0.05807	F1	mg/Kg		58	70 - 130		
Toluene	<0.00199	U F1	0.0996	0.05801	F1	mg/Kg		58	70 - 130		
Ethylbenzene	<0.00199	U F1	0.0996	0.05846	F1	mg/Kg		59	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1189	F1	mg/Kg		60	70 - 130		
o-Xylene	<0.00199	U F1	0.0996	0.06215	F1	mg/Kg		62	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-12274-A-11-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21464 **Prep Batch: 21455**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0998	0.04882	F1	mg/Kg		49	70 - 130	17	35
Toluene	<0.00199	U F1	0.0998	0.04688	F1	mg/Kg		47	70 - 130	21	35
Ethylbenzene	<0.00199	U F1	0.0998	0.04609	F1	mg/Kg		46	70 - 130	24	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.09432	F1	mg/Kg		47	70 - 130	23	35
o-Xylene	<0.00199	U F1	0.0998	0.05035	F1	mg/Kg		50	70 - 130	21	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 880-12274-A-11-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21464 — **Prep Batch: 21455**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-21477/5-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21466 — **Prep Batch: 21477**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 11:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 11:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 11:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/14/22 08:50	03/14/22 11:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/14/22 08:50	03/14/22 11:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/14/22 08:50	03/14/22 11:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/14/22 08:50	03/14/22 11:34	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/14/22 08:50	03/14/22 11:34	1

Lab Sample ID: LCS 880-21477/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21466 — **Prep Batch: 21477**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1001		mg/Kg		100	70 - 130		
Toluene			0.100	0.09748		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.09741		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2321		mg/Kg		116	70 - 130		
o-Xylene			0.100	0.1127		mg/Kg		113	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-21477/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21466 — **Prep Batch: 21477**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09137		mg/Kg		91	70 - 130	9	35
Toluene			0.100	0.1056		mg/Kg		106	70 - 130	8	35
Ethylbenzene			0.100	0.1085		mg/Kg		108	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2615	*+	mg/Kg		131	70 - 130	12	35
o-Xylene			0.100	0.1278		mg/Kg		128	70 - 130	13	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCSD 880-21477/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21466 **Prep Batch: 21477**

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

Lab Sample ID: 890-2063-1 MS **Client Sample ID: FS19**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21466 **Prep Batch: 21477**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0998	0.09514		mg/Kg		95	70 - 130
Toluene	<0.00200	U	0.0998	0.08942		mg/Kg		90	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08722		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00399	U *+	0.200	0.2073		mg/Kg		104	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1011		mg/Kg		101	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2063-1 MSD **Client Sample ID: FS19**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21466 **Prep Batch: 21477**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.07324		mg/Kg		74	70 - 130	26	35
Toluene	<0.00200	U	0.0994	0.08649		mg/Kg		87	70 - 130	3	35
Ethylbenzene	<0.00200	U	0.0994	0.08883		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	<0.00399	U *+	0.199	0.2081		mg/Kg		105	70 - 130	0	35
o-Xylene	<0.00200	U	0.0994	0.1025		mg/Kg		103	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-21500/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21456 **Prep Batch: 21500**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/14/22 09:23	03/14/22 11:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/14/22 09:23	03/14/22 11:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/22 09:23	03/14/22 11:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	03/14/22 09:23	03/14/22 11:32	1
o-Terphenyl	116		70 - 130	03/14/22 09:23	03/14/22 11:32	1

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCS 880-21500/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21500**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1006		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1080		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*121*		*70 - 130*

Lab Sample ID: LCSD 880-21500/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21500**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1008		mg/Kg		101	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1230		mg/Kg		123	70 - 130	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: 890-2063-1 MS — **Client Sample ID: FS19**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21500**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.0		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	50.1		998	889.2		mg/Kg		84	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 890-2063-1 MSD — **Client Sample ID: FS19**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21500**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	894.6		mg/Kg		90	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	50.1		998	856.3		mg/Kg		81	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 890-2063-1 MSD **Client Sample ID: FS19**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21456 **Prep Batch: 21500**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	72		70 - 130

Lab Sample ID: MB 880-21501/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21458 **Prep Batch: 21501**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 11:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 11:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:26	03/14/22 11:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130	03/14/22 09:26	03/14/22 11:32	1
o-Terphenyl	135	S1+	70 - 130	03/14/22 09:26	03/14/22 11:32	1

Lab Sample ID: LCS 880-21501/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21458 **Prep Batch: 21501**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	940.5		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: LCSD 880-21501/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21458 **Prep Batch: 21501**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1136		mg/Kg		114	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1302	*1	mg/Kg		130	70 - 130	32	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	142	S1+	70 - 130
o-Terphenyl	126		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 890-2063-21 MS — **Client Sample ID: FS39**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21458 — **Prep Batch: 21501**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1 F2	998	1078		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	82.5	*1	998	1138		mg/Kg		106	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: 890-2063-21 MSD — **Client Sample ID: FS39**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21458 — **Prep Batch: 21501**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1 F2	998	1407	F1 F2	mg/Kg		137	70 - 130	26	20
Diesel Range Organics (Over C10-C28)	82.5	*1	998	1094		mg/Kg		101	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Lab Sample ID: MB 880-21504/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21462 — **Prep Batch: 21504**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 11:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 11:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:30	03/14/22 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/14/22 09:30*	*03/14/22 11:00*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/14/22 09:30*	*03/14/22 11:00*	*1*

Lab Sample ID: LCS 880-21504/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21462 — **Prep Batch: 21504**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1135		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	792.4		mg/Kg		79	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCS 880-21504/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21462 **Prep Batch: 21504**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-21504/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21462 **Prep Batch: 21504**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1068		mg/Kg		107	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	780.5		mg/Kg		78	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-2063-12 MS **Client Sample ID: FS30**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21462 **Prep Batch: 21504**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	998	844.4		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	849.3		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 890-2063-12 MSD **Client Sample ID: FS30**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21462 **Prep Batch: 21504**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	998	663.6	F1 F2	mg/Kg		63	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	692.4	F1	mg/Kg		68	70 - 130	20	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	68	S1-	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21531/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/17/22 01:25	1

Lab Sample ID: LCS 880-21531/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	248.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-21531/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	248.4		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-2063-1 MS — **Client Sample ID: FS19**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	27.7		250	284.5		mg/Kg		103	90 - 110		

Lab Sample ID: 890-2063-1 MSD — **Client Sample ID: FS19**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	27.7		250	281.4		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-2063-11 MS — **Client Sample ID: FS29**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	225		249	474.9		mg/Kg		100	90 - 110		

Lab Sample ID: 890-2063-11 MSD — **Client Sample ID: FS29**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21620

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	225		249	465.7		mg/Kg		97	90 - 110	2	20

Lab Sample ID: MB 880-21533/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21621

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/16/22 11:21	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-21533/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21621

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.9		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-21533/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21621

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	250.5		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2063-21 MS — **Client Sample ID: FS39**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21621

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	31.4		250	288.0		mg/Kg		103	90 - 110		

Lab Sample ID: 890-2063-21 MSD — **Client Sample ID: FS39**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 21621

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	31.4		250	289.6		mg/Kg		103	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

GC VOA

Prep Batch: 21301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-17	FS35	Total/NA	Solid	5035	
MB 880-21301/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21301/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21301/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2056-A-1-J MS	Matrix Spike	Total/NA	Solid	5035	
890-2056-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 21455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-16	FS34	Total/NA	Solid	5035	
890-2063-18	FS36	Total/NA	Solid	5035	
890-2063-19	FS37	Total/NA	Solid	5035	
890-2063-25	SW01	Total/NA	Solid	5035	
890-2063-26	SW02	Total/NA	Solid	5035	
890-2063-27	SW03	Total/NA	Solid	5035	
890-2063-28	SW04	Total/NA	Solid	5035	
890-2063-29	SW05	Total/NA	Solid	5035	
890-2063-30	SW06	Total/NA	Solid	5035	
MB 880-21455/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21455/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21455/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12274-A-11-D MS	Matrix Spike	Total/NA	Solid	5035	
880-12274-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-16	FS34	Total/NA	Solid	8021B	21455
890-2063-18	FS36	Total/NA	Solid	8021B	21455
890-2063-19	FS37	Total/NA	Solid	8021B	21455
890-2063-25	SW01	Total/NA	Solid	8021B	21455
890-2063-26	SW02	Total/NA	Solid	8021B	21455
890-2063-27	SW03	Total/NA	Solid	8021B	21455
890-2063-28	SW04	Total/NA	Solid	8021B	21455
890-2063-29	SW05	Total/NA	Solid	8021B	21455
890-2063-30	SW06	Total/NA	Solid	8021B	21455
MB 880-21455/5-A	Method Blank	Total/NA	Solid	8021B	21455
LCS 880-21455/1-A	Lab Control Sample	Total/NA	Solid	8021B	21455
LCSD 880-21455/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21455
880-12274-A-11-D MS	Matrix Spike	Total/NA	Solid	8021B	21455
880-12274-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21455

Analysis Batch: 21466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Total/NA	Solid	8021B	21477
890-2063-2	FS20	Total/NA	Solid	8021B	21477
890-2063-3	FS21	Total/NA	Solid	8021B	21477
890-2063-4	FS22	Total/NA	Solid	8021B	21477
890-2063-5	FS23	Total/NA	Solid	8021B	21477
890-2063-6	FS24	Total/NA	Solid	8021B	21477
890-2063-7	FS25	Total/NA	Solid	8021B	21477
890-2063-8	FS26	Total/NA	Solid	8021B	21477

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

GC VOA (Continued)

Analysis Batch: 21466 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-9	FS27	Total/NA	Solid	8021B	21477
890-2063-10	FS28	Total/NA	Solid	8021B	21477
890-2063-11	FS29	Total/NA	Solid	8021B	21477
890-2063-12	FS30	Total/NA	Solid	8021B	21477
890-2063-13	FS31	Total/NA	Solid	8021B	21477
890-2063-14	FS32	Total/NA	Solid	8021B	21477
890-2063-15	FS33	Total/NA	Solid	8021B	21477
890-2063-20	FS38	Total/NA	Solid	8021B	21477
890-2063-21	FS39	Total/NA	Solid	8021B	21477
890-2063-22	FS40	Total/NA	Solid	8021B	21477
890-2063-23	FS41	Total/NA	Solid	8021B	21477
890-2063-24	FS42	Total/NA	Solid	8021B	21477
MB 880-21477/5-B	Method Blank	Total/NA	Solid	8021B	21477
LCS 880-21477/1-A	Lab Control Sample	Total/NA	Solid	8021B	21477
LCSD 880-21477/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21477
890-2063-1 MS	FS19	Total/NA	Solid	8021B	21477
890-2063-1 MSD	FS19	Total/NA	Solid	8021B	21477

Prep Batch: 21477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Total/NA	Solid	5035	
890-2063-2	FS20	Total/NA	Solid	5035	
890-2063-3	FS21	Total/NA	Solid	5035	
890-2063-4	FS22	Total/NA	Solid	5035	
890-2063-5	FS23	Total/NA	Solid	5035	
890-2063-6	FS24	Total/NA	Solid	5035	
890-2063-7	FS25	Total/NA	Solid	5035	
890-2063-8	FS26	Total/NA	Solid	5035	
890-2063-9	FS27	Total/NA	Solid	5035	
890-2063-10	FS28	Total/NA	Solid	5035	
890-2063-11	FS29	Total/NA	Solid	5035	
890-2063-12	FS30	Total/NA	Solid	5035	
890-2063-13	FS31	Total/NA	Solid	5035	
890-2063-14	FS32	Total/NA	Solid	5035	
890-2063-15	FS33	Total/NA	Solid	5035	
890-2063-20	FS38	Total/NA	Solid	5035	
890-2063-21	FS39	Total/NA	Solid	5035	
890-2063-22	FS40	Total/NA	Solid	5035	
890-2063-23	FS41	Total/NA	Solid	5035	
890-2063-24	FS42	Total/NA	Solid	5035	
MB 880-21477/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-21477/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21477/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2063-1 MS	FS19	Total/NA	Solid	5035	
890-2063-1 MSD	FS19	Total/NA	Solid	5035	

Analysis Batch: 21575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Total/NA	Solid	Total BTEX	
890-2063-2	FS20	Total/NA	Solid	Total BTEX	
890-2063-3	FS21	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

GC VOA (Continued)

Analysis Batch: 21575 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-4	FS22	Total/NA	Solid	Total BTEX	
890-2063-5	FS23	Total/NA	Solid	Total BTEX	
890-2063-6	FS24	Total/NA	Solid	Total BTEX	
890-2063-7	FS25	Total/NA	Solid	Total BTEX	
890-2063-8	FS26	Total/NA	Solid	Total BTEX	
890-2063-9	FS27	Total/NA	Solid	Total BTEX	
890-2063-10	FS28	Total/NA	Solid	Total BTEX	
890-2063-11	FS29	Total/NA	Solid	Total BTEX	
890-2063-12	FS30	Total/NA	Solid	Total BTEX	
890-2063-13	FS31	Total/NA	Solid	Total BTEX	
890-2063-14	FS32	Total/NA	Solid	Total BTEX	
890-2063-15	FS33	Total/NA	Solid	Total BTEX	
890-2063-16	FS34	Total/NA	Solid	Total BTEX	
890-2063-17	FS35	Total/NA	Solid	Total BTEX	
890-2063-18	FS36	Total/NA	Solid	Total BTEX	
890-2063-19	FS37	Total/NA	Solid	Total BTEX	
890-2063-20	FS38	Total/NA	Solid	Total BTEX	
890-2063-21	FS39	Total/NA	Solid	Total BTEX	
890-2063-22	FS40	Total/NA	Solid	Total BTEX	
890-2063-23	FS41	Total/NA	Solid	Total BTEX	
890-2063-24	FS42	Total/NA	Solid	Total BTEX	
890-2063-25	SW01	Total/NA	Solid	Total BTEX	
890-2063-26	SW02	Total/NA	Solid	Total BTEX	
890-2063-27	SW03	Total/NA	Solid	Total BTEX	
890-2063-28	SW04	Total/NA	Solid	Total BTEX	
890-2063-29	SW05	Total/NA	Solid	Total BTEX	
890-2063-30	SW06	Total/NA	Solid	Total BTEX	

Analysis Batch: 21616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-17	FS35	Total/NA	Solid	8021B	21301
MB 880-21301/5-A	Method Blank	Total/NA	Solid	8021B	21301
LCS 880-21301/1-A	Lab Control Sample	Total/NA	Solid	8021B	21301
LCSD 880-21301/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21301
890-2056-A-1-J MS	Matrix Spike	Total/NA	Solid	8021B	21301
890-2056-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21301

GC Semi VOA

Analysis Batch: 21456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Total/NA	Solid	8015B NM	21500
890-2063-2	FS20	Total/NA	Solid	8015B NM	21500
890-2063-3	FS21	Total/NA	Solid	8015B NM	21500
890-2063-4	FS22	Total/NA	Solid	8015B NM	21500
890-2063-5	FS23	Total/NA	Solid	8015B NM	21500
890-2063-6	FS24	Total/NA	Solid	8015B NM	21500
890-2063-7	FS25	Total/NA	Solid	8015B NM	21500
890-2063-8	FS26	Total/NA	Solid	8015B NM	21500
890-2063-9	FS27	Total/NA	Solid	8015B NM	21500
890-2063-10	FS28	Total/NA	Solid	8015B NM	21500

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

GC Semi VOA (Continued)

Analysis Batch: 21456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21500/1-A	Method Blank	Total/NA	Solid	8015B NM	21500
LCS 880-21500/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21500
LCSD 880-21500/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21500
890-2063-1 MS	FS19	Total/NA	Solid	8015B NM	21500
890-2063-1 MSD	FS19	Total/NA	Solid	8015B NM	21500

Analysis Batch: 21458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-21	FS39	Total/NA	Solid	8015B NM	21501
890-2063-22	FS40	Total/NA	Solid	8015B NM	21501
890-2063-23	FS41	Total/NA	Solid	8015B NM	21501
890-2063-24	FS42	Total/NA	Solid	8015B NM	21501
890-2063-25	SW01	Total/NA	Solid	8015B NM	21501
890-2063-26	SW02	Total/NA	Solid	8015B NM	21501
890-2063-27	SW03	Total/NA	Solid	8015B NM	21501
890-2063-28	SW04	Total/NA	Solid	8015B NM	21501
890-2063-29	SW05	Total/NA	Solid	8015B NM	21501
890-2063-30	SW06	Total/NA	Solid	8015B NM	21501
MB 880-21501/1-A	Method Blank	Total/NA	Solid	8015B NM	21501
LCS 880-21501/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21501
LCSD 880-21501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21501
890-2063-21 MS	FS39	Total/NA	Solid	8015B NM	21501
890-2063-21 MSD	FS39	Total/NA	Solid	8015B NM	21501

Analysis Batch: 21462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-11	FS29	Total/NA	Solid	8015B NM	21504
890-2063-12	FS30	Total/NA	Solid	8015B NM	21504
890-2063-13	FS31	Total/NA	Solid	8015B NM	21504
890-2063-14	FS32	Total/NA	Solid	8015B NM	21504
890-2063-15	FS33	Total/NA	Solid	8015B NM	21504
890-2063-16	FS34	Total/NA	Solid	8015B NM	21504
890-2063-17	FS35	Total/NA	Solid	8015B NM	21504
890-2063-18	FS36	Total/NA	Solid	8015B NM	21504
890-2063-19	FS37	Total/NA	Solid	8015B NM	21504
890-2063-20	FS38	Total/NA	Solid	8015B NM	21504
MB 880-21504/1-A	Method Blank	Total/NA	Solid	8015B NM	21504
LCS 880-21504/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21504
LCSD 880-21504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21504
890-2063-12 MS	FS30	Total/NA	Solid	8015B NM	21504
890-2063-12 MSD	FS30	Total/NA	Solid	8015B NM	21504

Prep Batch: 21500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Total/NA	Solid	8015NM Prep	
890-2063-2	FS20	Total/NA	Solid	8015NM Prep	
890-2063-3	FS21	Total/NA	Solid	8015NM Prep	
890-2063-4	FS22	Total/NA	Solid	8015NM Prep	
890-2063-5	FS23	Total/NA	Solid	8015NM Prep	
890-2063-6	FS24	Total/NA	Solid	8015NM Prep	
890-2063-7	FS25	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

GC Semi VOA (Continued)

Prep Batch: 21500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-8	FS26	Total/NA	Solid	8015NM Prep	
890-2063-9	FS27	Total/NA	Solid	8015NM Prep	
890-2063-10	FS28	Total/NA	Solid	8015NM Prep	
MB 880-21500/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21500/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21500/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2063-1 MS	FS19	Total/NA	Solid	8015NM Prep	
890-2063-1 MSD	FS19	Total/NA	Solid	8015NM Prep	

Prep Batch: 21501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-21	FS39	Total/NA	Solid	8015NM Prep	
890-2063-22	FS40	Total/NA	Solid	8015NM Prep	
890-2063-23	FS41	Total/NA	Solid	8015NM Prep	
890-2063-24	FS42	Total/NA	Solid	8015NM Prep	
890-2063-25	SW01	Total/NA	Solid	8015NM Prep	
890-2063-26	SW02	Total/NA	Solid	8015NM Prep	
890-2063-27	SW03	Total/NA	Solid	8015NM Prep	
890-2063-28	SW04	Total/NA	Solid	8015NM Prep	
890-2063-29	SW05	Total/NA	Solid	8015NM Prep	
890-2063-30	SW06	Total/NA	Solid	8015NM Prep	
MB 880-21501/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21501/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2063-21 MS	FS39	Total/NA	Solid	8015NM Prep	
890-2063-21 MSD	FS39	Total/NA	Solid	8015NM Prep	

Prep Batch: 21504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-11	FS29	Total/NA	Solid	8015NM Prep	
890-2063-12	FS30	Total/NA	Solid	8015NM Prep	
890-2063-13	FS31	Total/NA	Solid	8015NM Prep	
890-2063-14	FS32	Total/NA	Solid	8015NM Prep	
890-2063-15	FS33	Total/NA	Solid	8015NM Prep	
890-2063-16	FS34	Total/NA	Solid	8015NM Prep	
890-2063-17	FS35	Total/NA	Solid	8015NM Prep	
890-2063-18	FS36	Total/NA	Solid	8015NM Prep	
890-2063-19	FS37	Total/NA	Solid	8015NM Prep	
890-2063-20	FS38	Total/NA	Solid	8015NM Prep	
MB 880-21504/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21504/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2063-12 MS	FS30	Total/NA	Solid	8015NM Prep	
890-2063-12 MSD	FS30	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Total/NA	Solid	8015 NM	
890-2063-2	FS20	Total/NA	Solid	8015 NM	
890-2063-3	FS21	Total/NA	Solid	8015 NM	
890-2063-4	FS22	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

GC Semi VOA (Continued)

Analysis Batch: 21576 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-5	FS23	Total/NA	Solid	8015 NM	
890-2063-6	FS24	Total/NA	Solid	8015 NM	
890-2063-7	FS25	Total/NA	Solid	8015 NM	
890-2063-8	FS26	Total/NA	Solid	8015 NM	
890-2063-9	FS27	Total/NA	Solid	8015 NM	
890-2063-10	FS28	Total/NA	Solid	8015 NM	
890-2063-11	FS29	Total/NA	Solid	8015 NM	
890-2063-12	FS30	Total/NA	Solid	8015 NM	
890-2063-13	FS31	Total/NA	Solid	8015 NM	
890-2063-14	FS32	Total/NA	Solid	8015 NM	
890-2063-15	FS33	Total/NA	Solid	8015 NM	
890-2063-16	FS34	Total/NA	Solid	8015 NM	
890-2063-17	FS35	Total/NA	Solid	8015 NM	
890-2063-18	FS36	Total/NA	Solid	8015 NM	
890-2063-19	FS37	Total/NA	Solid	8015 NM	
890-2063-20	FS38	Total/NA	Solid	8015 NM	
890-2063-21	FS39	Total/NA	Solid	8015 NM	
890-2063-22	FS40	Total/NA	Solid	8015 NM	
890-2063-23	FS41	Total/NA	Solid	8015 NM	
890-2063-24	FS42	Total/NA	Solid	8015 NM	
890-2063-25	SW01	Total/NA	Solid	8015 NM	
890-2063-26	SW02	Total/NA	Solid	8015 NM	
890-2063-27	SW03	Total/NA	Solid	8015 NM	
890-2063-28	SW04	Total/NA	Solid	8015 NM	
890-2063-29	SW05	Total/NA	Solid	8015 NM	
890-2063-30	SW06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Soluble	Solid	DI Leach	
890-2063-2	FS20	Soluble	Solid	DI Leach	
890-2063-3	FS21	Soluble	Solid	DI Leach	
890-2063-4	FS22	Soluble	Solid	DI Leach	
890-2063-5	FS23	Soluble	Solid	DI Leach	
890-2063-6	FS24	Soluble	Solid	DI Leach	
890-2063-7	FS25	Soluble	Solid	DI Leach	
890-2063-8	FS26	Soluble	Solid	DI Leach	
890-2063-9	FS27	Soluble	Solid	DI Leach	
890-2063-10	FS28	Soluble	Solid	DI Leach	
890-2063-11	FS29	Soluble	Solid	DI Leach	
890-2063-12	FS30	Soluble	Solid	DI Leach	
890-2063-13	FS31	Soluble	Solid	DI Leach	
890-2063-14	FS32	Soluble	Solid	DI Leach	
890-2063-15	FS33	Soluble	Solid	DI Leach	
890-2063-16	FS34	Soluble	Solid	DI Leach	
890-2063-17	FS35	Soluble	Solid	DI Leach	
890-2063-18	FS36	Soluble	Solid	DI Leach	
890-2063-19	FS37	Soluble	Solid	DI Leach	
890-2063-20	FS38	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

HPLC/IC (Continued)

Leach Batch: 21531 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21531/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21531/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21531/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2063-1 MS	FS19	Soluble	Solid	DI Leach	
890-2063-1 MSD	FS19	Soluble	Solid	DI Leach	
890-2063-11 MS	FS29	Soluble	Solid	DI Leach	
890-2063-11 MSD	FS29	Soluble	Solid	DI Leach	

Leach Batch: 21533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-21	FS39	Soluble	Solid	DI Leach	
890-2063-22	FS40	Soluble	Solid	DI Leach	
890-2063-23	FS41	Soluble	Solid	DI Leach	
890-2063-24	FS42	Soluble	Solid	DI Leach	
890-2063-25	SW01	Soluble	Solid	DI Leach	
890-2063-26	SW02	Soluble	Solid	DI Leach	
890-2063-27	SW03	Soluble	Solid	DI Leach	
890-2063-28	SW04	Soluble	Solid	DI Leach	
890-2063-29	SW05	Soluble	Solid	DI Leach	
890-2063-30	SW06	Soluble	Solid	DI Leach	
MB 880-21533/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21533/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21533/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2063-21 MS	FS39	Soluble	Solid	DI Leach	
890-2063-21 MSD	FS39	Soluble	Solid	DI Leach	

Analysis Batch: 21620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1	FS19	Soluble	Solid	300.0	21531
890-2063-2	FS20	Soluble	Solid	300.0	21531
890-2063-3	FS21	Soluble	Solid	300.0	21531
890-2063-4	FS22	Soluble	Solid	300.0	21531
890-2063-5	FS23	Soluble	Solid	300.0	21531
890-2063-6	FS24	Soluble	Solid	300.0	21531
890-2063-7	FS25	Soluble	Solid	300.0	21531
890-2063-8	FS26	Soluble	Solid	300.0	21531
890-2063-9	FS27	Soluble	Solid	300.0	21531
890-2063-10	FS28	Soluble	Solid	300.0	21531
890-2063-11	FS29	Soluble	Solid	300.0	21531
890-2063-12	FS30	Soluble	Solid	300.0	21531
890-2063-13	FS31	Soluble	Solid	300.0	21531
890-2063-14	FS32	Soluble	Solid	300.0	21531
890-2063-15	FS33	Soluble	Solid	300.0	21531
890-2063-16	FS34	Soluble	Solid	300.0	21531
890-2063-17	FS35	Soluble	Solid	300.0	21531
890-2063-18	FS36	Soluble	Solid	300.0	21531
890-2063-19	FS37	Soluble	Solid	300.0	21531
890-2063-20	FS38	Soluble	Solid	300.0	21531
MB 880-21531/1-A	Method Blank	Soluble	Solid	300.0	21531
LCS 880-21531/2-A	Lab Control Sample	Soluble	Solid	300.0	21531
LCSD 880-21531/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21531

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

HPLC/IC (Continued)

Analysis Batch: 21620 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-1 MS	FS19	Soluble	Solid	300.0	21531
890-2063-1 MSD	FS19	Soluble	Solid	300.0	21531
890-2063-11 MS	FS29	Soluble	Solid	300.0	21531
890-2063-11 MSD	FS29	Soluble	Solid	300.0	21531

Analysis Batch: 21621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2063-21	FS39	Soluble	Solid	300.0	21533
890-2063-22	FS40	Soluble	Solid	300.0	21533
890-2063-23	FS41	Soluble	Solid	300.0	21533
890-2063-24	FS42	Soluble	Solid	300.0	21533
890-2063-25	SW01	Soluble	Solid	300.0	21533
890-2063-26	SW02	Soluble	Solid	300.0	21533
890-2063-27	SW03	Soluble	Solid	300.0	21533
890-2063-28	SW04	Soluble	Solid	300.0	21533
890-2063-29	SW05	Soluble	Solid	300.0	21533
890-2063-30	SW06	Soluble	Solid	300.0	21533
MB 880-21533/1-A	Method Blank	Soluble	Solid	300.0	21533
LCS 880-21533/2-A	Lab Control Sample	Soluble	Solid	300.0	21533
LCSD 880-21533/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21533
890-2063-21 MS	FS39	Soluble	Solid	300.0	21533
890-2063-21 MSD	FS39	Soluble	Solid	300.0	21533

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS19 — Lab Sample ID: 890-2063-1

Date Collected: 03/10/22 11:35 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/14/22 12:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 12:34	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 01:56	SC	XEN MID

Client Sample ID: FS20 — Lab Sample ID: 890-2063-2

Date Collected: 03/10/22 11:40 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 13:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21456	03/14/22 13:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 02:27	SC	XEN MID

Client Sample ID: FS21 — Lab Sample ID: 890-2063-3

Date Collected: 03/10/22 11:45 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 13:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 13:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 02:37	SC	XEN MID

Client Sample ID: FS22 — Lab Sample ID: 890-2063-4

Date Collected: 03/10/22 11:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 13:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS22 — Lab Sample ID: 890-2063-4

Date Collected: 03/10/22 11:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

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			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 14:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 02:48	SC	XEN MID

Client Sample ID: FS23 — Lab Sample ID: 890-2063-5

Date Collected: 03/10/22 12:00 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 14:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 14:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 02:58	SC	XEN MID

Client Sample ID: FS24 — Lab Sample ID: 890-2063-6

Date Collected: 03/10/22 12:05 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 14:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 14:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 03:29	SC	XEN MID

Client Sample ID: FS25 — Lab Sample ID: 890-2063-7

Date Collected: 03/10/22 12:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/14/22 12:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 15:19	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS25 — Lab Sample ID: 890-2063-7

Date Collected: 03/10/22 12:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 03:40	SC	XEN MID

Client Sample ID: FS26 — Lab Sample ID: 890-2063-8

Date Collected: 03/10/22 12:15 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21466	03/14/22 12:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 15:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 03:50	SC	XEN MID

Client Sample ID: FS27 — Lab Sample ID: 890-2063-9

Date Collected: 03/10/22 12:35 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21466	03/14/22 14:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 16:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 04:00	SC	XEN MID

Client Sample ID: FS28 — Lab Sample ID: 890-2063-10

Date Collected: 03/10/22 12:40 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21466	03/14/22 15:06	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 16:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 04:11	SC	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS29 — Lab Sample ID: 890-2063-11

Date Collected: 03/10/22 12:45 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 16:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 13:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 04:21	SC	XEN MID

Client Sample ID: FS30 — Lab Sample ID: 890-2063-12

Date Collected: 03/10/22 12:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 17:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 12:04	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 04:52	SC	XEN MID

Client Sample ID: FS31 — Lab Sample ID: 890-2063-13

Date Collected: 03/10/22 13:05 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 17:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 13:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 05:02	SC	XEN MID

Client Sample ID: FS32 — Lab Sample ID: 890-2063-14

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21466	03/14/22 17:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS32 — Lab Sample ID: 890-2063-14

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

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			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 05:33	SC	XEN MID

Client Sample ID: FS33 — Lab Sample ID: 890-2063-15

Date Collected: 03/10/22 13:15 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 18:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 14:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 05:44	SC	XEN MID

Client Sample ID: FS34 — Lab Sample ID: 890-2063-16

Date Collected: 03/10/22 13:20 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21464	03/14/22 17:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 14:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 05:54	SC	XEN MID

Client Sample ID: FS35 — Lab Sample ID: 890-2063-17

Date Collected: 03/10/22 13:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21301	03/14/22 17:00	KL	XEN MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	21616	03/15/22 15:43	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 14:53	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS35 — Lab Sample ID: 890-2063-17

Date Collected: 03/10/22 13:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 06:04	SC	XEN MID

Client Sample ID: FS36 — Lab Sample ID: 890-2063-18

Date Collected: 03/10/22 13:55 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	21464	03/14/22 18:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 15:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 08:04	SC	XEN MID

Client Sample ID: FS37 — Lab Sample ID: 890-2063-19

Date Collected: 03/10/22 14:00 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	21464	03/14/22 19:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 15:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 08:15	SC	XEN MID

Client Sample ID: FS38 — Lab Sample ID: 890-2063-20

Date Collected: 03/10/22 14:05 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	21466	03/14/22 18:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21504	03/14/22 09:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21462	03/14/22 15:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21531	03/14/22 12:26	CH	XEN MID
Soluble	Analysis	300.0		1			21620	03/17/22 08:25	SC	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS39 — Lab Sample ID: 890-2063-21

Date Collected: 03/10/22 12:45 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 18:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 12:34	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 14:22	CH	XEN MID

Client Sample ID: FS40 — Lab Sample ID: 890-2063-22

Date Collected: 03/10/22 12:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 19:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 13:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 14:53	CH	XEN MID

Client Sample ID: FS41 — Lab Sample ID: 890-2063-23

Date Collected: 03/10/22 13:05 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 19:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 13:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 15:03	CH	XEN MID

Client Sample ID: FS42 — Lab Sample ID: 890-2063-24

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21477	03/14/22 08:50	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	21466	03/14/22 20:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: FS42 — Lab Sample ID: 890-2063-24

Date Collected: 03/10/22 13:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

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			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 14:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 15:34	CH	XEN MID

Client Sample ID: SW01 — Lab Sample ID: 890-2063-25

Date Collected: 03/10/22 09:50 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21464	03/14/22 18:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 14:37	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 15:45	CH	XEN MID

Client Sample ID: SW02 — Lab Sample ID: 890-2063-26

Date Collected: 03/10/22 09:55 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21464	03/14/22 16:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 14:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 15:55	CH	XEN MID

Client Sample ID: SW03 — Lab Sample ID: 890-2063-27

Date Collected: 03/10/22 10:00 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21464	03/14/22 16:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 15:19	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Client Sample ID: SW03 Lab Sample ID: 890-2063-27

Date Collected: 03/10/22 10:00 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 16:05	CH	XEN MID

Client Sample ID: SW04 Lab Sample ID: 890-2063-28

Date Collected: 03/10/22 10:10 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21464	03/14/22 16:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 15:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 16:16	CH	XEN MID

Client Sample ID: SW05 Lab Sample ID: 890-2063-29

Date Collected: 03/10/22 10:15 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21464	03/14/22 17:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 16:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 16:26	CH	XEN MID

Client Sample ID: SW06 Lab Sample ID: 890-2063-30

Date Collected: 03/10/22 10:20 **Matrix: Solid**
Date Received: 03/10/22 16:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21455	03/13/22 12:38	MR	XEN MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	21464	03/14/22 17:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21575	03/14/22 19:47	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21576	03/14/22 19:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21501	03/14/22 09:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21458	03/14/22 16:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21533	03/14/22 12:28	CH	XEN MID
Soluble	Analysis	300.0		1			21621	03/16/22 16:36	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY

Job ID: 890-2063-1
SDG: 31403551.001 Task 01.02

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

Sample Summary

Client: WSP USA Inc. Job ID: 890-2063-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001 Task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2063-1	FS19	Solid	03/10/22 11:35	03/10/22 16:50	4
890-2063-2	FS20	Solid	03/10/22 11:40	03/10/22 16:50	4
890-2063-3	FS21	Solid	03/10/22 11:45	03/10/22 16:50	4
890-2063-4	FS22	Solid	03/10/22 11:50	03/10/22 16:50	4
890-2063-5	FS23	Solid	03/10/22 12:00	03/10/22 16:50	4
890-2063-6	FS24	Solid	03/10/22 12:05	03/10/22 16:50	4
890-2063-7	FS25	Solid	03/10/22 12:10	03/10/22 16:50	4
890-2063-8	FS26	Solid	03/10/22 12:15	03/10/22 16:50	4
890-2063-9	FS27	Solid	03/10/22 12:35	03/10/22 16:50	4
890-2063-10	FS28	Solid	03/10/22 12:40	03/10/22 16:50	4
890-2063-11	FS29	Solid	03/10/22 12:45	03/10/22 16:50	4
890-2063-12	FS30	Solid	03/10/22 12:50	03/10/22 16:50	4
890-2063-13	FS31	Solid	03/10/22 13:05	03/10/22 16:50	4
890-2063-14	FS32	Solid	03/10/22 13:10	03/10/22 16:50	4
890-2063-15	FS33	Solid	03/10/22 13:15	03/10/22 16:50	4
890-2063-16	FS34	Solid	03/10/22 13:20	03/10/22 16:50	4
890-2063-17	FS35	Solid	03/10/22 13:50	03/10/22 16:50	4
890-2063-18	FS36	Solid	03/10/22 13:55	03/10/22 16:50	4
890-2063-19	FS37	Solid	03/10/22 14:00	03/10/22 16:50	4
890-2063-20	FS38	Solid	03/10/22 14:05	03/10/22 16:50	4
890-2063-21	FS39	Solid	03/10/22 12:45	03/10/22 16:50	4
890-2063-22	FS40	Solid	03/10/22 12:50	03/10/22 16:50	4
890-2063-23	FS41	Solid	03/10/22 13:05	03/10/22 16:50	4
890-2063-24	FS42	Solid	03/10/22 13:10	03/10/22 16:50	4
890-2063-25	SW01	Solid	03/10/22 09:50	03/10/22 16:50	0 - 4
890-2063-26	SW02	Solid	03/10/22 09:55	03/10/22 16:50	0 - 4
890-2063-27	SW03	Solid	03/10/22 10:00	03/10/22 16:50	0 - 4
890-2063-28	SW04	Solid	03/10/22 10:10	03/10/22 16:50	0 - 4
890-2063-29	SW05	Solid	03/10/22 10:15	03/10/22 16:50	0 - 4
890-2063-30	SW06	Solid	03/10/22 10:20	03/10/22 16:50	0 - 4

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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3/17/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA Inc.	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	conner.shore@wsp.com ; tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine ☐	
P.O. Number:		Rush: 24 Hr	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	14.4/14.2	Thermometer ID	TNM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

890-2063 Chain of Custody

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS19	s	3/10/2022	1135	4'	1	x	x	x	Composite
FS20	s	3/10/2022	1140	4'	1	x	x	x	Composite
FS21	s	3/10/2022	1145	4'	1	x	x	x	Composite
FS22	s	3/10/2022	1150	4'	1	x	x	x	Composite
FS23	s	3/10/2022	1200	4'	1	x	x	x	Composite
FS24	s	3/10/2022	1205	4'	1	x	x	x	Composite
FS25	s	3/10/2022	1210	4'	1	x	x	x	Composite
FS26	s	3/10/2022	1215	4'	1	x	x	x	Composite
FS27	s	3/10/2022	1235	4'	1	x	x	x	Composite
FS28	s	3/10/2022	1240	4'	1	x	x	x	Composite

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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		3102216 50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

XENCO LABORATORIES

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Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 2 of 3

3/17/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA Inc.	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	conner.shore@wsp.com ; tacoma.morrissey@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine ☐	
P.O. Number:		Rush: 24 Hr	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
FS29	s	3/10/2022	1245	4'	1	x	x	x	Composite
FS30	s	3/10/2022	1250	4'	1	x	x	x	Composite
FS31	s	3/10/2022	1305	4'	1	x	x	x	Composite
FS32	s	3/10/2022	1310	4'	1	x	x	x	Composite
FS33	s	3/10/2022	1315	4'	1	x	x	x	Composite
FS34	s	3/10/2022	1320	4'	1	x	x	x	Composite
FS35	s	3/10/2022	1350	4'	1	x	x	x	Composite
FS36	s	3/10/2022	1355	4'	1	x	x	x	Composite
FS37	s	3/10/2022	1400	4'	1	x	x	x	Composite
FS38	s	3/10/2022	1405	4'	1	x	x	x	Composite

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		3102216 50	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

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Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 3 of 3

Work Order No: _____

3/17/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA Inc.	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.236.3849	Email:	conner.shore@wsp.com ; tacoma.morrissey@wsp.com

Work Order Comments

Program: UST/PST ☐ RP ☐ ownfields RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ vel III PT/UST TRRP Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Eunice Monument South Unit B Facility	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine ☐	
P.O. Number:		Rush: 24 Hr	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS39	s	3/10/2022	1245	4'	1	x	x	x	Composite
FS40	s	3/10/2022	1250	4'	1	x	x	x	Composite
FS41	s	3/10/2022	1305	4'	1	x	x	x	Composite
FS42	s	3/10/2022	1310	4'	1	x	x	x	Composite
SW01	s	3/10/2022	950	0-4'	1	x	x	x	Composite
SW02	s	3/10/2022	955	0-4'	1	x	x	x	Composite
SW03	s	3/10/2022	1000	0-4'	1	x	x	x	Composite
SW04	s	3/10/2022	1010	0-4'	1	x	x	x	Composite
SW05	s	3/10/2022	1015	0-4'	1	x	x	x	Composite
SW06	s	3/10/2022	1020	0-4'	1	x	x	x	Composite

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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1	2	31022 1650	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

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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

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s).	COC No: 890-664 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2063-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 3/14/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: EUNICE MONUMENT SOUTH UNIT B FACILITY	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M - Hexane
B NaOH	N - None
C Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q Na2SO3
F - MeOH	R - Na2S2O3
G Amchlor	S H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U Acetone
J - DI Water	V - MCAA
K EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
Preservation Code:													
FS19 (890-2063-1)	3/10/22	11 35 Mountain		Solid			X	X	X	X	X	1	
FS20 (890-2063-2)	3/10/22	11 40 Mountain		Solid			X	X	X	X	X	1	
FS21 (890-2063-3)	3/10/22	11 45 Mountain		Solid			X	X	X	X	X	1	
FS22 (890-2063-4)	3/10/22	11 50 Mountain		Solid			X	X	X	X	X	1	
FS23 (890-2063-5)	3/10/22	12 00 Mountain		Solid			X	X	X	X	X	1	
FS24 (890-2063-6)	3/10/22	12 05 Mountain		Solid			X	X	X	X	X	1	
FS25 (890-2063-7)	3/10/22	12 10 Mountain		Solid			X	X	X	X	X	1	
FS26 (890-2063-8)	3/10/22	12 15 Mountain		Solid			X	X	X	X	X	1	
FS27 (890-2063-9)	3/10/22	12 35 Mountain		Solid			X	X	X	X	X	1	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by: Clue Cuy, 3/1/22	Date/Time:	Company	Received by: Kramer	Date/Time: 3/14/22 800	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks 2 6/25

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3/17/2022
Released to Imaging: 10/13/2023 10:56:27 AM

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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

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-664 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2063-1
Address: 1211 W Florida Ave,	Due Date Requested: 3/14/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: EUNICE MONUMENT SOUTH UNIT B FACILITY	Project #: 89000048			
Site	SSOW#:			

Preservation Codes:

A - HCL	M Hexane
B NaOH	N - None
C - Zn Acetate	O AsNaO2
D Nitric Acid	P - Na2O4S
E - NaHSO4	Q Na2SO3
F MeOH	R - Na2S2O3
G - Amchlor	S H2SO4
H Ascorbic Acid	T - TSP Dodecahydrate
I Ice	U - Acetone
J DI Water	V - MCAA
K EDTA	W pH 4-5
L EDA	Z other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
FS28 (890-2063-10)	3/10/22	12 40 Mountain		Solid			X	X	X	X	X	1	
FS29 (890-2063-11)	3/10/22	12 45 Mountain		Solid			X	X	X	X	X	1	
FS30 (890-2063-12)	3/10/22	12 50 Mountain		Solid			X	X	X	X	X	1	
FS31 (890-2063-13)	3/10/22	13 05 Mountain		Solid			X	X	X	X	X	1	
FS32 (890-2063-14)	3/10/22	13 10 Mountain		Solid			X	X	X	X	X	1	
FS33 (890-2063-15)	3/10/22	13 15 Mountain		Solid			X	X	X	X	X	1	
FS34 (890-2063-16)	3/10/22	13 20 Mountain		Solid			X	X	X	X	X	1	
FS35 (890-2063-17)	3/10/22	13 50 Mountain		Solid			X	X	X	X	X	1	
FS36 (890-2063-18)	3/10/22	13 55 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II, III, IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by: Clue Cruz 3 11 22	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

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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

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-664 3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 3 of 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2063-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 3/14/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: EUNICE MONUMENT SOUTH UNIT B FACILITY	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.

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 - Na2O4S, Q Na2SO3, R - Na2S2O3, S H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
FS37 (890-2063-19)	3/10/22	14 00 Mountain		Solid			X	X	X	X	X	1	
FS38 (890-2063-20)	3/10/22	14 05 Mountain		Solid			X	X	X	X	X	1	
FS39 (890-2063-21)	3/10/22	12 45 Mountain		Solid			X	X	X	X	X	1	
FS40 (890-2063-22)	3/10/22	12 50 Mountain		Solid			X	X	X	X	X	1	
FS41 (890-2063-23)	3/10/22	13 05 Mountain		Solid			X	X	X	X	X	1	
FS42 (890-2063-24)	3/10/22	13 10 Mountain		Solid			X	X	X	X	X	1	
SW01 (890-2063-25)	3/10/22	09 50 Mountain		Solid			X	X	X	X	X	1	
SW02 (890-2063-26)	3/10/22	09 55 Mountain		Solid			X	X	X	X	X	1	
SW03 (890-2063-27)	3/10/22	10 00 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Cee Cruz 3 11 22	Date/Time:	Company	Received by: Kramer	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-664 4
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 4 of 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2063-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 3/14/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: EUNICE MONUMENT SOUTH UNIT B FACILITY	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SW04 (890-2063-28)	3/10/22	10:10 Mountain		Solid			X	X	X	X	X	1	
SW05 (890-2063-29)	3/10/22	10:15 Mountain		Solid			X	X	X	X	X	1	
SW06 (890-2063-30)	3/10/22	10:20 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II, III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Clue Cup 3 11 22			Kramer		
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

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Received by OCD: 7/19/2023 1:46:39 PM
3/17/2022
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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2063-1
SDG Number: 31403551.001 Task 01.02

Login Number: 2063
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2063-1
SDG Number: 31403551.001 Task 01.02

Login Number: 2063
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/14/22 08:17 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").	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2070-1
Laboratory Sample Delivery Group: 31403551.001TASK 01.02
Client Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
4/7/2022 12:47:52 PM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QC Sample Results 10
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Released to Imaging: 10/13/2023 10:56:27 AM

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Qualifiers

GC 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.
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: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Job ID: 890-2070-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2070-1

Receipt
The samples were received on 3/11/2022 11:17 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 5.4°C

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

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

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Client Sample ID: FS43 — Lab Sample ID: 890-2070-1

Date Collected: 03/03/22 15:45 **Matrix: Solid**
Date Received: 03/11/22 11:17
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/16/22 09:01	03/16/22 15:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/16/22 09:01	03/16/22 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/16/22 09:01*	*03/16/22 15:31*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/16/22 09:01*	*03/16/22 15:31*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/16/22 18:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**61.9**		49.9		mg/Kg			03/15/22 10:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/15/22 08:41	03/15/22 18:32	1
Diesel Range Organics (Over C10-C28)	**61.9**		49.9		mg/Kg		03/15/22 08:41	03/15/22 18:32	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/15/22 08:41	03/15/22 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/15/22 08:41*	*03/15/22 18:32*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/15/22 08:41*	*03/15/22 18:32*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**338**		101		mg/Kg			03/31/22 17:45	10

Client Sample ID: FS44 — Lab Sample ID: 890-2070-2

Date Collected: 03/10/22 15:50 **Matrix: Solid**
Date Received: 03/11/22 11:17
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 16:00	03/21/22 13:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 16:00	03/21/22 13:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 16:00	03/21/22 13:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/18/22 16:00	03/21/22 13:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 16:00	03/21/22 13:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 16:00	03/21/22 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:14*	*1*

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Client Sample ID: FS44 — Lab Sample ID: 890-2070-2

Date Collected: 03/10/22 15:50 **Matrix: Solid**
Date Received: 03/11/22 11:17
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:14*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/16/22 18:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**242**		49.8	mg/Kg			03/15/22 10:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/14/22 09:23	03/14/22 19:13	1
Diesel Range Organics (Over C10-C28)	**242**		49.8	mg/Kg		03/14/22 09:23	03/14/22 19:13	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/14/22 09:23	03/14/22 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*107*		*70 - 130*	*03/14/22 09:23*	*03/14/22 19:13*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/14/22 09:23*	*03/14/22 19:13*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**277**		49.0	mg/Kg			03/30/22 12:46	5

Client Sample ID: FS45 — Lab Sample ID: 890-2070-3

Date Collected: 03/10/22 15:55 **Matrix: Solid**
Date Received: 03/11/22 11:17
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/18/22 16:00	03/21/22 13:34	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/18/22 16:00	03/21/22 13:34	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/18/22 16:00	03/21/22 13:34	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/18/22 16:00	03/21/22 13:34	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/18/22 16:00	03/21/22 13:34	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/18/22 16:00	03/21/22 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:34*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/16/22 18:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/15/22 10:08	1

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Client Sample ID: FS45

Lab Sample ID: 890-2070-3
Matrix: Solid
Date Collected: 03/10/22 15:55
Date Received: 03/11/22 11:17
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 19:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 19:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/14/22 09:23*	*03/14/22 19:34*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/14/22 09:23*	*03/14/22 19:34*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<496	U	496		mg/Kg			03/30/22 13:59	50

Client Sample ID: FS46

Lab Sample ID: 890-2070-4
Matrix: Solid
Date Collected: 03/10/22 16:00
Date Received: 03/11/22 11:17
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/18/22 16:00	03/21/22 13:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 16:00	03/21/22 13:55	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/18/22 16:00	03/21/22 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:55*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/18/22 16:00*	*03/21/22 13:55*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/16/22 18:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**164**		49.9		mg/Kg			03/15/22 10:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 19:54	1
Diesel Range Organics (Over C10-C28)	**164**		49.9		mg/Kg		03/14/22 09:23	03/14/22 19:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 09:23	03/14/22 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/14/22 09:23*	*03/14/22 19:54*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/14/22 09:23*	*03/14/22 19:54*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Client Sample ID: FS46 — Lab Sample ID: 890-2070-4

Date Collected: 03/10/22 16:00 **Matrix: Solid**
Date Received: 03/11/22 11:17
Sample Depth: 4

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	218		48.4		mg/Kg			03/30/22 14:07	5

Client Sample ID: FS47 — Lab Sample ID: 890-2070-5

Date Collected: 03/10/22 16:05 **Matrix: Solid**
Date Received: 03/11/22 11:17
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/18/22 16:00	03/21/22 14:15	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/18/22 16:00	03/21/22 14:15	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/18/22 16:00	03/21/22 14:15	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/18/22 16:00	03/21/22 14:15	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/18/22 16:00	03/21/22 14:15	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/18/22 16:00	03/21/22 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/18/22 16:00*	*03/21/22 14:15*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/18/22 16:00*	*03/21/22 14:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/16/22 18:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/15/22 10:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 20:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 20:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/14/22 09:23*	*03/14/22 20:14*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/14/22 09:23*	*03/14/22 20:14*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	421		96.9		mg/Kg			03/31/22 17:36	10

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2066-A-1-H MS	Matrix Spike	99	103
890-2066-A-1-I MSD	Matrix Spike Duplicate	100	101
890-2070-1	FS43	102	110
890-2070-1 MS	FS43	106	113
890-2070-1 MSD	FS43	104	112
890-2070-2	FS44	103	100
890-2070-3	FS45	112	106
890-2070-4	FS46	105	103
890-2070-5	FS47	110	105
LCS 880-21696/1-A	Lab Control Sample	101	111
LCS 880-21736/1-A	Lab Control Sample	100	103
LCSD 880-21696/2-A	Lab Control Sample Dup	103	112
LCSD 880-21736/2-A	Lab Control Sample Dup	100	103
MB 880-21696/5-A	Method Blank	101	104
MB 880-21736/5-A	Method Blank	96	100

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-12419-A-1-B MS	Matrix Spike	110	94
880-12419-A-1-C MSD	Matrix Spike Duplicate	117	103
890-2063-A-1-E MS	Matrix Spike	86	75
890-2063-A-1-F MSD	Matrix Spike Duplicate	86	72
890-2070-1	FS43	99	101
890-2070-2	FS44	107	104
890-2070-3	FS45	109	102
890-2070-4	FS46	104	96
890-2070-5	FS47	101	98
LCS 880-21500/2-A	Lab Control Sample	120	121
LCS 880-21614/2-A	Lab Control Sample	98	92
LCSD 880-21500/3-A	Lab Control Sample Dup	124	124
LCSD 880-21614/3-A	Lab Control Sample Dup	95	90
MB 880-21500/1-A	Method Blank	113	116
MB 880-21614/1-A	Method Blank	116	128

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21696/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21704 **Prep Batch: 21696**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/22 09:01	03/16/22 15:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/22 09:01	03/16/22 15:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/22 09:01	03/16/22 15:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/16/22 09:01*	*03/16/22 15:09*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/16/22 09:01*	*03/16/22 15:09*	*1*

Lab Sample ID: LCS 880-21696/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21704 **Prep Batch: 21696**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1007		mg/Kg		101	70 - 130		
Toluene			0.100	0.1005		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.1012		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2099		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1033		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-21696/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21704 **Prep Batch: 21696**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1008		mg/Kg		101	70 - 130	0	35
Toluene			0.100	0.09932		mg/Kg		99	70 - 130	1	35
Ethylbenzene			0.100	0.1013		mg/Kg		101	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.2104		mg/Kg		105	70 - 130	0	35
o-Xylene			0.100	0.1037		mg/Kg		104	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: 890-2070-1 MS **Client Sample ID: FS43**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21704 **Prep Batch: 21696**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.09469		mg/Kg		94	70 - 130		
Toluene	<0.00200	U	0.100	0.09298		mg/Kg		93	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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

Lab Sample ID: 890-2070-1 MS **Client Sample ID: FS43**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21704 **Prep Batch: 21696**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.09512		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.201	0.1980		mg/Kg		99	70 - 130
o-Xylene	<0.00200	U	0.100	0.09770		mg/Kg		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: 890-2070-1 MSD **Client Sample ID: FS43**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21704 **Prep Batch: 21696**

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	0.08648		mg/Kg		86	70 - 130	9	35
Toluene	<0.00200	U	0.100	0.08473		mg/Kg		85	70 - 130	9	35
Ethylbenzene	<0.00200	U	0.100	0.08638		mg/Kg		86	70 - 130	10	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1801		mg/Kg		90	70 - 130	9	35
o-Xylene	<0.00200	U	0.100	0.08791		mg/Kg		88	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: MB 880-21736/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 11:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 11:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/18/22 16:00	03/21/22 11:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/18/22 16:00	03/21/22 11:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/18/22 16:00	03/21/22 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/18/22 16:00*	*03/21/22 11:23*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/18/22 16:00*	*03/21/22 11:23*	*1*

Lab Sample ID: LCS 880-21736/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1040		mg/Kg		104	70 - 130
Toluene	0.100	0.1033		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1042		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2451		mg/Kg		123	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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

Lab Sample ID: LCS 880-21736/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1184		mg/Kg		118	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-21736/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1081		mg/Kg		108	70 - 130	4	35
Toluene			0.100	0.1062		mg/Kg		106	70 - 130	3	35
Ethylbenzene			0.100	0.1067		mg/Kg		107	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2520		mg/Kg		126	70 - 130	3	35
o-Xylene			0.100	0.1223		mg/Kg		122	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2066-A-1-H MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.0998	0.1061		mg/Kg		106	70 - 130		
Toluene	<0.00202	U	0.0998	0.09301		mg/Kg		93	70 - 130		
Ethylbenzene	<0.00202	U	0.0998	0.08250		mg/Kg		83	70 - 130		
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1588		mg/Kg		80	70 - 130		
o-Xylene	<0.00202	U	0.0998	0.1174		mg/Kg		118	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2066-A-1-I MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.09801		mg/Kg		98	70 - 130	8	35
Toluene	<0.00202	U	0.100	0.08717		mg/Kg		87	70 - 130	6	35
Ethylbenzene	<0.00202	U	0.100	0.07849		mg/Kg		78	70 - 130	5	35
m-Xylene & p-Xylene	<0.00403	U	0.201	0.1425		mg/Kg		71	70 - 130	11	35
o-Xylene	<0.00202	U	0.100	0.1119		mg/Kg		111	70 - 130	5	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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

Lab Sample ID: 890-2066-A-1-I MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21980 **Prep Batch: 21736**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-21500/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21456 **Prep Batch: 21500**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 11:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 11:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 09:23	03/14/22 11:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	03/14/22 09:23	03/14/22 11:32	1
o-Terphenyl	116		70 - 130	03/14/22 09:23	03/14/22 11:32	1

Lab Sample ID: LCS 880-21500/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21456 **Prep Batch: 21500**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1006		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1080		mg/Kg		108	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: LCSD 880-21500/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21456 **Prep Batch: 21500**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1008		mg/Kg		101	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1230		mg/Kg		123	70 - 130	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	124		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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

Lab Sample ID: 890-2063-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21500**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.0		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	50.1		998	889.2		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 890-2063-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21500**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	894.6		mg/Kg		90	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	50.1		998	856.3		mg/Kg		81	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*72*		*70 - 130*

Lab Sample ID: MB 880-21614/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/15/22 08:41	03/15/22 10:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/15/22 08:41	03/15/22 10:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/15/22 08:41	03/15/22 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*03/15/22 08:41*	*03/15/22 10:25*	*1*
o-Terphenyl	*128*		*70 - 130*	*03/15/22 08:41*	*03/15/22 10:25*	*1*

Lab Sample ID: LCS 880-21614/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1041		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	916.3		mg/Kg		92	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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

Lab Sample ID: LCS 880-21614/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: LCSD 880-21614/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1058		mg/Kg		106	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	871.6		mg/Kg		87	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-12419-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1176		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1119		mg/Kg		107	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-12419-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21611 — **Prep Batch: 21614**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1146		mg/Kg		115	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1193		mg/Kg		115	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	103		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-238676/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/30/22 10:37	1

Lab Sample ID: LCS 410-238676/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.32		mg/Kg		107	90 - 110		

Lab Sample ID: 890-2070-2 MS — **Client Sample ID: FS44**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	277		19.8	282.8	4	mg/Kg		27	90 - 110		

Lab Sample ID: 890-2070-2 DU — **Client Sample ID: FS44**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	277			291.9		mg/Kg				5	15

Lab Sample ID: 890-2070-2 DU — **Client Sample ID: FS44**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	<490	U		<497	U	mg/Kg				4	15

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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Prep Batch: 21696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Total/NA	Solid	5035	
MB 880-21696/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21696/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21696/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2070-1 MS	FS43	Total/NA	Solid	5035	
890-2070-1 MSD	FS43	Total/NA	Solid	5035	

Analysis Batch: 21704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Total/NA	Solid	8021B	21696
MB 880-21696/5-A	Method Blank	Total/NA	Solid	8021B	21696
LCS 880-21696/1-A	Lab Control Sample	Total/NA	Solid	8021B	21696
LCSD 880-21696/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21696
890-2070-1 MS	FS43	Total/NA	Solid	8021B	21696
890-2070-1 MSD	FS43	Total/NA	Solid	8021B	21696

Prep Batch: 21736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-2	FS44	Total/NA	Solid	5035	
890-2070-3	FS45	Total/NA	Solid	5035	
890-2070-4	FS46	Total/NA	Solid	5035	
890-2070-5	FS47	Total/NA	Solid	5035	
MB 880-21736/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21736/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21736/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2066-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
890-2066-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Total/NA	Solid	Total BTEX	
890-2070-2	FS44	Total/NA	Solid	Total BTEX	
890-2070-3	FS45	Total/NA	Solid	Total BTEX	
890-2070-4	FS46	Total/NA	Solid	Total BTEX	
890-2070-5	FS47	Total/NA	Solid	Total BTEX	

Analysis Batch: 21980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-2	FS44	Total/NA	Solid	8021B	21736
890-2070-3	FS45	Total/NA	Solid	8021B	21736
890-2070-4	FS46	Total/NA	Solid	8021B	21736
890-2070-5	FS47	Total/NA	Solid	8021B	21736
MB 880-21736/5-A	Method Blank	Total/NA	Solid	8021B	21736
LCS 880-21736/1-A	Lab Control Sample	Total/NA	Solid	8021B	21736
LCSD 880-21736/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21736
890-2066-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	21736
890-2066-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21736

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

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Analysis Batch: 21456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-2	FS44	Total/NA	Solid	8015B NM	21500
890-2070-3	FS45	Total/NA	Solid	8015B NM	21500
890-2070-4	FS46	Total/NA	Solid	8015B NM	21500
890-2070-5	FS47	Total/NA	Solid	8015B NM	21500
MB 880-21500/1-A	Method Blank	Total/NA	Solid	8015B NM	21500
LCS 880-21500/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21500
LCSD 880-21500/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21500
890-2063-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	21500
890-2063-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21500

Prep Batch: 21500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-2	FS44	Total/NA	Solid	8015NM Prep	
890-2070-3	FS45	Total/NA	Solid	8015NM Prep	
890-2070-4	FS46	Total/NA	Solid	8015NM Prep	
890-2070-5	FS47	Total/NA	Solid	8015NM Prep	
MB 880-21500/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21500/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21500/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2063-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2063-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Total/NA	Solid	8015B NM	21614
MB 880-21614/1-A	Method Blank	Total/NA	Solid	8015B NM	21614
LCS 880-21614/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21614
LCSD 880-21614/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21614
880-12419-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21614
880-12419-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21614

Prep Batch: 21614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Total/NA	Solid	8015NM Prep	
MB 880-21614/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21614/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21614/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12419-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12419-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Total/NA	Solid	8015 NM	
890-2070-2	FS44	Total/NA	Solid	8015 NM	
890-2070-3	FS45	Total/NA	Solid	8015 NM	
890-2070-4	FS46	Total/NA	Solid	8015 NM	
890-2070-5	FS47	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

HPLC/IC

Leach Batch: 238676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Soluble	Solid	DI Leach	
890-2070-2	FS44	Soluble	Solid	DI Leach	
890-2070-3	FS45	Soluble	Solid	DI Leach	
890-2070-4	FS46	Soluble	Solid	DI Leach	
890-2070-5	FS47	Soluble	Solid	DI Leach	
MB 410-238676/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-238676/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
890-2070-2 MS	FS44	Soluble	Solid	DI Leach	
890-2070-2 DU	FS44	Soluble	Solid	DI Leach	

Analysis Batch: 239332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-2	FS44	Soluble	Solid	EPA 300.0 R2.1	238676
890-2070-3	FS45	Soluble	Solid	EPA 300.0 R2.1	238676
890-2070-4	FS46	Soluble	Solid	EPA 300.0 R2.1	238676
MB 410-238676/1-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	238676
LCS 410-238676/2-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	238676
890-2070-2 MS	FS44	Soluble	Solid	EPA 300.0 R2.1	238676
890-2070-2 DU	FS44	Soluble	Solid	EPA 300.0 R2.1	238676
890-2070-2 DU	FS44	Soluble	Solid	EPA 300.0 R2.1	238676

Analysis Batch: 239833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2070-1	FS43	Soluble	Solid	EPA 300.0 R2.1	238676
890-2070-5	FS47	Soluble	Solid	EPA 300.0 R2.1	238676

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Client Sample ID: FS43 — Lab Sample ID: 890-2070-1

Date Collected: 03/03/22 15:45 **Matrix: Solid**
Date Received: 03/11/22 11:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21696	03/16/22 09:01	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21704	03/16/22 15:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21756	03/16/22 18:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21624	03/15/22 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21614	03/15/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21611	03/15/22 18:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.94 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			239833	03/31/22 17:45	W5UX	ELLE

Client Sample ID: FS44 — Lab Sample ID: 890-2070-2

Date Collected: 03/10/22 15:50 **Matrix: Solid**
Date Received: 03/11/22 11:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21736	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21980	03/21/22 13:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21756	03/16/22 18:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21624	03/15/22 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 19:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.10 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239332	03/30/22 12:46	W5UX	ELLE

Client Sample ID: FS45 — Lab Sample ID: 890-2070-3

Date Collected: 03/10/22 15:55 **Matrix: Solid**
Date Received: 03/11/22 11:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21736	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21980	03/21/22 13:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21756	03/16/22 18:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21624	03/15/22 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 19:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239332	03/30/22 13:59	W5UX	ELLE

Client Sample ID: FS46 — Lab Sample ID: 890-2070-4

Date Collected: 03/10/22 16:00 **Matrix: Solid**
Date Received: 03/11/22 11:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21736	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21980	03/21/22 13:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21756	03/16/22 18:20	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Client Sample ID: FS46 Lab Sample ID: 890-2070-4

Date Collected: 03/10/22 16:00 **Matrix: Solid**
Date Received: 03/11/22 11:17

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			21624	03/15/22 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 19:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.17 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239332	03/30/22 14:07	W5UX	ELLE

Client Sample ID: FS47 Lab Sample ID: 890-2070-5

Date Collected: 03/10/22 16:05 **Matrix: Solid**
Date Received: 03/11/22 11:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21736	03/18/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21980	03/21/22 14:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21756	03/16/22 18:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21624	03/15/22 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21500	03/14/22 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 20:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.16 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			239833	03/31/22 17:36	W5UX	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-0660	08-10-22
California	State	2792	02-02-22 *
Colorado	State	PA00009	06-30-22
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-22
Georgia (DW)	State	C048	01-31-22 *
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-02-22 *
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-22
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-22
Massachusetts	State	M-PA009	06-30-22
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-22
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-22
Oregon	NELAP	PA200001	09-11-22
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-22 *
Texas	NELAP	T104704194-21-40	08-31-22
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-14-22
Washington	State	C457	04-12-22
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	04-30-22
Wyoming	State	8TMS-L	01-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	1.01	11-30-22

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Sample Summary

Client: WSP USA Inc. Job ID: 890-2070-1
Project/Site: EUNICE MONUMENT SOUTH UNIT B FACILITY SDG: 31403551.001TASK 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2070-1	FS43	Solid	03/03/22 15:45	03/11/22 11:17	4
890-2070-2	FS44	Solid	03/10/22 15:50	03/11/22 11:17	4
890-2070-3	FS45	Solid	03/10/22 15:55	03/11/22 11:17	4
890-2070-4	FS46	Solid	03/10/22 16:00	03/11/22 11:17	4
890-2070-5	FS47	Solid	03/10/22 16:05	03/11/22 11:17	4

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Chain of Custody

Work Order No: _____

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 1 of 1

4/7/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxonmobil.com,Ben.Helill@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility.	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	5.6/5.4	Thermometer ID	TW WR 007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS43	S	03/03/00	15:45	4'	1	X	X	X	Discrete
FS44	S	03/11/22	15:50	4'	1	X	X	X	Discrete
FS45	S	03/11/22	15:55	4'	1	X	X	X	Discrete
FS46	S	03/11/22	16:00	4'	1	X	X	X	Discrete
FS47	S	03/11/22	16:05	4'	1	X	X	X	Discrete

890-2070 Chain of Custody

Work Order Notes

API: 30-025-04297

TAT starts the day recevied by the lab, if received by 4:30pm

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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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		3/22/17	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 880-4085.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - Louisiana; NELAP - Texas		Job #: 890-2070-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/28/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: EUNICE MONUMENT SOUTH UNIT B FACILITY	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH (MOD) CHLORIDE	Unconfirmed	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
FS43 (890-2070-1)	3/3/22	15:45 Mountain		Solid			X		1	
FS44 (890-2070-2)	3/10/22	15:50 Mountain		Solid			X		1	
FS45 (890-2070-3)	3/10/22	15:55 Mountain		Solid			X		1	
FS46 (890-2070-4)	3/10/22	16:00 Mountain		Solid			X		1	
FS47 (890-2070-5)	3/10/22	16:05 Mountain		Solid			X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central, LLC

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	3/25/22 1055	EMC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.8

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-664 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2070-1
Address: 1211 W Florida Ave ,	Due Date Requested: 3/17/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: EUNICE MONUMENT SOUTH UNIT B FACILITY	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
FS43 (890-2070-1)	3/3/22	15 45 Mountain		Solid			X	X	X	X	X	1	
FS44 (890-2070-2)	3/10/22	15 50 Mountain		Solid			X	X	X	X	X	1	
FS45 (890-2070-3)	3/10/22	15 55 Mountain		Solid			X	X	X	X	X	1	
FS46 (890-2070-4)	3/10/22	16 00 Mountain		Solid			X	X	X	X	X	1	
FS47 (890-2070-5)	3/10/22	16 05 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by: Coe Ag 3 1 22	Date/Time:	Company	Received by: Kramer	Date/Time: 3/14/22	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 800	Company	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company	

Custody Seals Intact. ∆ Yes ∆ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 2.6/25

Ver: 06/08/2021

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2070-1
SDG Number: 31403551.001TASK 01.02

Login Number: 2070
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2070-1
SDG Number: 31403551.001TASK 01.02

Login Number: 2070
List Number: 3
Creator: Bryan, Debra A

List Source: Eurofins Lancaster Laboratories Env, LLC
List Creation: 03/25/22 01:47 PM

Question	Answer	Comment
The cooler's custody seal is 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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2070-1
SDG Number: 31403551.001TASK 01.02

Login Number: 2070
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/14/22 08:17 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").	N/A	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2083-1
Laboratory Sample Delivery Group: 31403551.001 Task 01.02
Client Project/Site: Eunice Monument South Unit B Facility

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
4/7/2022 6:37:36 AM

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

LINKS
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Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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

Case Narrative

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Job ID: 890-2083-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2083-1

Receipt
The samples were received on 3/16/2022 1:20 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 1.2°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21834 and analytical batch 880-21858 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

HPLC/IC
Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 111% and 115%. The sample results for but trial are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 116% and 115%. The sample results for but trial are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 111% and 115%. The sample results for but trial are in line and will both be reported.

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS71 Lab Sample ID: 890-2083-1

Date Collected: 03/15/22 12:15 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 14:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 14:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 14:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/18/22 13:50	03/20/22 14:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 14:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 13:50	03/20/22 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*03/18/22 13:50*	*03/20/22 14:52*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/18/22 13:50*	*03/20/22 14:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	49.9		mg/Kg		03/17/22 16:29	03/18/22 12:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		03/17/22 16:29	03/18/22 12:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/17/22 16:29	03/18/22 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/17/22 16:29*	*03/18/22 12:42*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/17/22 16:29*	*03/18/22 12:42*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.8**	*+	9.90		mg/Kg			04/05/22 22:14	1

Client Sample ID: FS72 Lab Sample ID: 890-2083-2

Date Collected: 03/15/22 12:20 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 15:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 15:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 15:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/18/22 13:50	03/20/22 15:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 13:50	03/20/22 15:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 13:50	03/20/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/18/22 13:50*	*03/20/22 15:12*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS72 — Lab Sample ID: 890-2083-2

Date Collected: 03/15/22 12:20 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/18/22 13:50*	*03/20/22 15:12*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/17/22 16:29	03/18/22 13:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/17/22 16:29	03/18/22 13:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/17/22 16:29	03/18/22 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*111*		*70 - 130*	*03/17/22 16:29*	*03/18/22 13:45*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/17/22 16:29*	*03/18/22 13:45*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.5**	*+	9.96	mg/Kg			04/05/22 15:59	1

Client Sample ID: FS73 — Lab Sample ID: 890-2083-3

Date Collected: 03/15/22 12:30 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/18/22 13:50	03/20/22 15:33	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/18/22 13:50	03/20/22 15:33	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/18/22 13:50	03/20/22 15:33	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/18/22 13:50	03/20/22 15:33	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/18/22 13:50	03/20/22 15:33	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/18/22 13:50	03/20/22 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/18/22 13:50*	*03/20/22 15:33*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/18/22 13:50*	*03/20/22 15:33*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**184**		49.9	mg/Kg			03/21/22 09:28	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS73 Lab Sample ID: 890-2083-3

Date Collected: 03/15/22 12:30 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/17/22 16:29	03/18/22 14:06	1
Diesel Range Organics (Over C10-C28)	**184**		49.9		mg/Kg		03/17/22 16:29	03/18/22 14:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/17/22 16:29	03/18/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/17/22 16:29*	*03/18/22 14:06*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/17/22 16:29*	*03/18/22 14:06*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**117**	***+**	49.4		mg/Kg			04/04/22 21:19	5

Client Sample ID: FS74 Lab Sample ID: 890-2083-4

Date Collected: 03/15/22 12:35 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 15:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 15:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 15:53	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/18/22 13:50	03/20/22 15:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 15:53	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/18/22 13:50	03/20/22 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/18/22 13:50*	*03/20/22 15:53*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/18/22 13:50*	*03/20/22 15:53*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 14:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 14:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/17/22 16:29*	*03/18/22 14:27*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/17/22 16:29*	*03/18/22 14:27*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS74 Lab Sample ID: 890-2083-4

Date Collected: 03/15/22 12:35 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.1	*+	10.1		mg/Kg			04/05/22 22:25	1

Client Sample ID: FS75 Lab Sample ID: 890-2083-5

Date Collected: 03/15/22 12:40 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:14	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:14	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:14	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/18/22 13:50	03/20/22 16:14	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:14	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/18/22 13:50	03/20/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/18/22 13:50*	*03/20/22 16:14*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/18/22 13:50*	*03/20/22 16:14*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 14:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 14:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/17/22 16:29*	*03/18/22 14:48*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/17/22 16:29*	*03/18/22 14:48*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.9	*+	49.6		mg/Kg			04/05/22 00:27	5

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS76 Lab Sample ID: 890-2083-6

Date Collected: 03/15/22 12:45 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/18/22 13:50	03/20/22 16:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/18/22 13:50	03/20/22 16:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/18/22 13:50	03/20/22 16:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/18/22 13:50	03/20/22 16:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/18/22 13:50	03/20/22 16:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/18/22 13:50	03/20/22 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 13:50*	*03/20/22 16:34*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/18/22 13:50*	*03/20/22 16:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**91.3**		49.9		mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/17/22 16:29	03/18/22 15:09	1
Diesel Range Organics (Over C10-C28)	**91.3**		49.9		mg/Kg		03/17/22 16:29	03/18/22 15:09	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/17/22 16:29	03/18/22 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/17/22 16:29*	*03/18/22 15:09*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/17/22 16:29*	*03/18/22 15:09*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**214**	*+	50.0		mg/Kg			04/05/22 00:49	5

Client Sample ID: FS77 Lab Sample ID: 890-2083-7

Date Collected: 03/15/22 12:50 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/18/22 13:50	03/20/22 16:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 16:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/18/22 13:50	03/20/22 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/18/22 13:50*	*03/20/22 16:54*	*1*

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS77 Lab Sample ID: 890-2083-7

Date Collected: 03/15/22 12:50 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/18/22 13:50*	*03/20/22 16:54*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.8**		50.0	mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/17/22 16:29	03/18/22 15:31	1
Diesel Range Organics (Over C10-C28)	**52.8**		50.0	mg/Kg		03/17/22 16:29	03/18/22 15:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/17/22 16:29	03/18/22 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*95*		*70 - 130*	*03/17/22 16:29*	*03/18/22 15:31*	*1*
o-Terphenyl	*89*		*70 - 130*	*03/17/22 16:29*	*03/18/22 15:31*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**83.2**	***+**	49.3	mg/Kg			04/05/22 15:15	5

Client Sample ID: FS78 Lab Sample ID: 890-2083-8

Date Collected: 03/15/22 12:55 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/18/22 13:50	03/20/22 17:15	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/18/22 13:50	03/20/22 17:15	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/18/22 13:50	03/20/22 17:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/18/22 13:50	03/20/22 17:15	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/18/22 13:50	03/20/22 17:15	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/18/22 13:50	03/20/22 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/18/22 13:50*	*03/20/22 17:15*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/18/22 13:50*	*03/20/22 17:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/21/22 09:28	1

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS78 Lab Sample ID: 890-2083-8

Date Collected: 03/15/22 12:55 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 15:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 15:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/17/22 16:29*	*03/18/22 15:52*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/17/22 16:29*	*03/18/22 15:52*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.9**	*+	49.6		mg/Kg			04/05/22 01:11	5

Client Sample ID: FS79 Lab Sample ID: 890-2083-9

Date Collected: 03/15/22 13:00 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 17:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 17:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 17:35	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/18/22 13:50	03/20/22 17:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 17:35	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/18/22 13:50	03/20/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/18/22 13:50*	*03/20/22 17:35*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/18/22 13:50*	*03/20/22 17:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**60.4**		50.0		mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 16:13	1
Diesel Range Organics (Over C10-C28)	**60.4**		50.0		mg/Kg		03/17/22 16:29	03/18/22 16:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/17/22 16:29*	*03/18/22 16:13*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/17/22 16:29*	*03/18/22 16:13*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS79 Lab Sample ID: 890-2083-9

Date Collected: 03/15/22 13:00 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.4	*+	49.7		mg/Kg			04/05/22 02:28	5

Client Sample ID: FS80 Lab Sample ID: 890-2083-10

Date Collected: 03/15/22 14:00 **Matrix: Solid**
Date Received: 03/16/22 13:20
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 17:56	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 17:56	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 17:56	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/18/22 13:50	03/20/22 17:56	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/18/22 13:50	03/20/22 17:56	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/18/22 13:50	03/20/22 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 13:50*	*03/20/22 17:56*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/18/22 13:50*	*03/20/22 17:56*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/21/22 13:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/21/22 09:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 16:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 16:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/17/22 16:29*	*03/18/22 16:34*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/17/22 16:29*	*03/18/22 16:34*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.0	*+	49.4		mg/Kg			04/05/22 02:06	5

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
880-12453-A-1-D MS	Matrix Spike	97	104										
880-12453-A-1-E MSD	Matrix Spike Duplicate	99	102										
890-2083-1	FS71	113	95										
890-2083-2	FS72	110	102										
890-2083-3	FS73	118	106										
890-2083-4	FS74	110	101										
890-2083-5	FS75	108	102										
890-2083-6	FS76	109	101										
890-2083-7	FS77	112	104										
890-2083-8	FS78	112	104										
890-2083-9	FS79	108	102										
890-2083-10	FS80	109	100										
LCS 880-21821/1-A	Lab Control Sample	102	103										
LCSD 880-21821/2-A	Lab Control Sample Dup	101	103										
MB 880-21820/5-A	Method Blank	96	100										
MB 880-21821/5-A	Method Blank	96	101										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-2083-1	FS71	98	98										
890-2083-1 MS	FS71	117	102										
890-2083-1 MSD	FS71	98	85										
890-2083-2	FS72	111	112										
890-2083-3	FS73	97	96										
890-2083-4	FS74	110	109										
890-2083-5	FS75	103	104										
890-2083-6	FS76	93	90										
890-2083-7	FS77	95	89										
890-2083-8	FS78	99	100										
890-2083-9	FS79	104	98										
890-2083-10	FS80	108	111										
LCS 880-21834/2-A	Lab Control Sample	115	121										
LCSD 880-21834/3-A	Lab Control Sample Dup	108	108										
MB 880-21834/1-A	Method Blank	117	123										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21820/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21850 — **Prep Batch: 21820**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:47	03/19/22 21:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:47	03/19/22 21:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:47	03/19/22 21:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/22 13:47	03/19/22 21:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:47	03/19/22 21:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:47	03/19/22 21:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/17/22 13:47*	*03/19/22 21:53*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/17/22 13:47*	*03/19/22 21:53*	*1*

Lab Sample ID: MB 880-21821/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21850 — **Prep Batch: 21821**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 09:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 09:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 09:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/18/22 13:50	03/20/22 09:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 13:50	03/20/22 09:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 13:50	03/20/22 09:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/18/22 13:50*	*03/20/22 09:29*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/18/22 13:50*	*03/20/22 09:29*	*1*

Lab Sample ID: LCS 880-21821/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21850 — **Prep Batch: 21821**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1061		mg/Kg		106	70 - 130		
Toluene			0.100	0.1052		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1000		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.2270		mg/Kg		114	70 - 130		
o-Xylene			0.100	0.1118		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-21821/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21850 — **Prep Batch: 21821**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1040		mg/Kg		104	70 - 130	2	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

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

Lab Sample ID: LCSD 880-21821/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21850 **Prep Batch: 21821**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09803		mg/Kg		98	70 - 130	7	35
Ethylbenzene			0.100	0.09407		mg/Kg		94	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2186		mg/Kg		109	70 - 130	4	35
o-Xylene			0.100	0.1094		mg/Kg		109	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 880-12453-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21850 **Prep Batch: 21821**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.101	0.1039		mg/Kg		103	70 - 130
Toluene	0.00810		0.101	0.09835		mg/Kg		90	70 - 130
Ethylbenzene	0.00838		0.101	0.09374		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.0296		0.201	0.2220		mg/Kg		96	70 - 130
o-Xylene	0.0209		0.101	0.1108		mg/Kg		89	70 - 130

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

Lab Sample ID: 880-12453-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21850 **Prep Batch: 21821**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.101	0.1039		mg/Kg		102	70 - 130	0	35
Toluene	0.00810		0.101	0.09797		mg/Kg		89	70 - 130	0	35
Ethylbenzene	0.00838		0.101	0.09564		mg/Kg		87	70 - 130	2	35
m-Xylene & p-Xylene	0.0296		0.202	0.2221		mg/Kg		95	70 - 130	0	35
o-Xylene	0.0209		0.101	0.1110		mg/Kg		89	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-21834/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 11:38	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

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

Lab Sample ID: MB 880-21834/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 11:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*03/17/22 16:29*	*03/18/22 11:38*	*1*
o-Terphenyl	*123*		*70 - 130*	*03/17/22 16:29*	*03/18/22 11:38*	*1*

Lab Sample ID: LCS 880-21834/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	872.7		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1134		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*121*		*70 - 130*

Lab Sample ID: LCSD 880-21834/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	866.5		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 890-2083-1 MS **Client Sample ID: FS71**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	998	1574	F1	mg/Kg		158	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1355	F1	mg/Kg		133	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

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

Lab Sample ID: 890-2083-1 MSD **Client Sample ID: FS71**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	1388	F1	mg/Kg		139	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1149		mg/Kg		112	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: 890-2083-3 MS **Client Sample ID: FS73**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 241069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	117	*+	20.0	148.4	4	mg/Kg		155	90 - 110

Lab Sample ID: 890-2083-3 DU **Client Sample ID: FS73**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 241069

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	117	*+	116.5	*+	mg/Kg		0.8	15

Lab Sample ID: MB 410-240233/2-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 241096

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			04/05/22 10:12	1

Lab Sample ID: LCS 410-240233/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 241096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	23.25	*+	mg/Kg		116	90 - 110

Lab Sample ID: 890-2090-A-12-G MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 241096

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	464	*+	20.0	456.1	4	mg/Kg		-42	90 - 110

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2090-A-12-H DU **Client Sample ID: Duplicate**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 241096

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	464	*+		403.3	*+	mg/Kg				14	15

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

GC VOA

Prep Batch: 21820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21820/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 21821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Total/NA	Solid	5035	
890-2083-2	FS72	Total/NA	Solid	5035	
890-2083-3	FS73	Total/NA	Solid	5035	
890-2083-4	FS74	Total/NA	Solid	5035	
890-2083-5	FS75	Total/NA	Solid	5035	
890-2083-6	FS76	Total/NA	Solid	5035	
890-2083-7	FS77	Total/NA	Solid	5035	
890-2083-8	FS78	Total/NA	Solid	5035	
890-2083-9	FS79	Total/NA	Solid	5035	
890-2083-10	FS80	Total/NA	Solid	5035	
MB 880-21821/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21821/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21821/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12453-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-12453-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Total/NA	Solid	8021B	21821
890-2083-2	FS72	Total/NA	Solid	8021B	21821
890-2083-3	FS73	Total/NA	Solid	8021B	21821
890-2083-4	FS74	Total/NA	Solid	8021B	21821
890-2083-5	FS75	Total/NA	Solid	8021B	21821
890-2083-6	FS76	Total/NA	Solid	8021B	21821
890-2083-7	FS77	Total/NA	Solid	8021B	21821
890-2083-8	FS78	Total/NA	Solid	8021B	21821
890-2083-9	FS79	Total/NA	Solid	8021B	21821
890-2083-10	FS80	Total/NA	Solid	8021B	21821
MB 880-21820/5-A	Method Blank	Total/NA	Solid	8021B	21820
MB 880-21821/5-A	Method Blank	Total/NA	Solid	8021B	21821
LCS 880-21821/1-A	Lab Control Sample	Total/NA	Solid	8021B	21821
LCSD 880-21821/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21821
880-12453-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	21821
880-12453-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21821

Analysis Batch: 22071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Total/NA	Solid	Total BTEX	
890-2083-2	FS72	Total/NA	Solid	Total BTEX	
890-2083-3	FS73	Total/NA	Solid	Total BTEX	
890-2083-4	FS74	Total/NA	Solid	Total BTEX	
890-2083-5	FS75	Total/NA	Solid	Total BTEX	
890-2083-6	FS76	Total/NA	Solid	Total BTEX	
890-2083-7	FS77	Total/NA	Solid	Total BTEX	
890-2083-8	FS78	Total/NA	Solid	Total BTEX	
890-2083-9	FS79	Total/NA	Solid	Total BTEX	
890-2083-10	FS80	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

GC Semi VOA

Prep Batch: 21834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Total/NA	Solid	8015NM Prep	
890-2083-2	FS72	Total/NA	Solid	8015NM Prep	
890-2083-3	FS73	Total/NA	Solid	8015NM Prep	
890-2083-4	FS74	Total/NA	Solid	8015NM Prep	
890-2083-5	FS75	Total/NA	Solid	8015NM Prep	
890-2083-6	FS76	Total/NA	Solid	8015NM Prep	
890-2083-7	FS77	Total/NA	Solid	8015NM Prep	
890-2083-8	FS78	Total/NA	Solid	8015NM Prep	
890-2083-9	FS79	Total/NA	Solid	8015NM Prep	
890-2083-10	FS80	Total/NA	Solid	8015NM Prep	
MB 880-21834/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21834/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2083-1 MS	FS71	Total/NA	Solid	8015NM Prep	
890-2083-1 MSD	FS71	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Total/NA	Solid	8015B NM	21834
890-2083-2	FS72	Total/NA	Solid	8015B NM	21834
890-2083-3	FS73	Total/NA	Solid	8015B NM	21834
890-2083-4	FS74	Total/NA	Solid	8015B NM	21834
890-2083-5	FS75	Total/NA	Solid	8015B NM	21834
890-2083-6	FS76	Total/NA	Solid	8015B NM	21834
890-2083-7	FS77	Total/NA	Solid	8015B NM	21834
890-2083-8	FS78	Total/NA	Solid	8015B NM	21834
890-2083-9	FS79	Total/NA	Solid	8015B NM	21834
890-2083-10	FS80	Total/NA	Solid	8015B NM	21834
MB 880-21834/1-A	Method Blank	Total/NA	Solid	8015B NM	21834
LCS 880-21834/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21834
LCSD 880-21834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21834
890-2083-1 MS	FS71	Total/NA	Solid	8015B NM	21834
890-2083-1 MSD	FS71	Total/NA	Solid	8015B NM	21834

Analysis Batch: 21989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Total/NA	Solid	8015 NM	
890-2083-2	FS72	Total/NA	Solid	8015 NM	
890-2083-3	FS73	Total/NA	Solid	8015 NM	
890-2083-4	FS74	Total/NA	Solid	8015 NM	
890-2083-5	FS75	Total/NA	Solid	8015 NM	
890-2083-6	FS76	Total/NA	Solid	8015 NM	
890-2083-7	FS77	Total/NA	Solid	8015 NM	
890-2083-8	FS78	Total/NA	Solid	8015 NM	
890-2083-9	FS79	Total/NA	Solid	8015 NM	
890-2083-10	FS80	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

HPLC/IC

Leach Batch: 238796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Soluble	Solid	DI Leach	
890-2083-2	FS72	Soluble	Solid	DI Leach	
890-2083-3	FS73	Soluble	Solid	DI Leach	
890-2083-4	FS74	Soluble	Solid	DI Leach	
890-2083-5	FS75	Soluble	Solid	DI Leach	
890-2083-6	FS76	Soluble	Solid	DI Leach	
890-2083-7	FS77	Soluble	Solid	DI Leach	
890-2083-8	FS78	Soluble	Solid	DI Leach	
890-2083-9	FS79	Soluble	Solid	DI Leach	
890-2083-10	FS80	Soluble	Solid	DI Leach	
MB 410-238796/2-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-238796/1-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 239322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-3	FS73	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-5	FS75	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-6	FS76	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-7	FS77	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-8	FS78	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-9	FS79	Soluble	Solid	EPA 300.0 R2.1	238796
MB 410-238796/2-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	238796
LCS 410-238796/1-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	238796

Analysis Batch: 240174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-2	FS72	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-4	FS74	Soluble	Solid	EPA 300.0 R2.1	238796
890-2083-10	FS80	Soluble	Solid	EPA 300.0 R2.1	238796

Leach Batch: 240233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-2	FS72	Soluble	Solid	DI Leach	
890-2083-7	FS77	Soluble	Solid	DI Leach	
MB 410-240233/2-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-240233/1-A	Lab Control Sample	Soluble	Solid	DI Leach	
890-2090-A-12-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2090-A-12-H DU	Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 240274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Soluble	Solid	DI Leach	
890-2083-3	FS73	Soluble	Solid	DI Leach	
890-2083-4	FS74	Soluble	Solid	DI Leach	
890-2083-5	FS75	Soluble	Solid	DI Leach	
890-2083-6	FS76	Soluble	Solid	DI Leach	
890-2083-8	FS78	Soluble	Solid	DI Leach	
890-2083-9	FS79	Soluble	Solid	DI Leach	
890-2083-10	FS80	Soluble	Solid	DI Leach	
890-2083-3 MS	FS73	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

HPLC/IC (Continued)

Leach Batch: 240274 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-3 DU	FS73	Soluble	Solid	DI Leach	

Analysis Batch: 241069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-3	FS73	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-5	FS75	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-6	FS76	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-8	FS78	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-9	FS79	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-10	FS80	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-3 MS	FS73	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-3 DU	FS73	Soluble	Solid	EPA 300.0 R2.1	240274

Analysis Batch: 241096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-2	FS72	Soluble	Solid	EPA 300.0 R2.1	240233
890-2083-7	FS77	Soluble	Solid	EPA 300.0 R2.1	240233
MB 410-240233/2-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	240233
LCS 410-240233/1-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-A-12-G MS	Matrix Spike	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-A-12-H DU	Duplicate	Soluble	Solid	EPA 300.0 R2.1	240233

Analysis Batch: 241583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2083-1	FS71	Soluble	Solid	EPA 300.0 R2.1	240274
890-2083-4	FS74	Soluble	Solid	EPA 300.0 R2.1	240274

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS71 Lab Sample ID: 890-2083-1

Date Collected: 03/15/22 12:15 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 14:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 12:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			241583	04/05/22 22:14	L4QM	ELLE
Soluble	Leach	DI Leach			5.09 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			240174	03/31/22 19:39	W5UX	ELLE

Client Sample ID: FS72 Lab Sample ID: 890-2083-2

Date Collected: 03/15/22 12:20 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 15:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 13:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			241096	04/05/22 15:59	L4QM	ELLE
Soluble	Leach	DI Leach			5.07 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			240174	03/31/22 20:19	W5UX	ELLE

Client Sample ID: FS73 Lab Sample ID: 890-2083-3

Date Collected: 03/15/22 12:30 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 15:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 14:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 16:53	W5UX	ELLE
Soluble	Leach	DI Leach			5.06 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/04/22 21:19	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS74 Lab Sample ID: 890-2083-4

Date Collected: 03/15/22 12:35 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 15:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 14:27	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	240274	04/01/22 17:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			241583	04/05/22 22:25	L4QM	ELLE
Soluble	Leach	DI Leach			5.06 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			240174	03/31/22 20:27	W5UX	ELLE

Client Sample ID: FS75 Lab Sample ID: 890-2083-5

Date Collected: 03/15/22 12:40 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 16:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 14:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 17:37	W5UX	ELLE
Soluble	Leach	DI Leach			5.04 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/05/22 00:27	W5UX	ELLE

Client Sample ID: FS76 Lab Sample ID: 890-2083-6

Date Collected: 03/15/22 12:45 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 16:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 15:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 17:48	W5UX	ELLE
Soluble	Leach	DI Leach			5.00 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/05/22 00:49	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS77 Lab Sample ID: 890-2083-7

Date Collected: 03/15/22 12:50 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 16:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 15:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 17:59	W5UX	ELLE
Soluble	Leach	DI Leach			5.07 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241096	04/05/22 15:15	L4QM	ELLE

Client Sample ID: FS78 Lab Sample ID: 890-2083-8

Date Collected: 03/15/22 12:55 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 17:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 15:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 18:10	W5UX	ELLE
Soluble	Leach	DI Leach			5.04 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/05/22 01:11	W5UX	ELLE

Client Sample ID: FS79 Lab Sample ID: 890-2083-9

Date Collected: 03/15/22 13:00 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 17:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 16:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 18:21	W5UX	ELLE
Soluble	Leach	DI Leach			5.03 g	50 mL	240274	04/01/22 17:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/05/22 02:28	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Client Sample ID: FS80 Lab Sample ID: 890-2083-10

Date Collected: 03/15/22 14:00 **Matrix: Solid**
Date Received: 03/16/22 13:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21821	03/18/22 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21850	03/20/22 17:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22071	03/21/22 13:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21989	03/21/22 09:28	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21858	03/18/22 16:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.06 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/05/22 02:06	W5UX	ELLE
Soluble	Leach	DI Leach			5.06 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		1			240174	03/31/22 20:35	W5UX	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-0660	08-10-22
California	State	2792	02-02-22 *
Colorado	State	PA00009	06-30-22
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-22
Georgia (DW)	State	C048	01-31-22 *
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-02-22 *
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-22
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-22
Massachusetts	State	M-PA009	06-30-22
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-22
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-22
Oregon	NELAP	PA200001	09-11-22
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-22 *
Texas	NELAP	T104704194-21-40	08-31-22
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-14-22
Washington	State	C457	04-12-22
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	04-30-22
Wyoming	State	8TMS-L	01-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	1.01	11-30-22

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Sample Summary

Client: WSP USA Inc. Job ID: 890-2083-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 Task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2083-1	FS71	Solid	03/15/22 12:15	03/16/22 13:20	0.5
890-2083-2	FS72	Solid	03/15/22 12:20	03/16/22 13:20	0.5
890-2083-3	FS73	Solid	03/15/22 12:30	03/16/22 13:20	0.5
890-2083-4	FS74	Solid	03/15/22 12:35	03/16/22 13:20	0.5
890-2083-5	FS75	Solid	03/15/22 12:40	03/16/22 13:20	0.5
890-2083-6	FS76	Solid	03/15/22 12:45	03/16/22 13:20	0.5
890-2083-7	FS77	Solid	03/15/22 12:50	03/16/22 13:20	0.5
890-2083-8	FS78	Solid	03/15/22 12:55	03/16/22 13:20	0.5
890-2083-9	FS79	Solid	03/15/22 13:00	03/16/22 13:20	0.5
890-2083-10	FS80	Solid	03/15/22 14:00	03/16/22 13:20	0.5

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxonmobil.com,Ben.Helill@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility.	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	1.4 / 1.2	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

890-2083 Chain of Custody

Work Order Notes

CC:2191851001
API:30-15-46232

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS71	S	03/15/22	12:15	0.5'	1	X	X	X	Discrete
FS72	S	03/15/22	12:20	0.5'	1	X	X	X	Discrete
FS73	S	03/15/22	12:30	0.5'	1	X	X	X	Discrete
FS74	S	03/15/22	12:35	0.5'	1	X	X	X	Discrete
FS75	S	03/15/22	12:40	0.5'	1	X	X	X	Discrete
FS76	S	03/15/22	12:45	0.5'	1	X	X	X	Discrete
FS77	S	03/15/22	12:50	0.5'	1	X	X	X	Discrete
FS78	S	03/15/22	12:55	0.5'	1	X	X	X	Discrete
FS79	S	03/15/22	13:00	0.5'	1	X	X	X	Discrete
FS80	S	03/15/22	14:00	0.5'	1	X	X	X	Discrete

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		3/16/22 1:20	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

4/7/2022

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 880-4085 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - Louisiana; NELAP - Texas		Job #: 890-2083-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/28/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Eunice Monument South Unit B Facility	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH (MOD) CHLORIDE	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FS71 (890-2083-1)	3/15/22	12:15 Mountain		Solid			X	1	
FS72 (890-2083-2)	3/15/22	12:20 Mountain		Solid			X	1	
FS73 (890-2083-3)	3/15/22	12:30 Mountain		Solid			X	1	
FS74 (890-2083-4)	3/15/22	12:35 Mountain		Solid			X	1	
FS75 (890-2083-5)	3/15/22	12:40 Mountain		Solid			X	1	
FS76 (890-2083-6)	3/15/22	12:45 Mountain		Solid			X	1	
FS77 (890-2083-7)	3/15/22	12:50 Mountain		Solid			X	1	
FS78 (890-2083-8)	3/15/22	12:55 Mountain		Solid			X	1	
FS79 (890-2083-9)	3/15/22	13:00 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	3/25/22	USS / ELLE

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.1

(B) Samples actually rec'd 3/25/22

Ver: 06/08/2021

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 880-4085.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - Louisiana; NELAP - Texas		Job #: 890-2083-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/28/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Eunice Monument South Unit B Facility	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH (MOD) CHLORIDE	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FS80 (890-2083-10)	3/15/22	14:00 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time: 3/15/22 1155	Company ELUE

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.1

TAR

R. Cramer actually resid 3/16/22

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2083-1
SDG Number: 31403551.001 Task 01.02

Login Number: 2083
List Number: 1
Creator: Olivas, Nathaniel

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2083-1
SDG Number: 31403551.001 Task 01.02

Login Number: 2083
List Number: 3
Creator: Foreman, Leah M

List Source: Eurofins Lancaster Laboratories Env, LLC
List Creation: 03/26/22 11:58 AM

Question	Answer	Comment
The cooler's custody seal is 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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2083-1
SDG Number: 31403551.001 Task 01.02

Login Number: 2083
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/17/22 02:02 PM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2090-1
Laboratory Sample Delivery Group: 31403551.001. task 01.02
Client Project/Site: Eunice Monument South Unit B Facility

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
4/7/2022 8:07:52 AM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Released to Imaging: 10/13/2023 10:56:27 AM

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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.
E	Result exceeded calibration range.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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)

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Job ID: 890-2090-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2090-1

Receipt
The samples were received on 3/16/2022 1:24 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 1.2°C

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

GC Semi VOA
Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-21831 and analytical batch 880-21770 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: FS70 (890-2090-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-21831/3-A) and (MB 880-21831/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21834 and analytical batch 880-21858 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-2099-A-1-C), (890-2099-A-1-D MS) and (890-2099-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21847 and analytical batch 880-21941 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

HPLC/IC
Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 111% and 118%. The sample results for but trial are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 118% and 120%. The sample results for but trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 118% and 120%. The sample results for but trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 118% and 120%. The sample results for but trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 115% and 111%. The sample results for but

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Case Narrative

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Job ID: 890-2090-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 111% and 118%. The sample results for but trial are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 118% and 120%. The sample results for but trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 118% and 120%. The sample results for but trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 118% and 120%. The sample results for but trials are in line and will both be reported.

Method 300_ORGFM_28D: The sample was prepared in duplicate on two prep separate prep batches. The laboratory control sample (LCS) for both batches recovered outside control limits for the following analytes:chloride at 115% and 111%. The sample results for but trials are in line and will both be reported.

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS48 Lab Sample ID: 890-2090-1

Date Collected: 03/14/22 10:20 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1	0.00198		mg/Kg		03/22/22 13:53	03/25/22 21:59	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		03/22/22 13:53	03/25/22 21:59	1
Ethylbenzene	**0.0493**	**F1**	0.00198		mg/Kg		03/22/22 13:53	03/25/22 21:59	1
m-Xylene & p-Xylene	**0.104**	**F1**	0.00396		mg/Kg		03/22/22 13:53	03/25/22 21:59	1
o-Xylene	**0.0189**	**F1**	0.00198		mg/Kg		03/22/22 13:53	03/25/22 21:59	1
Xylenes, Total	**0.123**	**F1**	0.00396		mg/Kg		03/22/22 13:53	03/25/22 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*224*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/25/22 21:59*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/22/22 13:53*	*03/25/22 21:59*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.172**		0.00396		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**8290**		249		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**573**		249		mg/Kg		03/18/22 17:03	03/19/22 19:30	5
Diesel Range Organics (Over C10-C28)	**6760**		249		mg/Kg		03/18/22 17:03	03/19/22 19:30	5
Oil Range Organics (Over C28-C36)	**953**		249		mg/Kg		03/18/22 17:03	03/19/22 19:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/18/22 17:03*	*03/19/22 19:30*	*5*
o-Terphenyl	*85*		*70 - 130*	*03/18/22 17:03*	*03/19/22 19:30*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**275**		5.00		mg/Kg			03/28/22 16:17	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**238**	***+**	50.0		mg/Kg			04/05/22 12:13	5

Client Sample ID: FS49 Lab Sample ID: 890-2090-2

Date Collected: 03/14/22 10:25 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/22/22 13:53	03/25/22 22:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/22/22 13:53	03/25/22 22:20	1
Ethylbenzene	**0.0173**		0.00201		mg/Kg		03/22/22 13:53	03/25/22 22:20	1
m-Xylene & p-Xylene	**0.0282**		0.00402		mg/Kg		03/22/22 13:53	03/25/22 22:20	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS49 — Lab Sample ID: 890-2090-2

Date Collected: 03/14/22 10:25 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	0.00690		0.00201		mg/Kg		03/22/22 13:53	03/25/22 22:20	1
Xylenes, Total	0.0351		0.00402		mg/Kg		03/22/22 13:53	03/25/22 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*166*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/25/22 22:20*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/22/22 13:53*	*03/25/22 22:20*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0524		0.00402		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4140		49.9		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	173		49.9		mg/Kg		03/18/22 08:39	03/19/22 22:56	1
Diesel Range Organics (Over C10-C28)	3410		49.9		mg/Kg		03/18/22 08:39	03/19/22 22:56	1
Oil Range Organics (Over C28-C36)	559		49.9		mg/Kg		03/18/22 08:39	03/19/22 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/18/22 08:39*	*03/19/22 22:56*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/18/22 08:39*	*03/19/22 22:56*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	622	*+	499		mg/Kg			04/05/22 15:48	50

Client Sample ID: FS50 — Lab Sample ID: 890-2090-3

Date Collected: 03/14/22 10:30 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 22:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 22:40	1
Ethylbenzene	0.0340		0.00200		mg/Kg		03/22/22 13:53	03/25/22 22:40	1
m-Xylene & p-Xylene	0.0592		0.00401		mg/Kg		03/22/22 13:53	03/25/22 22:40	1
o-Xylene	0.00996		0.00200		mg/Kg		03/22/22 13:53	03/25/22 22:40	1
Xylenes, Total	0.0692		0.00401		mg/Kg		03/22/22 13:53	03/25/22 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*214*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/25/22 22:40*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/22/22 13:53*	*03/25/22 22:40*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS50 Lab Sample ID: 890-2090-3

Date Collected: 03/14/22 10:30 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.103		0.00401		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	11700		249		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	482		249		mg/Kg		03/18/22 08:39	03/19/22 23:16	5
Diesel Range Organics (Over C10-C28)	9880		249		mg/Kg		03/18/22 08:39	03/19/22 23:16	5
Oil Range Organics (Over C28-C36)	1360		249		mg/Kg		03/18/22 08:39	03/19/22 23:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/18/22 08:39*	*03/19/22 23:16*	*5*
o-Terphenyl	*96*		*70 - 130*	*03/18/22 08:39*	*03/19/22 23:16*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	372	*+	199		mg/Kg			04/06/22 11:28	20

Client Sample ID: FS51 Lab Sample ID: 890-2090-4

Date Collected: 03/14/22 10:35 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 23:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 23:00	1
Ethylbenzene	0.0178		0.00200		mg/Kg		03/22/22 13:53	03/25/22 23:00	1
m-Xylene & p-Xylene	0.0343		0.00401		mg/Kg		03/22/22 13:53	03/25/22 23:00	1
o-Xylene	0.00676		0.00200		mg/Kg		03/22/22 13:53	03/25/22 23:00	1
Xylenes, Total	0.0411		0.00401		mg/Kg		03/22/22 13:53	03/25/22 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*174*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/25/22 23:00*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/22/22 13:53*	*03/25/22 23:00*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0589		0.00401		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8680		250		mg/Kg			03/18/22 12:52	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS51 Lab Sample ID: 890-2090-4

Date Collected: 03/14/22 10:35 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	333		250		mg/Kg		03/18/22 08:39	03/19/22 23:37	5
Diesel Range Organics (Over C10-C28)	7560		250		mg/Kg		03/18/22 08:39	03/19/22 23:37	5
Oil Range Organics (Over C28-C36)	788		250		mg/Kg		03/18/22 08:39	03/19/22 23:37	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*03/18/22 08:39*	*03/19/22 23:37*	*5*
o-Terphenyl	*96*		*70 - 130*	*03/18/22 08:39*	*03/19/22 23:37*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	428	*+	198		mg/Kg			04/01/22 02:14	20

Client Sample ID: FS52 Lab Sample ID: 890-2090-5

Date Collected: 03/14/22 10:40 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/22/22 13:53	03/25/22 23:21	1
Toluene	0.00604		0.00202		mg/Kg		03/22/22 13:53	03/25/22 23:21	1
Ethylbenzene	0.0506		0.00202		mg/Kg		03/22/22 13:53	03/25/22 23:21	1
m-Xylene & p-Xylene	0.0594		0.00404		mg/Kg		03/22/22 13:53	03/25/22 23:21	1
o-Xylene	0.0144		0.00202		mg/Kg		03/22/22 13:53	03/25/22 23:21	1
Xylenes, Total	0.0738		0.00404		mg/Kg		03/22/22 13:53	03/25/22 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*220*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/25/22 23:21*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/22/22 13:53*	*03/25/22 23:21*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.130		0.00404		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7960		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	505		250		mg/Kg		03/18/22 08:39	03/19/22 23:58	5
Diesel Range Organics (Over C10-C28)	6690		250		mg/Kg		03/18/22 08:39	03/19/22 23:58	5
Oil Range Organics (Over C28-C36)	766		250		mg/Kg		03/18/22 08:39	03/19/22 23:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/18/22 08:39*	*03/19/22 23:58*	*5*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS52 Lab Sample ID: 890-2090-5

Date Collected: 03/14/22 10:40 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	101		70 - 130	03/18/22 08:39	03/19/22 23:58	5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	438	*+	198	mg/Kg			04/01/22 02:22	20

Client Sample ID: FS53 Lab Sample ID: 890-2090-6

Date Collected: 03/14/22 10:45 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/22/22 13:53	03/25/22 23:41	1
Toluene	0.00585		0.00200	mg/Kg		03/22/22 13:53	03/25/22 23:41	1
Ethylbenzene	0.00982		0.00200	mg/Kg		03/22/22 13:53	03/25/22 23:41	1
m-Xylene & p-Xylene	0.0144		0.00401	mg/Kg		03/22/22 13:53	03/25/22 23:41	1
o-Xylene	0.00528		0.00200	mg/Kg		03/22/22 13:53	03/25/22 23:41	1
Xylenes, Total	0.0197		0.00401	mg/Kg		03/22/22 13:53	03/25/22 23:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130	03/22/22 13:53	03/25/22 23:41	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/22/22 13:53	03/25/22 23:41	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0354		0.00401	mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10900		250	mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	391		250	mg/Kg		03/18/22 08:39	03/20/22 00:18	5
Diesel Range Organics (Over C10-C28)	9190		250	mg/Kg		03/18/22 08:39	03/20/22 00:18	5
Oil Range Organics (Over C28-C36)	1300		250	mg/Kg		03/18/22 08:39	03/20/22 00:18	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	03/18/22 08:39	03/20/22 00:18	5
o-Terphenyl	98		70 - 130	03/18/22 08:39	03/20/22 00:18	5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	499	*+	200	mg/Kg			04/05/22 23:53	20

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS54 Lab Sample ID: 890-2090-7

Date Collected: 03/14/22 10:55 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/22/22 13:53	03/26/22 00:02	1
Toluene	**0.00355**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 00:02	1
Ethylbenzene	**0.0159**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 00:02	1
m-Xylene & p-Xylene	**0.0311**		0.00403		mg/Kg		03/22/22 13:53	03/26/22 00:02	1
o-Xylene	**0.00609**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 00:02	1
Xylenes, Total	**0.0372**		0.00403		mg/Kg		03/22/22 13:53	03/26/22 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*156*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 00:02*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/22/22 13:53*	*03/26/22 00:02*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0566**		0.00403		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**9760**		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**280**		250		mg/Kg		03/18/22 08:39	03/20/22 00:39	5
Diesel Range Organics (Over C10-C28)	**8510**		250		mg/Kg		03/18/22 08:39	03/20/22 00:39	5
Oil Range Organics (Over C28-C36)	**968**		250		mg/Kg		03/18/22 08:39	03/20/22 00:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*03/18/22 08:39*	*03/20/22 00:39*	*5*
o-Terphenyl	*115*		*70 - 130*	*03/18/22 08:39*	*03/20/22 00:39*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**400**	***+**	198		mg/Kg			04/01/22 02:46	20

Client Sample ID: FS55 Lab Sample ID: 890-2090-8

Date Collected: 03/14/22 11:00 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/22/22 13:53	03/26/22 00:22	1
Toluene	**0.00579**		0.00199		mg/Kg		03/22/22 13:53	03/26/22 00:22	1
Ethylbenzene	**0.0389**		0.00199		mg/Kg		03/22/22 13:53	03/26/22 00:22	1
m-Xylene & p-Xylene	**0.0676**		0.00398		mg/Kg		03/22/22 13:53	03/26/22 00:22	1
o-Xylene	**0.0111**		0.00199		mg/Kg		03/22/22 13:53	03/26/22 00:22	1
Xylenes, Total	**0.0787**		0.00398		mg/Kg		03/22/22 13:53	03/26/22 00:22	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS55 Lab Sample ID: 890-2090-8

Date Collected: 03/14/22 11:00 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	193	S1+	70 - 130	03/22/22 13:53	03/26/22 00:22	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/22/22 13:53	03/26/22 00:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.123		0.00398		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6830		249		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	292		249		mg/Kg		03/18/22 08:39	03/20/22 01:00	5
Diesel Range Organics (Over C10-C28)	5990		249		mg/Kg		03/18/22 08:39	03/20/22 01:00	5
Oil Range Organics (Over C28-C36)	544		249		mg/Kg		03/18/22 08:39	03/20/22 01:00	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	03/18/22 08:39	03/20/22 01:00	5
o-Terphenyl	98		70 - 130	03/18/22 08:39	03/20/22 01:00	5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	337	*+	98.8		mg/Kg			04/01/22 02:55	10

Client Sample ID: FS56 Lab Sample ID: 890-2090-9

Date Collected: 03/14/22 11:05 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/22/22 13:53	03/26/22 00:43	1
Toluene	0.00271		0.00201		mg/Kg		03/22/22 13:53	03/26/22 00:43	1
Ethylbenzene	0.0373		0.00201		mg/Kg		03/22/22 13:53	03/26/22 00:43	1
m-Xylene & p-Xylene	0.0575		0.00402		mg/Kg		03/22/22 13:53	03/26/22 00:43	1
o-Xylene	0.0115		0.00201		mg/Kg		03/22/22 13:53	03/26/22 00:43	1
Xylenes, Total	0.0690		0.00402		mg/Kg		03/22/22 13:53	03/26/22 00:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	212	S1+	70 - 130	03/22/22 13:53	03/26/22 00:43	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/22/22 13:53	03/26/22 00:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.109		0.00402		mg/Kg			03/21/22 15:31	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS56 Lab Sample ID: 890-2090-9

Date Collected: 03/14/22 11:05 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7900		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	346		250		mg/Kg		03/18/22 08:39	03/20/22 01:21	5
Diesel Range Organics (Over C10-C28)	6840		250		mg/Kg		03/18/22 08:39	03/20/22 01:21	5
Oil Range Organics (Over C28-C36)	718		250		mg/Kg		03/18/22 08:39	03/20/22 01:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/18/22 08:39*	*03/20/22 01:21*	*5*
o-Terphenyl	*100*		*70 - 130*	*03/18/22 08:39*	*03/20/22 01:21*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	346	*+	99.0		mg/Kg			04/01/22 03:03	10

Client Sample ID: FS57 Lab Sample ID: 890-2090-10

Date Collected: 03/14/22 11:10 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/22/22 13:53	03/26/22 01:04	1
Toluene	0.00255		0.00201		mg/Kg		03/22/22 13:53	03/26/22 01:04	1
Ethylbenzene	0.0269		0.00201		mg/Kg		03/22/22 13:53	03/26/22 01:04	1
m-Xylene & p-Xylene	0.0410		0.00402		mg/Kg		03/22/22 13:53	03/26/22 01:04	1
o-Xylene	0.00786		0.00201		mg/Kg		03/22/22 13:53	03/26/22 01:04	1
Xylenes, Total	0.0489		0.00402		mg/Kg		03/22/22 13:53	03/26/22 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*196*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 01:04*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/22/22 13:53*	*03/26/22 01:04*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0783		0.00402		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10000		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	272		250		mg/Kg		03/18/22 08:39	03/20/22 01:42	5
Diesel Range Organics (Over C10-C28)	8800		250		mg/Kg		03/18/22 08:39	03/20/22 01:42	5

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS57 Lab Sample ID: 890-2090-10

Date Collected: 03/14/22 11:10 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	944		250		mg/Kg		03/18/22 08:39	03/20/22 01:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/18/22 08:39*	*03/20/22 01:42*	*5*
o-Terphenyl	*97*		*70 - 130*	*03/18/22 08:39*	*03/20/22 01:42*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	729	*+	498		mg/Kg			04/05/22 13:13	50

Client Sample ID: FS58 Lab Sample ID: 890-2090-11

Date Collected: 03/14/22 11:15 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/26/22 02:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/26/22 02:27	1
Ethylbenzene	0.0228		0.00200		mg/Kg		03/22/22 13:53	03/26/22 02:27	1
m-Xylene & p-Xylene	0.0374		0.00401		mg/Kg		03/22/22 13:53	03/26/22 02:27	1
o-Xylene	0.00715		0.00200		mg/Kg		03/22/22 13:53	03/26/22 02:27	1
Xylenes, Total	0.0446		0.00401		mg/Kg		03/22/22 13:53	03/26/22 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*163*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 02:27*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/22/22 13:53*	*03/26/22 02:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0674		0.00401		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10200		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	257		250		mg/Kg		03/18/22 08:39	03/20/22 02:24	5
Diesel Range Organics (Over C10-C28)	8770		250		mg/Kg		03/18/22 08:39	03/20/22 02:24	5
Oll Range Organics (Over C28-C36)	1200		250		mg/Kg		03/18/22 08:39	03/20/22 02:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/18/22 08:39*	*03/20/22 02:24*	*5*
o-Terphenyl	*107*		*70 - 130*	*03/18/22 08:39*	*03/20/22 02:24*	*5*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS58 Lab Sample ID: 890-2090-11

Date Collected: 03/14/22 11:15 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	325	*+	100		mg/Kg			04/05/22 12:24	10

Client Sample ID: FS59 Lab Sample ID: 890-2090-12

Date Collected: 03/14/22 12:20 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/22/22 13:53	03/26/22 02:47	1
Toluene	0.00645		0.00201		mg/Kg		03/22/22 13:53	03/26/22 02:47	1
Ethylbenzene	0.0464		0.00201		mg/Kg		03/22/22 13:53	03/26/22 02:47	1
m-Xylene & p-Xylene	0.0880		0.00402		mg/Kg		03/22/22 13:53	03/26/22 02:47	1
o-Xylene	0.0147		0.00201		mg/Kg		03/22/22 13:53	03/26/22 02:47	1
Xylenes, Total	0.103		0.00402		mg/Kg		03/22/22 13:53	03/26/22 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*230*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 02:47*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/22/22 13:53*	*03/26/22 02:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.156		0.00402		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10400		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	469		250		mg/Kg		03/18/22 08:39	03/20/22 02:45	5
Diesel Range Organics (Over C10-C28)	8850		250		mg/Kg		03/18/22 08:39	03/20/22 02:45	5
Oil Range Organics (Over C28-C36)	1050		250		mg/Kg		03/18/22 08:39	03/20/22 02:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/18/22 08:39*	*03/20/22 02:45*	*5*
o-Terphenyl	*92*		*70 - 130*	*03/18/22 08:39*	*03/20/22 02:45*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	355	*+	100		mg/Kg			04/01/22 03:11	10

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS60 Lab Sample ID: 890-2090-13

Date Collected: 03/14/22 12:25 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:08	1
Toluene	**0.0133**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:08	1
Ethylbenzene	**0.108**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:08	1
m-Xylene & p-Xylene	**0.198**		0.00403		mg/Kg		03/22/22 13:53	03/26/22 03:08	1
o-Xylene	**0.0359**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:08	1
Xylenes, Total	**0.234**		0.00403		mg/Kg		03/22/22 13:53	03/26/22 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*399*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 03:08*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/22/22 13:53*	*03/26/22 03:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.355**		0.00403		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5370**		49.9		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**516**		49.9		mg/Kg		03/18/22 08:39	03/20/22 03:06	1
Diesel Range Organics (Over C10-C28)	**4210**		49.9		mg/Kg		03/18/22 08:39	03/20/22 03:06	1
Oil Range Organics (Over C28-C36)	**640**		49.9		mg/Kg		03/18/22 08:39	03/20/22 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/18/22 08:39*	*03/20/22 03:06*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/18/22 08:39*	*03/20/22 03:06*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**365**	***+**	99.8		mg/Kg			04/01/22 03:19	10

Client Sample ID: FS61 Lab Sample ID: 890-2090-14

Date Collected: 03/14/22 12:30 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:29	1
Toluene	**0.0161**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:29	1
Ethylbenzene	**0.0954**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:29	1
m-Xylene & p-Xylene	**0.177**		0.00403		mg/Kg		03/22/22 13:53	03/26/22 03:29	1
o-Xylene	**0.0285**		0.00202		mg/Kg		03/22/22 13:53	03/26/22 03:29	1
Xylenes, Total	**0.206**		0.00403		mg/Kg		03/22/22 13:53	03/26/22 03:29	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS61 Lab Sample ID: 890-2090-14

Date Collected: 03/14/22 12:30 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*308*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 03:29*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/22/22 13:53*	*03/26/22 03:29*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.317**		0.00403		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**9770**		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**795**		250		mg/Kg		03/18/22 08:39	03/20/22 03:27	5
Diesel Range Organics (Over C10-C28)	**8040**		250		mg/Kg		03/18/22 08:39	03/20/22 03:27	5
Oil Range Organics (Over C28-C36)	**933**		250		mg/Kg		03/18/22 08:39	03/20/22 03:27	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*125*		*70 - 130*	*03/18/22 08:39*	*03/20/22 03:27*	*5*
o-Terphenyl	*99*		*70 - 130*	*03/18/22 08:39*	*03/20/22 03:27*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**372**	***+**	198		mg/Kg			04/06/22 11:52	20

Client Sample ID: FS62 Lab Sample ID: 890-2090-15

Date Collected: 03/14/22 12:35 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/26/22 03:49	1
Toluene	**0.00246**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 03:49	1
Ethylbenzene	**0.0246**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 03:49	1
m-Xylene & p-Xylene	**0.0495**		0.00399		mg/Kg		03/22/22 13:53	03/26/22 03:49	1
o-Xylene	**0.00865**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 03:49	1
Xylenes, Total	**0.0582**		0.00399		mg/Kg		03/22/22 13:53	03/26/22 03:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*183*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 03:49*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/22/22 13:53*	*03/26/22 03:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0852**		0.00399		mg/Kg			03/21/22 15:31	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS62 Lab Sample ID: 890-2090-15

Date Collected: 03/14/22 12:35 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	11400		249		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	538		249		mg/Kg		03/18/22 08:39	03/20/22 03:48	5
Diesel Range Organics (Over C10-C28)	9980		249		mg/Kg		03/18/22 08:39	03/20/22 03:48	5
Oil Range Organics (Over C28-C36)	931		249		mg/Kg		03/18/22 08:39	03/20/22 03:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*03/18/22 08:39*	*03/20/22 03:48*	*5*
o-Terphenyl	*102*		*70 - 130*	*03/18/22 08:39*	*03/20/22 03:48*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	797	*+	500		mg/Kg			04/05/22 01:55	50

Client Sample ID: FS63 Lab Sample ID: 890-2090-16

Date Collected: 03/14/22 13:40 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/22/22 13:53	03/26/22 04:10	1
Toluene	0.00654		0.00202		mg/Kg		03/22/22 13:53	03/26/22 04:10	1
Ethylbenzene	0.0362		0.00202		mg/Kg		03/22/22 13:53	03/26/22 04:10	1
m-Xylene & p-Xylene	0.0726		0.00403		mg/Kg		03/22/22 13:53	03/26/22 04:10	1
o-Xylene	0.0124		0.00202		mg/Kg		03/22/22 13:53	03/26/22 04:10	1
Xylenes, Total	0.0850		0.00403		mg/Kg		03/22/22 13:53	03/26/22 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*188*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 04:10*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/22/22 13:53*	*03/26/22 04:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.128		0.00403		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7370		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	291		250		mg/Kg		03/18/22 08:39	03/20/22 04:09	5
Diesel Range Organics (Over C10-C28)	6380		250		mg/Kg		03/18/22 08:39	03/20/22 04:09	5

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS63 Lab Sample ID: 890-2090-16

Date Collected: 03/14/22 13:40 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	699		250		mg/Kg		03/18/22 08:39	03/20/22 04:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*03/18/22 08:39*	*03/20/22 04:09*	*5*
o-Terphenyl	*113*		*70 - 130*	*03/18/22 08:39*	*03/20/22 04:09*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	166	*+	49.8		mg/Kg			04/05/22 11:40	5

Client Sample ID: FS64 Lab Sample ID: 890-2090-17

Date Collected: 03/14/22 13:45 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/22/22 13:53	03/26/22 04:30	1
Toluene	0.00907		0.00199		mg/Kg		03/22/22 13:53	03/26/22 04:30	1
Ethylbenzene	0.00244		0.00199		mg/Kg		03/22/22 13:53	03/26/22 04:30	1
m-Xylene & p-Xylene	0.00733		0.00398		mg/Kg		03/22/22 13:53	03/26/22 04:30	1
o-Xylene	0.00639		0.00199		mg/Kg		03/22/22 13:53	03/26/22 04:30	1
Xylenes, Total	0.0137		0.00398		mg/Kg		03/22/22 13:53	03/26/22 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 04:30*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/22/22 13:53*	*03/26/22 04:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0252		0.00398		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2540		50.0		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/18/22 08:39	03/20/22 04:30	1
Diesel Range Organics (Over C10-C28)	2210		50.0		mg/Kg		03/18/22 08:39	03/20/22 04:30	1
Oil Range Organics (Over C28-C36)	326		50.0		mg/Kg		03/18/22 08:39	03/20/22 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/18/22 08:39*	*03/20/22 04:30*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/18/22 08:39*	*03/20/22 04:30*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS64 Lab Sample ID: 890-2090-17

Date Collected: 03/14/22 13:45 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**476**	***+**	199		mg/Kg			04/06/22 12:00	20

Client Sample ID: FS65 Lab Sample ID: 890-2090-18

Date Collected: 03/14/22 14:10 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/22/22 13:53	03/26/22 04:51	1
Toluene	**0.00591**		0.00198		mg/Kg		03/22/22 13:53	03/26/22 04:51	1
Ethylbenzene	**0.0488**		0.00198		mg/Kg		03/22/22 13:53	03/26/22 04:51	1
m-Xylene & p-Xylene	**0.0891**		0.00397		mg/Kg		03/22/22 13:53	03/26/22 04:51	1
o-Xylene	**0.0144**		0.00198		mg/Kg		03/22/22 13:53	03/26/22 04:51	1
Xylenes, Total	**0.104**		0.00397		mg/Kg		03/22/22 13:53	03/26/22 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*219*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 04:51*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/22/22 13:53*	*03/26/22 04:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.158**		0.00397		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5770**		249		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		03/18/22 08:39	03/20/22 04:50	5
Diesel Range Organics (Over C10-C28)	**4890**		249		mg/Kg		03/18/22 08:39	03/20/22 04:50	5
Oil Range Organics (Over C28-C36)	**876**		249		mg/Kg		03/18/22 08:39	03/20/22 04:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*03/18/22 08:39*	*03/20/22 04:50*	*5*
o-Terphenyl	*115*		*70 - 130*	*03/18/22 08:39*	*03/20/22 04:50*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**62.2**		49.2		mg/Kg			03/30/22 10:53	5

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS66 Lab Sample ID: 890-2090-19

Date Collected: 03/14/22 14:15 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:11	1
Toluene	**0.00629**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:11	1
Ethylbenzene	**0.0130**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:11	1
m-Xylene & p-Xylene	**0.0282**		0.00399		mg/Kg		03/22/22 13:53	03/26/22 05:11	1
o-Xylene	**0.00676**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:11	1
Xylenes, Total	**0.0350**		0.00399		mg/Kg		03/22/22 13:53	03/26/22 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*157*	*S1+*	*70 - 130*	*03/22/22 13:53*	*03/26/22 05:11*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/22/22 13:53*	*03/26/22 05:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0543**		0.00399		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3570**		49.8		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**189**		49.8		mg/Kg		03/18/22 08:39	03/20/22 05:11	1
Diesel Range Organics (Over C10-C28)	**2960**		49.8		mg/Kg		03/18/22 08:39	03/20/22 05:11	1
Oil Range Organics (Over C28-C36)	**421**		49.8		mg/Kg		03/18/22 08:39	03/20/22 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*03/18/22 08:39*	*03/20/22 05:11*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/18/22 08:39*	*03/20/22 05:11*	*1*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84.0**		49.6		mg/Kg			03/30/22 11:09	5

Client Sample ID: FS67 Lab Sample ID: 890-2090-20

Date Collected: 03/14/22 11:10 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:32	1
Toluene	**0.00424**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:32	1
Ethylbenzene	**0.0275**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:32	1
m-Xylene & p-Xylene	**0.0568**		0.00399		mg/Kg		03/22/22 13:53	03/26/22 05:32	1
o-Xylene	**0.0103**		0.00200		mg/Kg		03/22/22 13:53	03/26/22 05:32	1
Xylenes, Total	**0.0671**		0.00399		mg/Kg		03/22/22 13:53	03/26/22 05:32	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS67 Lab Sample ID: 890-2090-20

Date Collected: 03/14/22 11:10 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	174	S1+	70 - 130	03/22/22 13:53	03/26/22 05:32	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/22/22 13:53	03/26/22 05:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0988		0.00399		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6120		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	254		250		mg/Kg		03/18/22 08:39	03/20/22 05:31	5
Diesel Range Organics (Over C10-C28)	4900		250		mg/Kg		03/18/22 08:39	03/20/22 05:31	5
Oil Range Organics (Over C28-C36)	967		250		mg/Kg		03/18/22 08:39	03/20/22 05:31	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	03/18/22 08:39	03/20/22 05:31	5
o-Terphenyl	100		70 - 130	03/18/22 08:39	03/20/22 05:31	5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.0		49.2		mg/Kg			03/30/22 11:25	5

Client Sample ID: FS68 Lab Sample ID: 890-2090-21

Date Collected: 03/14/22 14:20 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/21/22 07:44	03/21/22 14:04	1
Toluene	0.0109		0.00199		mg/Kg		03/21/22 07:44	03/21/22 14:04	1
Ethylbenzene	0.0865		0.00199		mg/Kg		03/21/22 07:44	03/21/22 14:04	1
m-Xylene & p-Xylene	0.157		0.00398		mg/Kg		03/21/22 07:44	03/21/22 14:04	1
o-Xylene	0.0248		0.00199		mg/Kg		03/21/22 07:44	03/21/22 14:04	1
Xylenes, Total	0.182		0.00398		mg/Kg		03/21/22 07:44	03/21/22 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	285	S1+	70 - 130	03/21/22 07:44	03/21/22 14:04	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/21/22 07:44	03/21/22 14:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.279		0.00398		mg/Kg			03/21/22 15:31	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS68 Lab Sample ID: 890-2090-21

Date Collected: 03/14/22 14:20 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6500		249		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	493		249		mg/Kg		03/17/22 16:29	03/18/22 20:03	5
Diesel Range Organics (Over C10-C28)	5170		249		mg/Kg		03/17/22 16:29	03/18/22 20:03	5
Oil Range Organics (Over C28-C36)	837		249		mg/Kg		03/17/22 16:29	03/18/22 20:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/17/22 16:29*	*03/18/22 20:03*	*5*
o-Terphenyl	*101*		*70 - 130*	*03/17/22 16:29*	*03/18/22 20:03*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.2	*+	50.0		mg/Kg			04/04/22 23:53	5

Client Sample ID: FS69 Lab Sample ID: 890-2090-22

Date Collected: 03/14/22 14:25 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/21/22 07:44	03/21/22 14:25	1
Toluene	0.00545		0.00200		mg/Kg		03/21/22 07:44	03/21/22 14:25	1
Ethylbenzene	0.0938		0.00200		mg/Kg		03/21/22 07:44	03/21/22 14:25	1
m-Xylene & p-Xylene	0.128		0.00400		mg/Kg		03/21/22 07:44	03/21/22 14:25	1
o-Xylene	0.0232		0.00200		mg/Kg		03/21/22 07:44	03/21/22 14:25	1
Xylenes, Total	0.151		0.00400		mg/Kg		03/21/22 07:44	03/21/22 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*314*	*S1+*	*70 - 130*	*03/21/22 07:44*	*03/21/22 14:25*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/21/22 07:44*	*03/21/22 14:25*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.250		0.00400		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3420		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	404		250		mg/Kg		03/17/22 16:29	03/18/22 20:24	5
Diesel Range Organics (Over C10-C28)	2660		250		mg/Kg		03/17/22 16:29	03/18/22 20:24	5

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS69 Lab Sample ID: 890-2090-22

Date Collected: 03/14/22 14:25 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	351		250		mg/Kg		03/17/22 16:29	03/18/22 20:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/17/22 16:29*	*03/18/22 20:24*	*5*
o-Terphenyl	*102*		*70 - 130*	*03/17/22 16:29*	*03/18/22 20:24*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	231	*+	49.8		mg/Kg			04/05/22 00:38	5

Client Sample ID: FS70 Lab Sample ID: 890-2090-23

Date Collected: 03/14/22 14:30 **Matrix: Solid**
Date Received: 03/16/22 13:24
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/21/22 07:44	03/21/22 14:45	1
Toluene	0.00741		0.00198		mg/Kg		03/21/22 07:44	03/21/22 14:45	1
Ethylbenzene	0.107		0.00198		mg/Kg		03/21/22 07:44	03/21/22 14:45	1
m-Xylene & p-Xylene	0.168		0.00397		mg/Kg		03/21/22 07:44	03/21/22 14:45	1
o-Xylene	0.0245		0.00198		mg/Kg		03/21/22 07:44	03/21/22 14:45	1
Xylenes, Total	0.193		0.00397		mg/Kg		03/21/22 07:44	03/21/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*322*	*S1+*	*70 - 130*	*03/21/22 07:44*	*03/21/22 14:45*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/21/22 07:44*	*03/21/22 14:45*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.307		0.00397		mg/Kg			03/21/22 15:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1820		250		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	268	*1	250		mg/Kg		03/17/22 15:48	03/18/22 09:01	5
Diesel Range Organics (Over C10-C28)	1550		250		mg/Kg		03/17/22 15:48	03/18/22 09:01	5
Oll Range Organics (Over C28-C36)	<250	U	250		mg/Kg		03/17/22 15:48	03/18/22 09:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*03/17/22 15:48*	*03/18/22 09:01*	*5*
o-Terphenyl	*108*		*70 - 130*	*03/17/22 15:48*	*03/18/22 09:01*	*5*

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	233	*+	50.0		mg/Kg			04/04/22 22:58	5

Eurofins Carlsbad

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
880-12586-A-1-F MS	Matrix Spike	103	112										
880-12586-A-1-G MSD	Matrix Spike Duplicate	102	110										
890-2090-1	FS48	224 S1+	100										
890-2090-1 MS	FS48	255 S1+	103										
890-2090-1 MSD	FS48	229 S1+	111										
890-2090-2	FS49	166 S1+	108										
890-2090-3	FS50	214 S1+	99										
890-2090-4	FS51	174 S1+	102										
890-2090-5	FS52	220 S1+	100										
890-2090-6	FS53	155 S1+	107										
890-2090-7	FS54	156 S1+	108										
890-2090-8	FS55	193 S1+	101										
890-2090-9	FS56	212 S1+	102										
890-2090-10	FS57	196 S1+	105										
890-2090-11	FS58	163 S1+	105										
890-2090-12	FS59	230 S1+	100										
890-2090-13	FS60	399 S1+	103										
890-2090-14	FS61	308 S1+	101										
890-2090-15	FS62	183 S1+	103										
890-2090-16	FS63	188 S1+	99										
890-2090-17	FS64	134 S1+	111										
890-2090-18	FS65	219 S1+	102										
890-2090-19	FS66	157 S1+	108										
890-2090-20	FS67	174 S1+	103										
890-2090-21	FS68	285 S1+	104										
890-2090-22	FS69	314 S1+	109										
890-2090-23	FS70	322 S1+	103										
LCS 880-21822/1-A	Lab Control Sample	102	112										
LCS 880-21977/1-A	Lab Control Sample	103	110										
LCSD 880-21822/2-A	Lab Control Sample Dup	103	111										
LCSD 880-21977/2-A	Lab Control Sample Dup	102	109										
MB 880-21822/5-A	Method Blank	103	105										
MB 880-21977/5-A	Method Blank	101	103										
MB 880-22266/5-A	Method Blank	100	104										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-12586-A-1-D MS	Matrix Spike	108	96										
880-12586-A-1-E MSD	Matrix Spike Duplicate	110	99										
890-2083-A-1-D MS	Matrix Spike	117	102										
890-2083-A-1-E MSD	Matrix Spike Duplicate	98	85										
890-2090-1	FS48	94	85										

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-2090-2	FS49	110	101										
890-2090-3	FS50	109	96										
890-2090-4	FS51	111	96										
890-2090-5	FS52	118	101										
890-2090-6	FS53	109	98										
890-2090-7	FS54	125	115										
890-2090-8	FS55	105	98										
890-2090-9	FS56	108	100										
890-2090-10	FS57	102	97										
890-2090-11	FS58	112	107										
890-2090-12	FS59	102	92										
890-2090-13	FS60	112	90										
890-2090-14	FS61	125	99										
890-2090-15	FS62	124	102										
890-2090-16	FS63	115	113										
890-2090-17	FS64	102	93										
890-2090-18	FS65	122	115										
890-2090-19	FS66	114	100										
890-2090-20	FS67	118	100										
890-2090-21	FS68	118	101										
890-2090-22	FS69	113	102										
890-2090-23	FS70	132 S1+	108										
890-2095-A-1-J MS	Matrix Spike	104	104										
890-2095-A-1-K MSD	Matrix Spike Duplicate	101	106										
890-2099-A-1-D MS	Matrix Spike	193 S1+	340 S1+										
890-2099-A-1-E MSD	Matrix Spike Duplicate	187 S1+	327 S1+										
LCS 880-21834/2-A	Lab Control Sample	115	121										
LCS 880-21847/2-A	Lab Control Sample	102	107										
LCS 880-21924/2-A	Lab Control Sample	111	113										
LCSD 880-21834/3-A	Lab Control Sample Dup	108	108										
LCSD 880-21847/3-A	Lab Control Sample Dup	97	106										
LCSD 880-21924/3-A	Lab Control Sample Dup	95	94										
MB 880-21834/1-A	Method Blank	117	123										
MB 880-21847/1-A	Method Blank	106	113										
MB 880-21924/1-A	Method Blank	98	101										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)										
LCS 880-21831/2-A	Lab Control Sample	101	111										
LCSD 880-21831/3-A	Lab Control Sample Dup	124	133 S1+										
MB 880-21831/1-A	Method Blank	116	133 S1+										

Surrogate Legend

Surrogate Summary

Client: WSP USA Inc.
Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility
SDG: 31403551.001. task 01.02

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21822/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 21822**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 21:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 21:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 21:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/22/22 13:53	03/25/22 21:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/22/22 13:53	03/25/22 21:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/22/22 13:53	03/25/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/22/22 13:53*	*03/25/22 21:37*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/22/22 13:53*	*03/25/22 21:37*	*1*

Lab Sample ID: LCS 880-21822/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 21822**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1006		mg/Kg		101	70 - 130		
Toluene			0.100	0.09986		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.1034		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2117		mg/Kg		106	70 - 130		
o-Xylene			0.100	0.1073		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 880-21822/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 21822**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09871		mg/Kg		99	70 - 130	2	35
Toluene			0.100	0.09681		mg/Kg		97	70 - 130	3	35
Ethylbenzene			0.100	0.1014		mg/Kg		101	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2080		mg/Kg		104	70 - 130	2	35
o-Xylene			0.100	0.1048		mg/Kg		105	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 890-2090-1 MS **Client Sample ID: FS48**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 21822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F1	0.0998	0.04246	F1	mg/Kg		43	70 - 130		
Toluene	<0.00198	U F1	0.0998	0.03947	F1	mg/Kg		38	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: 890-2090-1 MS **Client Sample ID: FS48**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 21822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.0493	F1	0.0998	0.09052	F1	mg/Kg		41	70 - 130
m-Xylene & p-Xylene	0.104	F1	0.200	0.1691	F1	mg/Kg		33	70 - 130
o-Xylene	0.0189	F1	0.0998	0.04041	F1	mg/Kg		22	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*255*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2090-1 MSD **Client Sample ID: FS48**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 21822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.04325	F1	mg/Kg		43	70 - 130	2	35
Toluene	<0.00198	U F1	0.100	0.03688	F1	mg/Kg		35	70 - 130	7	35
Ethylbenzene	0.0493	F1	0.100	0.08187	F1	mg/Kg		33	70 - 130	10	35
m-Xylene & p-Xylene	0.104	F1	0.200	0.1519	F1	mg/Kg		24	70 - 130	11	35
o-Xylene	0.0189	F1	0.100	0.03797	F1	mg/Kg		19	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*229*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: MB 880-21977/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/21/22 07:44	03/21/22 11:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/21/22 07:44	03/21/22 11:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/21/22 07:44	03/21/22 11:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/21/22 07:44	03/21/22 11:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/21/22 07:44	03/21/22 11:19	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/21/22 07:44	03/21/22 11:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/21/22 07:44*	*03/21/22 11:19*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/21/22 07:44*	*03/21/22 11:19*	*1*

Lab Sample ID: LCS 880-21977/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09387		mg/Kg		94	70 - 130
Toluene	0.100	0.09339		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09526		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1971		mg/Kg		99	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: LCS 880-21977/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09610		mg/Kg		96	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-21977/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09279		mg/Kg		93	70 - 130	1	35
Toluene			0.100	0.09258		mg/Kg		93	70 - 130	1	35
Ethylbenzene			0.100	0.09512		mg/Kg		95	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1968		mg/Kg		98	70 - 130	0	35
o-Xylene			0.100	0.09589		mg/Kg		96	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-12586-A-1-F MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U	0.0998	0.09690		mg/Kg		97	70 - 130		
Toluene	<0.00198	U	0.0998	0.09470		mg/Kg		95	70 - 130		
Ethylbenzene	<0.00198	U	0.0998	0.09716		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene	<0.00396	U	0.200	0.2018		mg/Kg		101	70 - 130		
o-Xylene	<0.00198	U	0.0998	0.09862		mg/Kg		99	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-12586-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.09510		mg/Kg		95	70 - 130	2	35
Toluene	<0.00198	U	0.100	0.09393		mg/Kg		94	70 - 130	1	35
Ethylbenzene	<0.00198	U	0.100	0.09588		mg/Kg		96	70 - 130	1	35
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1992		mg/Kg		100	70 - 130	1	35
o-Xylene	<0.00198	U	0.100	0.09720		mg/Kg		97	70 - 130	1	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: 880-12586-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21978 **Prep Batch: 21977**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: MB 880-22266/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22323 **Prep Batch: 22266**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/22 07:30	03/25/22 10:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/25/22 07:30	03/25/22 10:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/25/22 07:30	03/25/22 10:42	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/25/22 07:30	03/25/22 10:42	1

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

Lab Sample ID: MB 880-21831/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 00:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 00:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 00:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	03/17/22 15:48	03/18/22 00:23	1
o-Terphenyl	133	S1+	70 - 130	03/17/22 15:48	03/18/22 00:23	1

Lab Sample ID: LCS 880-21831/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	916.8		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	958.0		mg/Kg		96	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	111		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: LCSD 880-21831/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1165	*1	mg/Kg		116	70 - 130	24	20
Diesel Range Organics (Over C10-C28)			1000	1171		mg/Kg		117	70 - 130	20	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Lab Sample ID: 890-2095-A-1-J MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	998	1150		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1180		mg/Kg		116	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: 890-2095-A-1-K MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	999	1160		mg/Kg		114	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1183		mg/Kg		116	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: MB 880-21834/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 11:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 11:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 16:29	03/18/22 11:38	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: MB 880-21834/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	03/17/22 16:29	03/18/22 11:38	1
o-Terphenyl	123		70 - 130	03/17/22 16:29	03/18/22 11:38	1

Lab Sample ID: LCS 880-21834/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	872.7		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1134		mg/Kg		113	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: LCSD 880-21834/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	866.5		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 890-2083-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21858 **Prep Batch: 21834**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	998	1574	F1	mg/Kg		158	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1355	F1	mg/Kg		133	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	102		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: 890-2083-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21858 — **Prep Batch: 21834**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	1388	F1	mg/Kg		139	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1149		mg/Kg		112	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: MB 880-21847/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21941 — **Prep Batch: 21847**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/18/22 08:39	03/19/22 20:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/18/22 08:39	03/19/22 20:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/18/22 08:39	03/19/22 20:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/18/22 08:39*	*03/19/22 20:52*	*1*
o-Terphenyl	*113*		*70 - 130*	*03/18/22 08:39*	*03/19/22 20:52*	*1*

Lab Sample ID: LCS 880-21847/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21941 — **Prep Batch: 21847**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	801.7		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1079		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: LCSD 880-21847/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21941 — **Prep Batch: 21847**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	836.8		mg/Kg		84	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1100		mg/Kg		110	70 - 130	2	20

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: LCSD 880-21847/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21847**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: 880-12586-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21847**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	998	1358	F1	mg/Kg		136	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	1340		mg/Kg		129	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 880-12586-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21847**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	999	1476	F1	mg/Kg		148	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	999	1374	F1	mg/Kg		133	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: MB 880-21924/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21924**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/18/22 17:03	03/19/22 11:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/18/22 17:03	03/19/22 11:36	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/22 17:03	03/19/22 11:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/18/22 17:03	03/19/22 11:36	1
o-Terphenyl	101		70 - 130	03/18/22 17:03	03/19/22 11:36	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

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

Lab Sample ID: LCS 880-21924/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21924**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	830.9		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1109		mg/Kg		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-21924/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21924**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	712.5		mg/Kg		71	70 - 130	15	20
Diesel Range Organics (Over C10-C28)			1000	920.6		mg/Kg		92	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: 890-2099-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21924**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	5620		998	7016	4	mg/Kg		140	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*193*	*S1+*	*70 - 130*
o-Terphenyl	*340*	*S1+*	*70 - 130*

Lab Sample ID: 890-2099-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21941 **Prep Batch: 21924**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	5620		999	6564	4	mg/Kg		95	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*187*	*S1+*	*70 - 130*
o-Terphenyl	*327*	*S1+*	*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22475/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 22476

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/28/22 15:06	1

Lab Sample ID: LCS 880-22475/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 22476

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	246.0		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-22475/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 22476

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	246.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-2141-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 22476

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	72.0		249	313.1		mg/Kg		97	90 - 110		

Lab Sample ID: 890-2141-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 22476

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	72.0		249	313.9		mg/Kg		97	90 - 110	0	20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-238676/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/30/22 10:37	1

Lab Sample ID: LCS 410-238676/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 239332

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	21.32		mg/Kg		107	90 - 110		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 410-238366/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 240119

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			04/01/22 02:06	1

Lab Sample ID: LCS 410-238366/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 240119

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			20.0	23.93	*+	mg/Kg		120	90 - 110		

Lab Sample ID: 890-2090-5 MS — **Client Sample ID: FS52**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 240119

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	438	*+	19.8	577.3	4	mg/Kg		700	90 - 110		

Lab Sample ID: 890-2090-5 DU — **Client Sample ID: FS52**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 240119

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	438	*+		521.5	*+ F5	mg/Kg				17	15

Lab Sample ID: MB 410-240233/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 241096

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			04/05/22 10:12	1

Lab Sample ID: 890-2085-A-2-J MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 241583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3050	*+	19.7	3968	4 *+	mg/Kg		4669	90 - 110		

Lab Sample ID: 890-2085-A-2-K DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 241583

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	3050	*+		3767	F5 *+	mg/Kg				21	15

Lab Sample ID: 890-2090-3 DU — **Client Sample ID: FS50**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 241818

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	372	*+		3884	E F3 *+	mg/Kg				165	15

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

GC VOA

Prep Batch: 21822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Total/NA	Solid	5035	
890-2090-2	FS49	Total/NA	Solid	5035	
890-2090-3	FS50	Total/NA	Solid	5035	
890-2090-4	FS51	Total/NA	Solid	5035	
890-2090-5	FS52	Total/NA	Solid	5035	
890-2090-6	FS53	Total/NA	Solid	5035	
890-2090-7	FS54	Total/NA	Solid	5035	
890-2090-8	FS55	Total/NA	Solid	5035	
890-2090-9	FS56	Total/NA	Solid	5035	
890-2090-10	FS57	Total/NA	Solid	5035	
890-2090-11	FS58	Total/NA	Solid	5035	
890-2090-12	FS59	Total/NA	Solid	5035	
890-2090-13	FS60	Total/NA	Solid	5035	
890-2090-14	FS61	Total/NA	Solid	5035	
890-2090-15	FS62	Total/NA	Solid	5035	
890-2090-16	FS63	Total/NA	Solid	5035	
890-2090-17	FS64	Total/NA	Solid	5035	
890-2090-18	FS65	Total/NA	Solid	5035	
890-2090-19	FS66	Total/NA	Solid	5035	
890-2090-20	FS67	Total/NA	Solid	5035	
MB 880-21822/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21822/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21822/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2090-1 MS	FS48	Total/NA	Solid	5035	
890-2090-1 MSD	FS48	Total/NA	Solid	5035	

Prep Batch: 21977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-21	FS68	Total/NA	Solid	5035	
890-2090-22	FS69	Total/NA	Solid	5035	
890-2090-23	FS70	Total/NA	Solid	5035	
MB 880-21977/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21977/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21977/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12586-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-12586-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-21	FS68	Total/NA	Solid	8021B	21977
890-2090-22	FS69	Total/NA	Solid	8021B	21977
890-2090-23	FS70	Total/NA	Solid	8021B	21977
MB 880-21977/5-A	Method Blank	Total/NA	Solid	8021B	21977
LCS 880-21977/1-A	Lab Control Sample	Total/NA	Solid	8021B	21977
LCSD 880-21977/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21977
880-12586-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	21977
880-12586-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21977

Analysis Batch: 22094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

GC VOA (Continued)

Analysis Batch: 22094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-2	FS49	Total/NA	Solid	Total BTEX	
890-2090-3	FS50	Total/NA	Solid	Total BTEX	
890-2090-4	FS51	Total/NA	Solid	Total BTEX	
890-2090-5	FS52	Total/NA	Solid	Total BTEX	
890-2090-6	FS53	Total/NA	Solid	Total BTEX	
890-2090-7	FS54	Total/NA	Solid	Total BTEX	
890-2090-8	FS55	Total/NA	Solid	Total BTEX	
890-2090-9	FS56	Total/NA	Solid	Total BTEX	
890-2090-10	FS57	Total/NA	Solid	Total BTEX	
890-2090-11	FS58	Total/NA	Solid	Total BTEX	
890-2090-12	FS59	Total/NA	Solid	Total BTEX	
890-2090-13	FS60	Total/NA	Solid	Total BTEX	
890-2090-14	FS61	Total/NA	Solid	Total BTEX	
890-2090-15	FS62	Total/NA	Solid	Total BTEX	
890-2090-16	FS63	Total/NA	Solid	Total BTEX	
890-2090-17	FS64	Total/NA	Solid	Total BTEX	
890-2090-18	FS65	Total/NA	Solid	Total BTEX	
890-2090-19	FS66	Total/NA	Solid	Total BTEX	
890-2090-20	FS67	Total/NA	Solid	Total BTEX	
890-2090-21	FS68	Total/NA	Solid	Total BTEX	
890-2090-22	FS69	Total/NA	Solid	Total BTEX	
890-2090-23	FS70	Total/NA	Solid	Total BTEX	

Prep Batch: 22266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22266/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 22323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Total/NA	Solid	8021B	21822
890-2090-2	FS49	Total/NA	Solid	8021B	21822
890-2090-3	FS50	Total/NA	Solid	8021B	21822
890-2090-4	FS51	Total/NA	Solid	8021B	21822
890-2090-5	FS52	Total/NA	Solid	8021B	21822
890-2090-6	FS53	Total/NA	Solid	8021B	21822
890-2090-7	FS54	Total/NA	Solid	8021B	21822
890-2090-8	FS55	Total/NA	Solid	8021B	21822
890-2090-9	FS56	Total/NA	Solid	8021B	21822
890-2090-10	FS57	Total/NA	Solid	8021B	21822
890-2090-11	FS58	Total/NA	Solid	8021B	21822
890-2090-12	FS59	Total/NA	Solid	8021B	21822
890-2090-13	FS60	Total/NA	Solid	8021B	21822
890-2090-14	FS61	Total/NA	Solid	8021B	21822
890-2090-15	FS62	Total/NA	Solid	8021B	21822
890-2090-16	FS63	Total/NA	Solid	8021B	21822
890-2090-17	FS64	Total/NA	Solid	8021B	21822
890-2090-18	FS65	Total/NA	Solid	8021B	21822
890-2090-19	FS66	Total/NA	Solid	8021B	21822
890-2090-20	FS67	Total/NA	Solid	8021B	21822
MB 880-21822/5-A	Method Blank	Total/NA	Solid	8021B	21822
MB 880-22266/5-A	Method Blank	Total/NA	Solid	8021B	22266

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

GC VOA (Continued)

Analysis Batch: 22323 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-21822/1-A	Lab Control Sample	Total/NA	Solid	8021B	21822
LCSD 880-21822/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21822
890-2090-1 MS	FS48	Total/NA	Solid	8021B	21822
890-2090-1 MSD	FS48	Total/NA	Solid	8021B	21822

GC Semi VOA

Analysis Batch: 21770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-23	FS70	Total/NA	Solid	8015B NM	21831
MB 880-21831/1-A	Method Blank	Total/NA	Solid	8015B NM	21831
LCS 880-21831/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21831
LCSD 880-21831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21831
890-2095-A-1-J MS	Matrix Spike	Total/NA	Solid	8015B NM	21831
890-2095-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21831

Prep Batch: 21831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-23	FS70	Total/NA	Solid	8015NM Prep	
MB 880-21831/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21831/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2095-A-1-J MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2095-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 21834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-21	FS68	Total/NA	Solid	8015NM Prep	
890-2090-22	FS69	Total/NA	Solid	8015NM Prep	
MB 880-21834/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21834/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2083-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2083-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 21847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-2	FS49	Total/NA	Solid	8015NM Prep	
890-2090-3	FS50	Total/NA	Solid	8015NM Prep	
890-2090-4	FS51	Total/NA	Solid	8015NM Prep	
890-2090-5	FS52	Total/NA	Solid	8015NM Prep	
890-2090-6	FS53	Total/NA	Solid	8015NM Prep	
890-2090-7	FS54	Total/NA	Solid	8015NM Prep	
890-2090-8	FS55	Total/NA	Solid	8015NM Prep	
890-2090-9	FS56	Total/NA	Solid	8015NM Prep	
890-2090-10	FS57	Total/NA	Solid	8015NM Prep	
890-2090-11	FS58	Total/NA	Solid	8015NM Prep	
890-2090-12	FS59	Total/NA	Solid	8015NM Prep	
890-2090-13	FS60	Total/NA	Solid	8015NM Prep	
890-2090-14	FS61	Total/NA	Solid	8015NM Prep	
890-2090-15	FS62	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

GC Semi VOA (Continued)

Prep Batch: 21847 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-16	FS63	Total/NA	Solid	8015NM Prep	
890-2090-17	FS64	Total/NA	Solid	8015NM Prep	
890-2090-18	FS65	Total/NA	Solid	8015NM Prep	
890-2090-19	FS66	Total/NA	Solid	8015NM Prep	
890-2090-20	FS67	Total/NA	Solid	8015NM Prep	
MB 880-21847/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21847/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21847/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12586-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12586-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-21	FS68	Total/NA	Solid	8015B NM	21834
890-2090-22	FS69	Total/NA	Solid	8015B NM	21834
MB 880-21834/1-A	Method Blank	Total/NA	Solid	8015B NM	21834
LCS 880-21834/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21834
LCSD 880-21834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21834
890-2083-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	21834
890-2083-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21834

Analysis Batch: 21887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Total/NA	Solid	8015 NM	
890-2090-2	FS49	Total/NA	Solid	8015 NM	
890-2090-3	FS50	Total/NA	Solid	8015 NM	
890-2090-4	FS51	Total/NA	Solid	8015 NM	
890-2090-5	FS52	Total/NA	Solid	8015 NM	
890-2090-6	FS53	Total/NA	Solid	8015 NM	
890-2090-7	FS54	Total/NA	Solid	8015 NM	
890-2090-8	FS55	Total/NA	Solid	8015 NM	
890-2090-9	FS56	Total/NA	Solid	8015 NM	
890-2090-10	FS57	Total/NA	Solid	8015 NM	
890-2090-11	FS58	Total/NA	Solid	8015 NM	
890-2090-12	FS59	Total/NA	Solid	8015 NM	
890-2090-13	FS60	Total/NA	Solid	8015 NM	
890-2090-14	FS61	Total/NA	Solid	8015 NM	
890-2090-15	FS62	Total/NA	Solid	8015 NM	
890-2090-16	FS63	Total/NA	Solid	8015 NM	
890-2090-17	FS64	Total/NA	Solid	8015 NM	
890-2090-18	FS65	Total/NA	Solid	8015 NM	
890-2090-19	FS66	Total/NA	Solid	8015 NM	
890-2090-20	FS67	Total/NA	Solid	8015 NM	
890-2090-21	FS68	Total/NA	Solid	8015 NM	
890-2090-22	FS69	Total/NA	Solid	8015 NM	
890-2090-23	FS70	Total/NA	Solid	8015 NM	

Prep Batch: 21924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Total/NA	Solid	8015NM Prep	
MB 880-21924/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

GC Semi VOA (Continued)

Prep Batch: 21924 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-21924/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21924/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2099-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2099-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Total/NA	Solid	8015B NM	21924
890-2090-2	FS49	Total/NA	Solid	8015B NM	21847
890-2090-3	FS50	Total/NA	Solid	8015B NM	21847
890-2090-4	FS51	Total/NA	Solid	8015B NM	21847
890-2090-5	FS52	Total/NA	Solid	8015B NM	21847
890-2090-6	FS53	Total/NA	Solid	8015B NM	21847
890-2090-7	FS54	Total/NA	Solid	8015B NM	21847
890-2090-8	FS55	Total/NA	Solid	8015B NM	21847
890-2090-9	FS56	Total/NA	Solid	8015B NM	21847
890-2090-10	FS57	Total/NA	Solid	8015B NM	21847
890-2090-11	FS58	Total/NA	Solid	8015B NM	21847
890-2090-12	FS59	Total/NA	Solid	8015B NM	21847
890-2090-13	FS60	Total/NA	Solid	8015B NM	21847
890-2090-14	FS61	Total/NA	Solid	8015B NM	21847
890-2090-15	FS62	Total/NA	Solid	8015B NM	21847
890-2090-16	FS63	Total/NA	Solid	8015B NM	21847
890-2090-17	FS64	Total/NA	Solid	8015B NM	21847
890-2090-18	FS65	Total/NA	Solid	8015B NM	21847
890-2090-19	FS66	Total/NA	Solid	8015B NM	21847
890-2090-20	FS67	Total/NA	Solid	8015B NM	21847
MB 880-21847/1-A	Method Blank	Total/NA	Solid	8015B NM	21847
MB 880-21924/1-A	Method Blank	Total/NA	Solid	8015B NM	21924
LCS 880-21847/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21847
LCS 880-21924/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21924
LCSD 880-21847/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21847
LCSD 880-21924/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21924
880-12586-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	21847
880-12586-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21847
890-2099-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	21924
890-2099-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21924

HPLC/IC

Leach Batch: 22475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Soluble	Solid	DI Leach	
MB 880-22475/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22475/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22475/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2141-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2141-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

HPLC/IC

Analysis Batch: 22476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Soluble	Solid	300.0	22475
MB 880-22475/1-A	Method Blank	Soluble	Solid	300.0	22475
LCS 880-22475/2-A	Lab Control Sample	Soluble	Solid	300.0	22475
LCSD 880-22475/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22475
890-2141-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	22475
890-2141-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22475

Leach Batch: 238366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Soluble	Solid	DI Leach	
890-2090-2	FS49	Soluble	Solid	DI Leach	
890-2090-3	FS50	Soluble	Solid	DI Leach	
890-2090-4	FS51	Soluble	Solid	DI Leach	
890-2090-5	FS52	Soluble	Solid	DI Leach	
890-2090-6	FS53	Soluble	Solid	DI Leach	
890-2090-7	FS54	Soluble	Solid	DI Leach	
890-2090-8	FS55	Soluble	Solid	DI Leach	
890-2090-9	FS56	Soluble	Solid	DI Leach	
890-2090-10	FS57	Soluble	Solid	DI Leach	
890-2090-11	FS58	Soluble	Solid	DI Leach	
890-2090-12	FS59	Soluble	Solid	DI Leach	
890-2090-13	FS60	Soluble	Solid	DI Leach	
890-2090-14	FS61	Soluble	Solid	DI Leach	
890-2090-15	FS62	Soluble	Solid	DI Leach	
890-2090-16	FS63	Soluble	Solid	DI Leach	
890-2090-17	FS64	Soluble	Solid	DI Leach	
MB 410-238366/2-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-238366/1-A	Lab Control Sample	Soluble	Solid	DI Leach	
890-2090-5 MS	FS52	Soluble	Solid	DI Leach	
890-2090-5 DU	FS52	Soluble	Solid	DI Leach	

Leach Batch: 238676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-18	FS65	Soluble	Solid	DI Leach	
890-2090-19	FS66	Soluble	Solid	DI Leach	
890-2090-20	FS67	Soluble	Solid	DI Leach	
MB 410-238676/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-238676/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Leach Batch: 238796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-21	FS68	Soluble	Solid	DI Leach	
890-2090-22	FS69	Soluble	Solid	DI Leach	
890-2090-23	FS70	Soluble	Solid	DI Leach	
MB 410-238796/2-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-238796/1-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 239314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-2	FS49	Soluble	Solid	EPA 300.0 R2.1	238366

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

HPLC/IC (Continued)

Analysis Batch: 239314 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-3	FS50	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-4	FS51	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-5	FS52	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-6	FS53	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-7	FS54	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-8	FS55	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-9	FS56	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-10	FS57	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-11	FS58	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-12	FS59	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-13	FS60	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-14	FS61	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-15	FS62	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-16	FS63	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-17	FS64	Soluble	Solid	EPA 300.0 R2.1	238366
MB 410-238366/2-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	238366
LCS 410-238366/1-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	238366

Analysis Batch: 239322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-21	FS68	Soluble	Solid	EPA 300.0 R2.1	238796
890-2090-22	FS69	Soluble	Solid	EPA 300.0 R2.1	238796
890-2090-23	FS70	Soluble	Solid	EPA 300.0 R2.1	238796
MB 410-238796/2-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	238796
LCS 410-238796/1-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	238796

Analysis Batch: 239332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-18	FS65	Soluble	Solid	EPA 300.0 R2.1	238676
890-2090-19	FS66	Soluble	Solid	EPA 300.0 R2.1	238676
890-2090-20	FS67	Soluble	Solid	EPA 300.0 R2.1	238676
MB 410-238676/1-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	238676
LCS 410-238676/2-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	238676

Analysis Batch: 240119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-4	FS51	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-5	FS52	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-7	FS54	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-8	FS55	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-9	FS56	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-12	FS59	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-13	FS60	Soluble	Solid	EPA 300.0 R2.1	238366
MB 410-238366/2-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	238366
LCS 410-238366/1-A	Lab Control Sample	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-5 MS	FS52	Soluble	Solid	EPA 300.0 R2.1	238366
890-2090-5 DU	FS52	Soluble	Solid	EPA 300.0 R2.1	238366

Leach Batch: 240233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

HPLC/IC (Continued)

Leach Batch: 240233 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-2	FS49	Soluble	Solid	DI Leach	
890-2090-3	FS50	Soluble	Solid	DI Leach	
890-2090-10	FS57	Soluble	Solid	DI Leach	
890-2090-11	FS58	Soluble	Solid	DI Leach	
890-2090-14	FS61	Soluble	Solid	DI Leach	
890-2090-16	FS63	Soluble	Solid	DI Leach	
890-2090-17	FS64	Soluble	Solid	DI Leach	
MB 410-240233/2-A	Method Blank	Soluble	Solid	DI Leach	
890-2090-3 DU	FS50	Soluble	Solid	DI Leach	

Leach Batch: 240274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-6	FS53	Soluble	Solid	DI Leach	
890-2090-15	FS62	Soluble	Solid	DI Leach	
890-2090-21	FS68	Soluble	Solid	DI Leach	
890-2090-22	FS69	Soluble	Solid	DI Leach	
890-2090-23	FS70	Soluble	Solid	DI Leach	
890-2085-A-2-J MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2085-A-2-K DU	Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 241069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-15	FS62	Soluble	Solid	EPA 300.0 R2.1	240274
890-2090-21	FS68	Soluble	Solid	EPA 300.0 R2.1	240274
890-2090-22	FS69	Soluble	Solid	EPA 300.0 R2.1	240274
890-2090-23	FS70	Soluble	Solid	EPA 300.0 R2.1	240274

Analysis Batch: 241096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-1	FS48	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-2	FS49	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-10	FS57	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-11	FS58	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-16	FS63	Soluble	Solid	EPA 300.0 R2.1	240233
MB 410-240233/2-A	Method Blank	Soluble	Solid	EPA 300.0 R2.1	240233

Analysis Batch: 241583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-6	FS53	Soluble	Solid	EPA 300.0 R2.1	240274
890-2085-A-2-J MS	Matrix Spike	Soluble	Solid	EPA 300.0 R2.1	240274
890-2085-A-2-K DU	Duplicate	Soluble	Solid	EPA 300.0 R2.1	240274

Analysis Batch: 241818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2090-3	FS50	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-14	FS61	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-17	FS64	Soluble	Solid	EPA 300.0 R2.1	240233
890-2090-3 DU	FS50	Soluble	Solid	EPA 300.0 R2.1	240233

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS48 Lab Sample ID: 890-2090-1

Date Collected: 03/14/22 10:20 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 21:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21924	03/18/22 17:03	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/19/22 19:30	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	22475	03/28/22 11:00	CH	XEN MID
Soluble	Analysis	300.0		1			22476	03/28/22 16:17	CH	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241096	04/05/22 12:13	L4QM	ELLE
Soluble	Leach	DI Leach			5.00 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 19:49	W5UX	ELLE

Client Sample ID: FS49 Lab Sample ID: 890-2090-2

Date Collected: 03/14/22 10:25 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 22:20	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21941	03/19/22 22:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			241096	04/05/22 15:48	L4QM	ELLE
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 20:28	W5UX	ELLE

Client Sample ID: FS50 Lab Sample ID: 890-2090-3

Date Collected: 03/14/22 10:30 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 22:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/19/22 23:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			241818	04/06/22 11:28	W5UX	ELLE
Soluble	Leach	DI Leach			5.04 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 20:44	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS51 Lab Sample ID: 890-2090-4

Date Collected: 03/14/22 10:35 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 23:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/19/22 23:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			240119	04/01/22 02:14	L4QM	ELLE
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 20:52	W5UX	ELLE

Client Sample ID: FS52 Lab Sample ID: 890-2090-5

Date Collected: 03/14/22 10:40 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 23:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/19/22 23:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			240119	04/01/22 02:22	L4QM	ELLE
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 16:08	W5UX	ELLE

Client Sample ID: FS53 Lab Sample ID: 890-2090-6

Date Collected: 03/14/22 10:45 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/25/22 23:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 00:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			241583	04/05/22 23:53	L4QM	ELLE
Soluble	Leach	DI Leach			5.00 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 21:15	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS54 Lab Sample ID: 890-2090-7

Date Collected: 03/14/22 10:55 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 00:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 00:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			240119	04/01/22 02:46	L4QM	ELLE
Soluble	Leach	DI Leach			5.04 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 21:23	W5UX	ELLE

Client Sample ID: FS55 Lab Sample ID: 890-2090-8

Date Collected: 03/14/22 11:00 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 00:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 01:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.06 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			240119	04/01/22 02:55	L4QM	ELLE
Soluble	Leach	DI Leach			5.06 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 21:55	W5UX	ELLE

Client Sample ID: FS56 Lab Sample ID: 890-2090-9

Date Collected: 03/14/22 11:05 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 00:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 01:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			240119	04/01/22 03:03	L4QM	ELLE
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 22:11	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS57 Lab Sample ID: 890-2090-10

Date Collected: 03/14/22 11:10 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 01:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 01:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			241096	04/05/22 13:13	L4QM	ELLE
Soluble	Leach	DI Leach			5.06 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 17:35	W5UX	ELLE

Client Sample ID: FS58 Lab Sample ID: 890-2090-11

Date Collected: 03/14/22 11:15 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 02:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 02:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			241096	04/05/22 12:24	L4QM	ELLE
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 22:34	W5UX	ELLE

Client Sample ID: FS59 Lab Sample ID: 890-2090-12

Date Collected: 03/14/22 12:20 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 02:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 02:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			240119	04/01/22 03:11	L4QM	ELLE
Soluble	Leach	DI Leach			5.00 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 22:42	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS60 Lab Sample ID: 890-2090-13

Date Collected: 03/14/22 12:25 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 03:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21941	03/20/22 03:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		10			240119	04/01/22 03:19	L4QM	ELLE
Soluble	Leach	DI Leach			5.01 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/30/22 22:58	W5UX	ELLE

Client Sample ID: FS61 Lab Sample ID: 890-2090-14

Date Collected: 03/14/22 12:30 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 03:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 03:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			241818	04/06/22 11:52	W5UX	ELLE
Soluble	Leach	DI Leach			5.05 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 23:37	W5UX	ELLE

Client Sample ID: FS62 Lab Sample ID: 890-2090-15

Date Collected: 03/14/22 12:35 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 03:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 03:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			241069	04/05/22 01:55	W5UX	ELLE
Soluble	Leach	DI Leach			5.08 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/30/22 23:53	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS63 Lab Sample ID: 890-2090-16

Date Collected: 03/14/22 13:40 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 04:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 04:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241096	04/05/22 11:40	L4QM	ELLE
Soluble	Leach	DI Leach			5.03 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239314	03/31/22 00:01	W5UX	ELLE

Client Sample ID: FS64 Lab Sample ID: 890-2090-17

Date Collected: 03/14/22 13:45 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 04:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21941	03/20/22 04:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	240233	04/01/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		20			241818	04/06/22 12:00	W5UX	ELLE
Soluble	Leach	DI Leach			5.02 g	50 mL	238366	03/28/22 15:53	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		50			239314	03/31/22 00:25	W5UX	ELLE

Client Sample ID: FS65 Lab Sample ID: 890-2090-18

Date Collected: 03/14/22 14:10 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 04:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 04:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.08 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239332	03/30/22 10:53	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS66 Lab Sample ID: 890-2090-19

Date Collected: 03/14/22 14:15 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 05:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21941	03/20/22 05:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239332	03/30/22 11:09	W5UX	ELLE

Client Sample ID: FS67 Lab Sample ID: 890-2090-20

Date Collected: 03/14/22 11:10 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21822	03/22/22 13:53	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22323	03/26/22 05:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21847	03/18/22 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21941	03/20/22 05:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.08 g	50 mL	238676	03/29/22 10:46	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239332	03/30/22 11:25	W5UX	ELLE

Client Sample ID: FS68 Lab Sample ID: 890-2090-21

Date Collected: 03/14/22 14:20 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21977	03/21/22 07:44	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21978	03/21/22 14:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21858	03/18/22 20:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 20:33	W5UX	ELLE
Soluble	Leach	DI Leach			5.00 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/04/22 23:53	W5UX	ELLE

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Client Sample ID: FS69 Lab Sample ID: 890-2090-22

Date Collected: 03/14/22 14:25 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21977	03/21/22 07:44	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21978	03/21/22 14:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21834	03/17/22 16:29	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21858	03/18/22 20:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 20:44	W5UX	ELLE
Soluble	Leach	DI Leach			5.02 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/05/22 00:38	W5UX	ELLE

Client Sample ID: FS70 Lab Sample ID: 890-2090-23

Date Collected: 03/14/22 14:30 **Matrix: Solid**
Date Received: 03/16/22 13:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21977	03/21/22 07:44	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21978	03/21/22 14:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22094	03/21/22 15:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21887	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		5			21770	03/18/22 09:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.07 g	50 mL	238796	03/29/22 15:26	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			239322	03/30/22 20:55	W5UX	ELLE
Soluble	Leach	DI Leach			5.00 g	50 mL	240274	04/01/22 17:52	L4QM	ELLE
Soluble	Analysis	EPA 300.0 R2.1		5			241069	04/04/22 22:58	W5UX	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-0660	08-10-22
California	State	2792	02-02-22 *
Colorado	State	PA00009	06-30-22
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-22
Georgia (DW)	State	C048	01-31-22 *
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-02-22 *
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-22
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-22
Massachusetts	State	M-PA009	06-30-22
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-22
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-22
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-22
Oregon	NELAP	PA200001	09-11-22
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-22 *
Texas	NELAP	T104704194-21-40	08-31-22
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-14-22
Washington	State	C457	04-12-22
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	04-30-22
Wyoming	State	8TMS-L	01-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	1.01	11-30-22

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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

Sample Summary

Client: WSP USA Inc. Job ID: 890-2090-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001. task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2090-1	FS48	Solid	03/14/22 10:20	03/16/22 13:24	0.5
890-2090-2	FS49	Solid	03/14/22 10:25	03/16/22 13:24	0.5
890-2090-3	FS50	Solid	03/14/22 10:30	03/16/22 13:24	0.5
890-2090-4	FS51	Solid	03/14/22 10:35	03/16/22 13:24	0.5
890-2090-5	FS52	Solid	03/14/22 10:40	03/16/22 13:24	0.5
890-2090-6	FS53	Solid	03/14/22 10:45	03/16/22 13:24	0.5
890-2090-7	FS54	Solid	03/14/22 10:55	03/16/22 13:24	0.5
890-2090-8	FS55	Solid	03/14/22 11:00	03/16/22 13:24	0.5
890-2090-9	FS56	Solid	03/14/22 11:05	03/16/22 13:24	0.5
890-2090-10	FS57	Solid	03/14/22 11:10	03/16/22 13:24	0.5
890-2090-11	FS58	Solid	03/14/22 11:15	03/16/22 13:24	0.5
890-2090-12	FS59	Solid	03/14/22 12:20	03/16/22 13:24	0.5
890-2090-13	FS60	Solid	03/14/22 12:25	03/16/22 13:24	0.5
890-2090-14	FS61	Solid	03/14/22 12:30	03/16/22 13:24	0.5
890-2090-15	FS62	Solid	03/14/22 12:35	03/16/22 13:24	0.5
890-2090-16	FS63	Solid	03/14/22 13:40	03/16/22 13:24	0.5
890-2090-17	FS64	Solid	03/14/22 13:45	03/16/22 13:24	0.5
890-2090-18	FS65	Solid	03/14/22 14:10	03/16/22 13:24	0.5
890-2090-19	FS66	Solid	03/14/22 14:15	03/16/22 13:24	0.5
890-2090-20	FS67	Solid	03/14/22 11:10	03/16/22 13:24	0.5
890-2090-21	FS68	Solid	03/14/22 14:20	03/16/22 13:24	0.5
890-2090-22	FS69	Solid	03/14/22 14:25	03/16/22 13:24	0.5
890-2090-23	FS70	Solid	03/14/22 14:30	03/16/22 13:24	0.5

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 3

4/7/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxonmobil.com,Ben.Helill@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility.	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	1.4/1.2	Thermometer ID	T-NM-002	
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

890-2090 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS48	S	01/14/22	10:20	0.5'	1	X	X	X
FS49	S	01/14/22	10:25	0.5'	1	X	X	X
FS50	S	01/14/22	10:30	0.5'	1	X	X	X
FS51	S	01/14/22	10:35	0.5'	1	X	X	X
FS52	S	01/14/22	10:40	0.5'	1	X	X	X
FS53	S	01/14/22	10:45	0.5'	1	X	X	X
FS54	S	01/14/22	10:55	0.5'	1	X	X	X
FS55	S	01/14/22	11:00	0.5'	1	X	X	X
FS56	S	01/14/22	11:05	0.5'	1	X	X	X
FS57	S	01/14/22	11:10	0.5'	1	X	X	X

Work Order Notes

CC:2191851001
API:30-15-46232

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Discrete

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1 Mirage	N. Ortiz	3/16/22 1:27			
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 2 of 3

4/7/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxonmobil.com,Ben.Helill@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility.	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	14 / 11.2	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

CC:2191851001
API:30-15-46232

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS58	S	01/14/22	11:15	0.5'	1	X	X	X	Discrete
FS59	S	01/14/22	12:20	0.5'	1	X	X	X	Discrete
FS60	S	01/14/22	12:25	0.5'	1	X	X	X	Discrete
FS61	S	01/14/22	12:30	0.5'	1	X	X	X	Discrete
FS62	S	01/14/22	12:35	0.5'	1	X	X	X	Discrete
FS63	S	01/14/22	13:40	0.5'	1	X	X	X	Discrete
FS64	S	01/14/22	13:45	0.5'	1	X	X	X	Discrete
FS65	S	01/14/22	14:10	0.5'	1	X	X	X	Discrete
FS66	S	01/14/22	14:15	0.5'	1	X	X	X	Discrete
FS67	S	01/14/22	11:10	0.5'	1	X	X	X	Discrete

3. 14. 22

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1			3/16/22 1:32			
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 3 of 3

4/7/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxonmobil.com,Ben.Helill@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility.	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.4 / 1.2	Thermometer ID	T-NM 007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS68	S	01/14/22	14:20	0.5'	1	X	X	X	Discrete
FS69	S	01/14/22	14:25	0.5'	1	X	X	X	Discrete
FS70	S	01/14/22	14:30	0.5'	1	X	X	X	Discrete

Work Order Notes

CC:2191851001
API:30-15-46232

TAT starts the day recevied by the lab, if received by 4:30pm

Page 62 of 68

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1		3/16/22 1:22	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 880-4085.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 3
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - Louisiana; NELAP - Texas		Job #: 890-2090-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/28/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Eunice Monument South Unit B Facility	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH (MOD) eHLORIDE	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FS48 (890-2090-1)	3/14/22	10:20 Mountain		Solid			X	1	
FS49 (890-2090-2)	3/14/22	10:25 Mountain		Solid			X	1	
FS50 (890-2090-3)	3/14/22	10:30 Mountain		Solid			X	1	
FS51 (890-2090-4)	3/14/22	10:35 Mountain		Solid			X	1	
FS52 (890-2090-5)	3/14/22	10:40 Mountain		Solid			X	1	
FS53 (890-2090-6)	3/14/22	10:45 Mountain		Solid			X	1	
FS54 (890-2090-7)	3/14/22	10:55 Mountain		Solid			X	1	
FS55 (890-2090-8)	3/14/22	11:00 Mountain		Solid			X	1	
FS56 (890-2090-9)	3/14/22	11:05 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time: 3/25/22	Company: ELKE

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.8

Ver: 06/08/2021

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 880-4085.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 3
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - Louisiana; NELAP - Texas		Job #: 890-2090-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/28/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Eunice Monument South Unit B Facility	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH (MOD) cHLORIDE	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FS57 (890-2090-10)	3/14/22	11:10 Mountain		Solid			X	1	
FS58 (890-2090-11)	3/14/22	11:15 Mountain		Solid			X	1	
FS59 (890-2090-12)	3/14/22	12:20 Mountain		Solid			X	1	
FS60 (890-2090-13)	3/14/22	12:25 Mountain		Solid			X	1	
FS61 (890-2090-14)	3/14/22	12:30 Mountain		Solid			X	1	
FS62 (890-2090-15)	3/14/22	12:35 Mountain		Solid			X	1	
FS63 (890-2090-16)	3/14/22	13:40 Mountain		Solid			X	1	
FS64 (890-2090-17)	3/14/22	13:45 Mountain		Solid			X	1	
FS65 (890-2090-18)	3/14/22	14:10 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/25/22 1055	Company ELKE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.8

Ver: 06/08/2021

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 880-4085.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 3 of 3
Company: Eurofins Lancaster Laboratories Env, LLC		Accreditations Required (See note): NELAP - Louisiana; NELAP - Texas		Job #: 890-2090-1
Address: 2425 New Holland Pike,	Due Date Requested: 3/28/2022			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Eunice Monument South Unit B Facility	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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 - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28DAY_DL_EACH_MOD) CHLORIDE	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FS66 (890-2090-19)	3/14/22	14:15 Mountain		Solid			X	1	
FS67 (890-2090-20)	3/14/22	11:10 Mountain		Solid			X	1	
FS68 (890-2090-21)	3/14/22	14:20 Mountain		Solid			X	1	
FS69 (890-2090-22)	3/14/22	14:25 Mountain		Solid			X	1	
FS70 (890-2090-23)	3/14/22	14:30 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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 complicance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time: 3/25/22 1055	Company: FEDEX

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2090-1
SDG Number: 31403551.001. task 01.02

Login Number: 2090
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2090-1
SDG Number: 31403551.001. task 01.02

Login Number: 2090
List Number: 3
Creator: Bryan, Debra A

List Source: Eurofins Lancaster Laboratories Env, LLC
List Creation: 03/25/22 01:47 PM

Question	Answer	Comment
The cooler's custody seal is 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 (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2090-1
SDG Number: 31403551.001. task 01.02

Login Number: 2090
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/17/22 02:02 PM

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

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2091-1
Laboratory Sample Delivery Group: 31403551.001 task 01.02
Client Project/Site: Eunice Monument South Unit B Facility

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
4/5/2022 3:27:33 PM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: WSP USA Inc.
Project/Site: Eunice Monument South Unit B Facility

Laboratory Job ID: 890-2091-1
SDG: 31403551.001 task 01.02

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Job ID: 890-2091-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2091-1

Receipt
The samples were received on 3/16/2022 1:21 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 1.2°C

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

GC Semi VOA
Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-21831 and analytical batch 880-21770 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-21831/3-A) and (MB 880-21831/1-A). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW07 Lab Sample ID: 890-2091-1

Date Collected: 03/14/22 09:30 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 22:48	1
Toluene	**0.00258**		0.00200		mg/Kg		03/24/22 07:30	03/24/22 22:48	1
Ethylbenzene	**0.00248**		0.00200		mg/Kg		03/24/22 07:30	03/24/22 22:48	1
m-Xylene & p-Xylene	**0.00541**		0.00401		mg/Kg		03/24/22 07:30	03/24/22 22:48	1
o-Xylene	**0.00215**		0.00200		mg/Kg		03/24/22 07:30	03/24/22 22:48	1
Xylenes, Total	**0.00756**		0.00401		mg/Kg		03/24/22 07:30	03/24/22 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/24/22 07:30*	*03/24/22 22:48*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/24/22 07:30*	*03/24/22 22:48*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0126**		0.00401		mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/17/22 15:48	03/18/22 06:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 06:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 06:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/17/22 15:48*	*03/18/22 06:34*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/17/22 15:48*	*03/18/22 06:34*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.2	U	10.2		mg/Kg		03/31/22 18:29	04/01/22 10:30	1

Client Sample ID: SW08 Lab Sample ID: 890-2091-2

Date Collected: 03/14/22 09:35 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/24/22 07:30	03/24/22 23:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/24/22 07:30	03/24/22 23:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/24/22 07:30	03/24/22 23:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/24/22 07:30	03/24/22 23:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/24/22 07:30	03/24/22 23:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/24/22 07:30	03/24/22 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/24/22 07:30*	*03/24/22 23:08*	*1*

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW08 Lab Sample ID: 890-2091-2

Date Collected: 03/14/22 09:35 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/24/22 07:30*	*03/24/22 23:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		03/17/22 15:48	03/18/22 06:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/17/22 15:48	03/18/22 06:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/17/22 15:48	03/18/22 06:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*83*		*70 - 130*	*03/17/22 15:48*	*03/18/22 06:55*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/17/22 15:48*	*03/18/22 06:55*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.7**		9.84	mg/Kg		03/31/22 18:29	04/01/22 10:42	1

Client Sample ID: SW09 Lab Sample ID: 890-2091-3

Date Collected: 03/14/22 09:40 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 23:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 23:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 23:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/24/22 07:30	03/24/22 23:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/22 07:30	03/24/22 23:29	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/24/22 07:30	03/24/22 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/24/22 07:30*	*03/24/22 23:29*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/24/22 07:30*	*03/24/22 23:29*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/18/22 12:52	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW09 Lab Sample ID: 890-2091-3

Date Collected: 03/14/22 09:40 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/17/22 15:48	03/18/22 07:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 07:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 07:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/17/22 15:48*	*03/18/22 07:16*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/17/22 15:48*	*03/18/22 07:16*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg		04/01/22 21:20	04/02/22 07:06	1

Client Sample ID: SW10 Lab Sample ID: 890-2091-4

Date Collected: 03/14/22 09:45 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 23:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 23:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 23:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/24/22 07:30	03/24/22 23:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 23:49	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/24/22 07:30	03/24/22 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/24/22 07:30*	*03/24/22 23:49*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/24/22 07:30*	*03/24/22 23:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		03/17/22 15:48	03/18/22 07:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/17/22 15:48	03/18/22 07:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/17/22 15:48	03/18/22 07:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/17/22 15:48*	*03/18/22 07:37*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/17/22 15:48*	*03/18/22 07:37*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW10 Lab Sample ID: 890-2091-4

Date Collected: 03/14/22 09:45 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96		mg/Kg		04/01/22 21:20	04/02/22 07:42	1

Client Sample ID: SW11 Lab Sample ID: 890-2091-5

Date Collected: 03/14/22 09:50 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/22 07:30	03/25/22 00:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/22 07:30	03/25/22 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/24/22 07:30*	*03/25/22 00:09*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/24/22 07:30*	*03/25/22 00:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		03/17/22 15:48	03/18/22 07:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/17/22 15:48	03/18/22 07:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/17/22 15:48	03/18/22 07:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*03/17/22 15:48*	*03/18/22 07:58*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/17/22 15:48*	*03/18/22 07:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.1**		9.82		mg/Kg		04/01/22 21:20	04/02/22 07:53	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW12 Lab Sample ID: 890-2091-6

Date Collected: 03/14/22 09:55 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/24/22 07:30	03/25/22 00:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/24/22 07:30	03/25/22 00:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/24/22 07:30	03/25/22 00:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/24/22 07:30	03/25/22 00:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/24/22 07:30	03/25/22 00:30	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/24/22 07:30	03/25/22 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/24/22 07:30*	*03/25/22 00:30*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/24/22 07:30*	*03/25/22 00:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/17/22 15:48	03/18/22 08:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 08:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 08:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/17/22 15:48*	*03/18/22 08:18*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/17/22 15:48*	*03/18/22 08:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.9**		10.1		mg/Kg		04/01/22 21:20	04/02/22 08:53	1

Client Sample ID: SW13 Lab Sample ID: 890-2091-7

Date Collected: 03/14/22 10:00 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/22 07:30	03/25/22 00:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/22 07:30	03/25/22 00:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/22 07:30	03/25/22 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*03/24/22 07:30*	*03/25/22 00:51*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW13 Lab Sample ID: 890-2091-7

Date Collected: 03/14/22 10:00 **Matrix: Solid**
Date Received: 03/16/22 13:21
Sample Depth: 0 - 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/24/22 07:30*	*03/25/22 00:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/25/22 16:04	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/18/22 12:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/17/22 15:48	03/18/22 08:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 08:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*03/17/22 15:48*	*03/18/22 08:40*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/17/22 15:48*	*03/18/22 08:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.2**		10.2		mg/Kg		04/01/22 21:20	04/02/22 09:05	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-12762-A-1-E MS	Matrix Spike	102	104
880-12762-A-1-F MSD	Matrix Spike Duplicate	104	106
890-2091-1	SW07	101	100
890-2091-2	SW08	102	98
890-2091-3	SW09	101	89
890-2091-4	SW10	105	94
890-2091-5	SW11	92	93
890-2091-6	SW12	106	104
890-2091-7	SW13	115	92
LCS 880-21823/1-A	Lab Control Sample	105	103
LCSD 880-21823/2-A	Lab Control Sample Dup	98	101
MB 880-21823/5-A	Method Blank	98	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2091-1	SW07	93	102
890-2091-2	SW08	83	86
890-2091-3	SW09	88	97
890-2091-4	SW10	98	110
890-2091-5	SW11	84	91
890-2091-6	SW12	91	100
890-2091-7	SW13	85	95
890-2095-A-1-J MS	Matrix Spike	104	104
890-2095-A-1-K MSD	Matrix Spike Duplicate	101	106

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-21831/2-A	Lab Control Sample	101	111
LCSD 880-21831/3-A	Lab Control Sample Dup	124	133 S1+
MB 880-21831/1-A	Method Blank	116	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21823/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22265 **Prep Batch: 21823**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 17:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 17:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 17:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/24/22 07:30	03/24/22 17:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/22 07:30	03/24/22 17:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/24/22 07:30	03/24/22 17:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/24/22 07:30*	*03/24/22 17:25*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/24/22 07:30*	*03/24/22 17:25*	*1*

Lab Sample ID: LCS 880-21823/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22265 **Prep Batch: 21823**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09555		mg/Kg		96	70 - 130		
Toluene			0.100	0.09727		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1036		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2413		mg/Kg		121	70 - 130		
o-Xylene			0.100	0.1175		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-21823/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22265 **Prep Batch: 21823**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08471		mg/Kg		85	70 - 130	12	35
Toluene			0.100	0.08475		mg/Kg		85	70 - 130	14	35
Ethylbenzene			0.100	0.08895		mg/Kg		89	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.2074		mg/Kg		104	70 - 130	15	35
o-Xylene			0.100	0.1028		mg/Kg		103	70 - 130	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-12762-A-1-E MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22265 **Prep Batch: 21823**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.0994	0.09084		mg/Kg		91	70 - 130		
Toluene	<0.00202	U	0.0994	0.09058		mg/Kg		91	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

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

Lab Sample ID: 880-12762-A-1-E MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22265 **Prep Batch: 21823**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0994	0.09607		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.2228		mg/Kg		112	70 - 130
o-Xylene	<0.00202	U	0.0994	0.1082		mg/Kg		109	70 - 130

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

Lab Sample ID: 880-12762-A-1-F MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22265 **Prep Batch: 21823**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.09563		mg/Kg		95	70 - 130	5	35
Toluene	<0.00202	U	0.100	0.09477		mg/Kg		94	70 - 130	5	35
Ethylbenzene	<0.00202	U	0.100	0.1005		mg/Kg		99	70 - 130	4	35
m-Xylene & p-Xylene	<0.00403	U	0.201	0.2343		mg/Kg		117	70 - 130	5	35
o-Xylene	<0.00202	U	0.100	0.1152		mg/Kg		115	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 880-21831/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 00:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 00:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/17/22 15:48	03/18/22 00:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*03/17/22 15:48*	*03/18/22 00:23*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*03/17/22 15:48*	*03/18/22 00:23*	*1*

Lab Sample ID: LCS 880-21831/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	916.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)			1000	958.0		mg/Kg		96	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

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

Lab Sample ID: LCS 880-21831/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: LCSD 880-21831/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1165	*1	mg/Kg		116	70 - 130	24	20
Diesel Range Organics (Over C10-C28)			1000	1171		mg/Kg		117	70 - 130	20	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	133	S1+	70 - 130

Lab Sample ID: 890-2095-A-1-J MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	998	1150		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1180		mg/Kg		116	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 890-2095-A-1-K MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 21770 **Prep Batch: 21831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	999	1160		mg/Kg		114	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1183		mg/Kg		116	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	106		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-47209/28-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47133 — **Prep Batch: 47209**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/31/22 18:29	04/01/22 04:46	1

Lab Sample ID: LCS 860-47209/29-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47133 — **Prep Batch: 47209**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			100	103.3		mg/Kg		103	80 - 120		

Lab Sample ID: LCSD 860-47209/30-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47133 — **Prep Batch: 47209**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			100	97.24		mg/Kg		97	80 - 120	6	20

Lab Sample ID: 880-12729-A-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47133 — **Prep Batch: 47209**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	11.9		101	113.1		mg/Kg		100	80 - 120		

Lab Sample ID: 880-12729-A-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47133 — **Prep Batch: 47209**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11.9		101	114.9		mg/Kg		102	80 - 120	2	20

Lab Sample ID: MB 860-47388/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47217 — **Prep Batch: 47388**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		04/01/22 21:20	04/02/22 06:31	1

Lab Sample ID: LCS 860-47388/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47217 — **Prep Batch: 47388**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			100	102.0		mg/Kg		102	80 - 120		

Lab Sample ID: LCSD 860-47388/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47217 — **Prep Batch: 47388**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			100	96.11		mg/Kg		96	80 - 120	6	20

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2091-3 MS **Client Sample ID: SW09**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 47217 **Prep Batch: 47388**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<10.1	U	101	103.8		mg/Kg		93	80 - 120		

Lab Sample ID: 890-2091-3 MSD **Client Sample ID: SW09**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 47217 **Prep Batch: 47388**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<10.1	U	102	105.2		mg/Kg		94	80 - 120	1	20

Lab Sample ID: 890-2091-5 MS **Client Sample ID: SW11**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 47217 **Prep Batch: 47388**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	11.1		99.2	109.5		mg/Kg		99	80 - 120		

Lab Sample ID: 890-2091-5 MSD **Client Sample ID: SW11**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 47217 **Prep Batch: 47388**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11.1		99.0	109.7		mg/Kg		100	80 - 120	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

GC VOA

Prep Batch: 21823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	5035	
890-2091-2	SW08	Total/NA	Solid	5035	
890-2091-3	SW09	Total/NA	Solid	5035	
890-2091-4	SW10	Total/NA	Solid	5035	
890-2091-5	SW11	Total/NA	Solid	5035	
890-2091-6	SW12	Total/NA	Solid	5035	
890-2091-7	SW13	Total/NA	Solid	5035	
MB 880-21823/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21823/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21823/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12762-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-12762-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	8021B	21823
890-2091-2	SW08	Total/NA	Solid	8021B	21823
890-2091-3	SW09	Total/NA	Solid	8021B	21823
890-2091-4	SW10	Total/NA	Solid	8021B	21823
890-2091-5	SW11	Total/NA	Solid	8021B	21823
890-2091-6	SW12	Total/NA	Solid	8021B	21823
890-2091-7	SW13	Total/NA	Solid	8021B	21823
MB 880-21823/5-A	Method Blank	Total/NA	Solid	8021B	21823
LCS 880-21823/1-A	Lab Control Sample	Total/NA	Solid	8021B	21823
LCSD 880-21823/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21823
880-12762-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	21823
880-12762-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21823

Analysis Batch: 22393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	Total BTEX	
890-2091-2	SW08	Total/NA	Solid	Total BTEX	
890-2091-3	SW09	Total/NA	Solid	Total BTEX	
890-2091-4	SW10	Total/NA	Solid	Total BTEX	
890-2091-5	SW11	Total/NA	Solid	Total BTEX	
890-2091-6	SW12	Total/NA	Solid	Total BTEX	
890-2091-7	SW13	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 21770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	8015B NM	21831
890-2091-2	SW08	Total/NA	Solid	8015B NM	21831
890-2091-3	SW09	Total/NA	Solid	8015B NM	21831
890-2091-4	SW10	Total/NA	Solid	8015B NM	21831
890-2091-5	SW11	Total/NA	Solid	8015B NM	21831
890-2091-6	SW12	Total/NA	Solid	8015B NM	21831
890-2091-7	SW13	Total/NA	Solid	8015B NM	21831
MB 880-21831/1-A	Method Blank	Total/NA	Solid	8015B NM	21831
LCS 880-21831/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21831

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

GC Semi VOA (Continued)

Analysis Batch: 21770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-21831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21831
890-2095-A-1-J MS	Matrix Spike	Total/NA	Solid	8015B NM	21831
890-2095-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21831

Prep Batch: 21831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	8015NM Prep	
890-2091-2	SW08	Total/NA	Solid	8015NM Prep	
890-2091-3	SW09	Total/NA	Solid	8015NM Prep	
890-2091-4	SW10	Total/NA	Solid	8015NM Prep	
890-2091-5	SW11	Total/NA	Solid	8015NM Prep	
890-2091-6	SW12	Total/NA	Solid	8015NM Prep	
890-2091-7	SW13	Total/NA	Solid	8015NM Prep	
MB 880-21831/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21831/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2095-A-1-J MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2095-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	8015 NM	
890-2091-2	SW08	Total/NA	Solid	8015 NM	
890-2091-3	SW09	Total/NA	Solid	8015 NM	
890-2091-4	SW10	Total/NA	Solid	8015 NM	
890-2091-5	SW11	Total/NA	Solid	8015 NM	
890-2091-6	SW12	Total/NA	Solid	8015 NM	
890-2091-7	SW13	Total/NA	Solid	8015 NM	

HPLC/IC

Analysis Batch: 47133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	300.0	47209
890-2091-2	SW08	Total/NA	Solid	300.0	47209
MB 860-47209/28-A	Method Blank	Total/NA	Solid	300.0	47209
LCS 860-47209/29-A	Lab Control Sample	Total/NA	Solid	300.0	47209
LCSD 860-47209/30-A	Lab Control Sample Dup	Total/NA	Solid	300.0	47209
880-12729-A-3-B MS	Matrix Spike	Total/NA	Solid	300.0	47209
880-12729-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	300.0	47209

Prep Batch: 47209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-1	SW07	Total/NA	Solid	300_Prep	
890-2091-2	SW08	Total/NA	Solid	300_Prep	
MB 860-47209/28-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-47209/29-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-47209/30-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
880-12729-A-3-B MS	Matrix Spike	Total/NA	Solid	300_Prep	
880-12729-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	300_Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

HPLC/IC

Analysis Batch: 47217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-3	SW09	Total/NA	Solid	300.0	47388
890-2091-4	SW10	Total/NA	Solid	300.0	47388
890-2091-5	SW11	Total/NA	Solid	300.0	47388
890-2091-6	SW12	Total/NA	Solid	300.0	47388
890-2091-7	SW13	Total/NA	Solid	300.0	47388
MB 860-47388/1-A	Method Blank	Total/NA	Solid	300.0	47388
LCS 860-47388/2-A	Lab Control Sample	Total/NA	Solid	300.0	47388
LCSD 860-47388/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	47388
890-2091-3 MS	SW09	Total/NA	Solid	300.0	47388
890-2091-3 MSD	SW09	Total/NA	Solid	300.0	47388
890-2091-5 MS	SW11	Total/NA	Solid	300.0	47388
890-2091-5 MSD	SW11	Total/NA	Solid	300.0	47388

Prep Batch: 47388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2091-3	SW09	Total/NA	Solid	300_Prep	
890-2091-4	SW10	Total/NA	Solid	300_Prep	
890-2091-5	SW11	Total/NA	Solid	300_Prep	
890-2091-6	SW12	Total/NA	Solid	300_Prep	
890-2091-7	SW13	Total/NA	Solid	300_Prep	
MB 860-47388/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-47388/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-47388/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
890-2091-3 MS	SW09	Total/NA	Solid	300_Prep	
890-2091-3 MSD	SW09	Total/NA	Solid	300_Prep	
890-2091-5 MS	SW11	Total/NA	Solid	300_Prep	
890-2091-5 MSD	SW11	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW07 Lab Sample ID: 890-2091-1

Date Collected: 03/14/22 09:30 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/24/22 22:48	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 06:34	AJ	XEN MID
Total/NA	Prep	300_Prep			4.90 g	50 mL	47209	03/31/22 18:29	ANP	XEN STF
Total/NA	Analysis	300.0		1			47133	04/01/22 10:30	WP	XEN STF

Client Sample ID: SW08 Lab Sample ID: 890-2091-2

Date Collected: 03/14/22 09:35 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/24/22 23:08	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 06:55	AJ	XEN MID
Total/NA	Prep	300_Prep			5.08 g	50 mL	47209	03/31/22 18:29	ANP	XEN STF
Total/NA	Analysis	300.0		1			47133	04/01/22 10:42	WP	XEN STF

Client Sample ID: SW09 Lab Sample ID: 890-2091-3

Date Collected: 03/14/22 09:40 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/24/22 23:29	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 07:16	AJ	XEN MID
Total/NA	Prep	300_Prep			4.95 g	50 mL	47388	04/01/22 21:20	ANP	XEN STF
Total/NA	Analysis	300.0		1			47217	04/02/22 07:06	A1S	XEN STF

Client Sample ID: SW10 Lab Sample ID: 890-2091-4

Date Collected: 03/14/22 09:45 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/24/22 23:49	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW10 Lab Sample ID: 890-2091-4

Date Collected: 03/14/22 09:45 **Matrix: Solid**
Date Received: 03/16/22 13:21

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			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 07:37	AJ	XEN MID
Total/NA	Prep	300_Prep			5.02 g	50 mL	47388	04/01/22 21:20	ANP	XEN STF
Total/NA	Analysis	300.0		1			47217	04/02/22 07:42	A1S	XEN STF

Client Sample ID: SW11 Lab Sample ID: 890-2091-5

Date Collected: 03/14/22 09:50 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/25/22 00:09	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 07:58	AJ	XEN MID
Total/NA	Prep	300_Prep			5.09 g	50 mL	47388	04/01/22 21:20	ANP	XEN STF
Total/NA	Analysis	300.0		1			47217	04/02/22 07:53	A1S	XEN STF

Client Sample ID: SW12 Lab Sample ID: 890-2091-6

Date Collected: 03/14/22 09:55 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/25/22 00:30	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 08:18	AJ	XEN MID
Total/NA	Prep	300_Prep			4.97 g	50 mL	47388	04/01/22 21:20	ANP	XEN STF
Total/NA	Analysis	300.0		1			47217	04/02/22 08:53	A1S	XEN STF

Client Sample ID: SW13 Lab Sample ID: 890-2091-7

Date Collected: 03/14/22 10:00 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21823	03/24/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22265	03/25/22 00:51	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			22393	03/25/22 16:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21886	03/18/22 12:52	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21831	03/17/22 15:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21770	03/18/22 08:40	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Client Sample ID: SW13 Lab Sample ID: 890-2091-7

Date Collected: 03/14/22 10:00 **Matrix: Solid**
Date Received: 03/16/22 13:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	300_Prep			4.92 g	50 mL	47388	04/01/22 21:20	ANP	XEN STF
Total/NA	Analysis	300.0		1			47217	04/02/22 09:05	A1S	XEN STF

Laboratory References:

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

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Laboratory: Eurofins Houston

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:

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

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

Sample Summary

Client: WSP USA Inc. Job ID: 890-2091-1
Project/Site: Eunice Monument South Unit B Facility SDG: 31403551.001 task 01.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2091-1	SW07	Solid	03/14/22 09:30	03/16/22 13:21	0 - 4
890-2091-2	SW08	Solid	03/14/22 09:35	03/16/22 13:21	0 - 4
890-2091-3	SW09	Solid	03/14/22 09:40	03/16/22 13:21	0 - 4
890-2091-4	SW10	Solid	03/14/22 09:45	03/16/22 13:21	0 - 4
890-2091-5	SW11	Solid	03/14/22 09:50	03/16/22 13:21	0 - 4
890-2091-6	SW12	Solid	03/14/22 09:55	03/16/22 13:21	0 - 4
890-2091-7	SW13	Solid	03/14/22 10:00	03/16/22 13:21	0 - 4

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Chain of Custody

Work Order No: _____

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

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4/5/2022

Project Manager:	Tacoma Morrissey	Bill to: (if different)	
Company Name:	WSP USA	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxonmobil.com,Ben.Heiiil@wsp.com

Work Order Comments

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

Project Name:	Eunice Monument South Unit B Facility.	Turn Around	
Project Number:	31403551.001 Task 01.02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	1.4 1.2	Thermometer ID		
Received Intact:	Yes No	T-NM-002		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Work Order Notes

CC:2191851001
API:30-15-46232

890-2091 Chain of Custody

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
SW07	S	01/14/22	9:30	0'- 4'	1	X	X	X	Discrete
SW08	S	01/14/22	9:35	0'- 4'	1	X	X	X	Discrete
SW09	S	01/14/22	9:40	0'- 4'	1	X	X	X	Discrete
SW10	S	01/14/22	9:45	0'- 4'	1	X	X	X	Discrete
SW11	S	01/14/22	9:50	0'- 4'	1	X	X	X	Discrete
SW12	S	01/14/22	9:55	0'-4'	1	X	X	X	Discrete
SW13	S	01/14/22	10:00	0'-4'	1	X	X	X	Discrete

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 Tl Sn U V Zn

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to 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
1			3/16/22 1:21	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018 1

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Temp: 16.8 IR ID:HOU-323
C/F +0.2
Corrected Temp. 17.0

Chain of Custody Record

890-2091 Chain of Custody

Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica		1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Louisiana; NELAP Texas		Job #: 890-2091-1
Address: 4145 Greenbriar Dr	Due Date Requested: 3/22/2022			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Eunice Monument South Unit B Facility	Project #: 89000048			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastoil, BT=Tissue, A=Air)	300_ORGFM_28D/300_Prep Chloride	Special Instructions/Note:
SW07 (890-2091-1)	3/14/22	09:30 Mountain		Solid	X	
SW08 (890-2091-2)	3/14/22	09:35 Mountain		Solid	X	
SW09 (890-2091-3)	3/14/22	09:40 Mountain		Solid	X	
SW10 (890-2091-4)	3/14/22	09:45 Mountain		Solid	X	
SW11 (890-2091-5)	3/14/22	09:50 Mountain		Solid	X	
SW12 (890-2091-6)	3/14/22	09:55 Mountain		Solid	X	
SW13 (890-2091 7)	3/14/22	10:00 Mountain		Solid	X	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out 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/tests/matrix 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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Rebecca Rodriguez	Date/Time:	Company	Received by:	Date/Time: 5/26/22 9:10	Company Xenco
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2091-1
SDG Number: 31403551.001 task 01.02

Login Number: 2091
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2091-1
SDG Number: 31403551.001 task 01.02

Login Number: 2091
List Number: 3
Creator: Torres, Sandra

List Source: Eurofins Houston
List Creation: 03/26/22 11:28 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.	False	Refer to Job Narrative for details.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	17.0
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	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2091-1
SDG Number: 31403551.001 task 01.02

Login Number: 2091
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/17/22 02:02 PM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2943-1
Laboratory Sample Delivery Group: 03C2077002
Client Project/Site: EMSU B

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
9/19/2022 9:28:16 AM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: EMSU B

Laboratory Job ID: 890-2943-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
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.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Job ID: 890-2943-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2943-1

Receipt
The samples were received on 9/13/2022 8:26 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 1.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34412 and analytical batch 880-34552 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

GC Semi VOA
Method 8015MOD_NM: The method blank for preparation batch 880-34497 and analytical batch 880-34433 contained Gasoline Range Organics (GRO)-C6-C10 and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-34495/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-19130-A-12-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-34495 and analytical batch 880-34439 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34495 and analytical batch 880-34439 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-34554 and analytical batch 880-34548 was outside the upper control limits.

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

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

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS18A

Lab Sample ID: 890-2943-1
Matrix: Solid
Date Collected: 09/12/22 10:40
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1	0.00202	0.000388	mg/Kg		09/13/22 14:24	09/15/22 20:42	1
Toluene	<0.00202	U F1	0.00202	0.000460	mg/Kg		09/13/22 14:24	09/15/22 20:42	1
Ethylbenzene	<0.00202	U F1	0.00202	0.000570	mg/Kg		09/13/22 14:24	09/15/22 20:42	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403	0.00102	mg/Kg		09/13/22 14:24	09/15/22 20:42	1
o-Xylene	<0.00202	U F1	0.00202	0.000347	mg/Kg		09/13/22 14:24	09/15/22 20:42	1
Xylenes, Total	<0.00403	U F1	0.00403	0.00102	mg/Kg		09/13/22 14:24	09/15/22 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/13/22 14:24*	*09/15/22 20:42*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*09/13/22 14:24*	*09/15/22 20:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**333**		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**16.6**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:09	1
Diesel Range Organics (Over C10-C28)	**227**		49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:09	1
Oil Range Organics (Over C28-C36)	**89.2**	**B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*09/14/22 11:59*	*09/15/22 01:09*	*1*
o-Terphenyl	*79*		*70 - 130*	*09/14/22 11:59*	*09/15/22 01:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.8**		5.04	0.865	mg/Kg			09/14/22 19:57	1

Client Sample ID: FS05A

Lab Sample ID: 890-2943-2
Matrix: Solid
Date Collected: 09/12/22 10:45
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/13/22 14:24	09/15/22 21:08	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/13/22 14:24	09/15/22 21:08	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/13/22 14:24	09/15/22 21:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/13/22 14:24	09/15/22 21:08	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/13/22 14:24	09/15/22 21:08	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/13/22 14:24	09/15/22 21:08	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS05A

Date Collected: 09/12/22 10:45
Date Received: 09/13/22 08:26
Sample Depth: 4

Lab Sample ID: 890-2943-2

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/13/22 14:24*	*09/15/22 21:08*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/13/22 14:24*	*09/15/22 21:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**99.0**		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**22.5**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:31	1
Diesel Range Organics (Over C10-C28)	**38.0**	**J**	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:31	1
Oil Range Organics (Over C28-C36)	**38.5**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*78*		*70 - 130*	*09/14/22 11:59*	*09/15/22 03:31*	*1*
o-Terphenyl	*72*		*70 - 130*	*09/14/22 11:59*	*09/15/22 03:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.63**		4.97	0.853	mg/Kg			09/14/22 20:11	1

Client Sample ID: FS09A

Date Collected: 09/12/22 10:50
Date Received: 09/13/22 08:26
Sample Depth: 4

Lab Sample ID: 890-2943-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/13/22 14:24	09/15/22 21:34	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		09/13/22 14:24	09/15/22 21:34	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		09/13/22 14:24	09/15/22 21:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		09/13/22 14:24	09/15/22 21:34	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		09/13/22 14:24	09/15/22 21:34	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		09/13/22 14:24	09/15/22 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*09/13/22 14:24*	*09/15/22 21:34*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/13/22 14:24*	*09/15/22 21:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			09/16/22 10:33	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS09A

Lab Sample ID: 890-2943-3
Matrix: Solid
Date Collected: 09/12/22 10:50
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	49.9	J	50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	29.7	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 20:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 20:23	1
Oil Range Organics (Over C28-C36)	20.2	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/14/22 11:59*	*09/14/22 20:23*	*1*
o-Terphenyl	*78*		*70 - 130*	*09/14/22 11:59*	*09/14/22 20:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.5		5.04	0.865	mg/Kg			09/14/22 20:16	1

Client Sample ID: FS07A

Lab Sample ID: 890-2943-4
Matrix: Solid
Date Collected: 09/12/22 10:55
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		09/13/22 14:24	09/15/22 21:59	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		09/13/22 14:24	09/15/22 21:59	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		09/13/22 14:24	09/15/22 21:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/13/22 14:24	09/15/22 21:59	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		09/13/22 14:24	09/15/22 21:59	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/13/22 14:24	09/15/22 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/13/22 14:24*	*09/15/22 21:59*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/13/22 14:24*	*09/15/22 21:59*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	115		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	27.0	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:50	1
Diesel Range Organics (Over C10-C28)	43.6	J	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:50	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS07A

Lab Sample ID: 890-2943-4
Matrix: Solid
Date Collected: 09/12/22 10:55
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	43.9	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*09/14/22 11:59*	*09/15/22 02:50*	*1*
o-Terphenyl	*78*		*70 - 130*	*09/14/22 11:59*	*09/15/22 02:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.0		5.00	0.858	mg/Kg			09/14/22 20:21	1

Client Sample ID: FS06A

Lab Sample ID: 890-2943-5
Matrix: Solid
Date Collected: 09/12/22 11:00
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		09/13/22 14:24	09/15/22 22:25	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		09/13/22 14:24	09/15/22 22:25	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		09/13/22 14:24	09/15/22 22:25	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		09/13/22 14:24	09/15/22 22:25	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		09/13/22 14:24	09/15/22 22:25	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		09/13/22 14:24	09/15/22 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/13/22 14:24*	*09/15/22 22:25*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/13/22 14:24*	*09/15/22 22:25*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	145		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	27.8	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:10	1
Diesel Range Organics (Over C10-C28)	69.4		50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:10	1
Oll Range Organics (Over C28-C36)	48.1	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*09/14/22 11:59*	*09/15/22 02:10*	*1*
o-Terphenyl	*73*		*70 - 130*	*09/14/22 11:59*	*09/15/22 02:10*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS06A

Lab Sample ID: 890-2943-5
Matrix: Solid
Date Collected: 09/12/22 11:00
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.11		5.01	0.860	mg/Kg			09/14/22 20:26	1

Client Sample ID: FS08A

Lab Sample ID: 890-2943-6
Matrix: Solid
Date Collected: 09/12/22 11:05
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/13/22 14:24	09/15/22 22:51	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/13/22 14:24	09/15/22 22:51	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/13/22 14:24	09/15/22 22:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/13/22 14:24	09/15/22 22:51	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/13/22 14:24	09/15/22 22:51	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/13/22 14:24	09/15/22 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/13/22 14:24*	*09/15/22 22:51*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/13/22 14:24*	*09/15/22 22:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	65.7		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.3	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 21:26	1
Diesel Range Organics (Over C10-C28)	18.1	J	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 21:26	1
Oil Range Organics (Over C28-C36)	23.3	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*09/14/22 11:59*	*09/14/22 21:26*	*1*
o-Terphenyl	*79*		*70 - 130*	*09/14/22 11:59*	*09/14/22 21:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.9		5.03	0.863	mg/Kg			09/14/22 20:40	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS03A

Lab Sample ID: 890-2943-7
Matrix: Solid
Date Collected: 09/12/22 11:10
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/13/22 14:24	09/15/22 23:16	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		09/13/22 14:24	09/15/22 23:16	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		09/13/22 14:24	09/15/22 23:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		09/13/22 14:24	09/15/22 23:16	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		09/13/22 14:24	09/15/22 23:16	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		09/13/22 14:24	09/15/22 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*09/13/22 14:24*	*09/15/22 23:16*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/13/22 14:24*	*09/15/22 23:16*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**253**		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**27.5**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:49	1
Diesel Range Organics (Over C10-C28)	**160**		50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:49	1
Oil Range Organics (Over C28-C36)	**65.0**	**B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/14/22 11:59*	*09/15/22 01:49*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/14/22 11:59*	*09/15/22 01:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.3**		5.02	0.862	mg/Kg			09/14/22 20:45	1

Client Sample ID: FS10A

Lab Sample ID: 890-2943-8
Matrix: Solid
Date Collected: 09/12/22 11:15
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/13/22 14:24	09/15/22 23:42	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		09/13/22 14:24	09/15/22 23:42	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		09/13/22 14:24	09/15/22 23:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		09/13/22 14:24	09/15/22 23:42	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		09/13/22 14:24	09/15/22 23:42	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		09/13/22 14:24	09/15/22 23:42	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS10A

Lab Sample ID: 890-2943-8
Matrix: Solid
Date Collected: 09/12/22 11:15
Date Received: 09/13/22 08:26
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/13/22 14:24*	*09/15/22 23:42*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/13/22 14:24*	*09/15/22 23:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**78.2**		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**19.6**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:50	1
Diesel Range Organics (Over C10-C28)	**36.2**	**J**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:50	1
Oil Range Organics (Over C28-C36)	**22.4**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*80*		*70 - 130*	*09/14/22 11:59*	*09/14/22 23:50*	*1*
o-Terphenyl	*73*		*70 - 130*	*09/14/22 11:59*	*09/14/22 23:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.2**		4.98	0.855	mg/Kg			09/14/22 20:50	1

Client Sample ID: FS12A

Lab Sample ID: 890-2943-9
Matrix: Solid
Date Collected: 09/12/22 11:20
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		09/13/22 14:24	09/16/22 00:07	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		09/13/22 14:24	09/16/22 00:07	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		09/13/22 14:24	09/16/22 00:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		09/13/22 14:24	09/16/22 00:07	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		09/13/22 14:24	09/16/22 00:07	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		09/13/22 14:24	09/16/22 00:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*09/13/22 14:24*	*09/16/22 00:07*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/13/22 14:24*	*09/16/22 00:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			09/16/22 10:33	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS12A

Lab Sample ID: 890-2943-9
Matrix: Solid
Date Collected: 09/12/22 11:20
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	79.9		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.1	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 00:10	1
Diesel Range Organics (Over C10-C28)	24.7	J	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 00:10	1
Oil Range Organics (Over C28-C36)	29.1	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/14/22 11:59*	*09/15/22 00:10*	*1*
o-Terphenyl	*74*		*70 - 130*	*09/14/22 11:59*	*09/15/22 00:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.17		5.05	0.867	mg/Kg			09/14/22 20:55	1

Client Sample ID: FS11A

Lab Sample ID: 890-2943-10
Matrix: Solid
Date Collected: 09/12/22 11:25
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		09/13/22 14:24	09/16/22 00:33	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		09/13/22 14:24	09/16/22 00:33	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		09/13/22 14:24	09/16/22 00:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/13/22 14:24	09/16/22 00:33	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		09/13/22 14:24	09/16/22 00:33	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/13/22 14:24	09/16/22 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/13/22 14:24*	*09/16/22 00:33*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/13/22 14:24*	*09/16/22 00:33*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	72.4		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.2	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 21:47	1
Diesel Range Organics (Over C10-C28)	27.6	J	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 21:47	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS11A

Lab Sample ID: 890-2943-10
Matrix: Solid
Date Collected: 09/12/22 11:25
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	**19.6**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*09/14/22 11:59*	*09/14/22 21:47*	*1*
o-Terphenyl	*80*		*70 - 130*	*09/14/22 11:59*	*09/14/22 21:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.4**		5.05	0.867	mg/Kg			09/14/22 21:00	1

Client Sample ID: FS16A

Lab Sample ID: 890-2943-11
Matrix: Solid
Date Collected: 09/12/22 11:30
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg		09/14/22 14:04	09/16/22 01:48	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg		09/14/22 14:04	09/16/22 01:48	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg		09/14/22 14:04	09/16/22 01:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		09/14/22 14:04	09/16/22 01:48	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		09/14/22 14:04	09/16/22 01:48	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg		09/14/22 14:04	09/16/22 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/14/22 14:04*	*09/16/22 01:48*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/14/22 14:04*	*09/16/22 01:48*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.0**		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**27.7**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:30	1
Oll Range Organics (Over C28-C36)	**23.3**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/14/22 11:59*	*09/14/22 23:30*	*1*
o-Terphenyl	*76*		*70 - 130*	*09/14/22 11:59*	*09/14/22 23:30*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS16A

Lab Sample ID: 890-2943-11
Matrix: Solid
Date Collected: 09/12/22 11:30
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.4		4.99	0.857	mg/Kg			09/14/22 21:05	1

Client Sample ID: FS17A

Lab Sample ID: 890-2943-12
Matrix: Solid
Date Collected: 09/12/22 11:35
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00100	J	0.00200	0.000384	mg/Kg		09/14/22 14:04	09/16/22 02:09	1
Toluene	0.00107	J	0.00200	0.000455	mg/Kg		09/14/22 14:04	09/16/22 02:09	1
Ethylbenzene	0.00188	J	0.00200	0.000564	mg/Kg		09/14/22 14:04	09/16/22 02:09	1
m-Xylene & p-Xylene	0.00282	J	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 02:09	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/14/22 14:04	09/16/22 02:09	1
Xylenes, Total	0.00282	J	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*09/14/22 14:04*	*09/16/22 02:09*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*09/14/22 14:04*	*09/16/22 02:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00677		0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	46.2	J	50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	22.8	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:08	1
Oil Range Organics (Over C28-C36)	23.4	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*09/14/22 11:59*	*09/14/22 22:08*	*1*
o-Terphenyl	*76*		*70 - 130*	*09/14/22 11:59*	*09/14/22 22:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		4.98	0.855	mg/Kg			09/14/22 21:19	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS20A

Lab Sample ID: 890-2943-13
Matrix: Solid
Date Collected: 09/12/22 12:40
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000528	J	0.00199	0.000383	mg/Kg		09/14/22 14:04	09/16/22 02:29	1
Toluene	0.000559	J	0.00199	0.000454	mg/Kg		09/14/22 14:04	09/16/22 02:29	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		09/14/22 14:04	09/16/22 02:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		09/14/22 14:04	09/16/22 02:29	1
o-Xylene	0.000836	J	0.00199	0.000343	mg/Kg		09/14/22 14:04	09/16/22 02:29	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		09/14/22 14:04	09/16/22 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/14/22 14:04*	*09/16/22 02:29*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/14/22 14:04*	*09/16/22 02:29*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00192	J	0.00398	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	302		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.7	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 00:49	1
Diesel Range Organics (Over C10-C28)	169		49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 00:49	1
Oil Range Organics (Over C28-C36)	107	B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*09/14/22 11:59*	*09/15/22 00:49*	*1*
o-Terphenyl	*77*		*70 - 130*	*09/14/22 11:59*	*09/15/22 00:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.31		4.96	0.851	mg/Kg			09/14/22 21:24	1

Client Sample ID: FS21A

Lab Sample ID: 890-2943-14
Matrix: Solid
Date Collected: 09/12/22 12:45
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00823		0.00199	0.000383	mg/Kg		09/14/22 14:04	09/16/22 02:50	1
Toluene	0.00381		0.00199	0.000453	mg/Kg		09/14/22 14:04	09/16/22 02:50	1
Ethylbenzene	0.00306		0.00199	0.000562	mg/Kg		09/14/22 14:04	09/16/22 02:50	1
m-Xylene & p-Xylene	0.00131	J	0.00398	0.00100	mg/Kg		09/14/22 14:04	09/16/22 02:50	1
o-Xylene	0.00409		0.00199	0.000342	mg/Kg		09/14/22 14:04	09/16/22 02:50	1
Xylenes, Total	0.00540		0.00398	0.00100	mg/Kg		09/14/22 14:04	09/16/22 02:50	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS21A

Lab Sample ID: 890-2943-14
Matrix: Solid
Date Collected: 09/12/22 12:45
Date Received: 09/13/22 08:26
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*09/14/22 14:04*	*09/16/22 02:50*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*09/14/22 14:04*	*09/16/22 02:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0205**		0.00398	0.00100	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**41.5**	**J**	49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.1**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:29	1
Oil Range Organics (Over C28-C36)	**20.4**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*87*		*70 - 130*	*09/14/22 11:59*	*09/14/22 22:29*	*1*
o-Terphenyl	*86*		*70 - 130*	*09/14/22 11:59*	*09/14/22 22:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.1**		4.96	0.851	mg/Kg			09/14/22 21:39	1

Client Sample ID: FS24A

Lab Sample ID: 890-2943-15
Matrix: Solid
Date Collected: 09/12/22 12:50
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		09/14/22 14:04	09/16/22 03:10	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		09/14/22 14:04	09/16/22 03:10	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		09/14/22 14:04	09/16/22 03:10	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		09/14/22 14:04	09/16/22 03:10	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		09/14/22 14:04	09/16/22 03:10	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		09/14/22 14:04	09/16/22 03:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*09/14/22 14:04*	*09/16/22 03:10*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/14/22 14:04*	*09/16/22 03:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			09/16/22 10:33	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS24A

Lab Sample ID: 890-2943-15
Matrix: Solid
Date Collected: 09/12/22 12:50
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	107		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	29.0	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:51	1
Diesel Range Organics (Over C10-C28)	38.3	J	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:51	1
Oil Range Organics (Over C28-C36)	39.4	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*09/14/22 11:59*	*09/15/22 03:51*	*1*
o-Terphenyl	*79*		*70 - 130*	*09/14/22 11:59*	*09/15/22 03:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.87		5.04	0.865	mg/Kg			09/14/22 21:44	1

Client Sample ID: FS23A

Lab Sample ID: 890-2943-16
Matrix: Solid
Date Collected: 09/12/22 12:55
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/14/22 14:04	09/16/22 03:31	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/14/22 14:04	09/16/22 03:31	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/14/22 14:04	09/16/22 03:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 03:31	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/14/22 14:04	09/16/22 03:31	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/14/22 14:04*	*09/16/22 03:31*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/14/22 14:04*	*09/16/22 03:31*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	172		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.8	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:29	1
Diesel Range Organics (Over C10-C28)	98.5		50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:29	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS23A

Lab Sample ID: 890-2943-16
Matrix: Solid
Date Collected: 09/12/22 12:55
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	51.9	B	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/14/22 11:59*	*09/15/22 01:29*	*1*
o-Terphenyl	*76*		*70 - 130*	*09/14/22 11:59*	*09/15/22 01:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		5.03	0.863	mg/Kg			09/14/22 21:48	1

Client Sample ID: FS22A

Lab Sample ID: 890-2943-17
Matrix: Solid
Date Collected: 09/12/22 13:00
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000684	J	0.00201	0.000387	mg/Kg		09/14/22 14:04	09/16/22 03:51	1
Toluene	0.000650	J	0.00201	0.000459	mg/Kg		09/14/22 14:04	09/16/22 03:51	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		09/14/22 14:04	09/16/22 03:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/14/22 14:04	09/16/22 03:51	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		09/14/22 14:04	09/16/22 03:51	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/14/22 14:04	09/16/22 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/14/22 14:04*	*09/16/22 03:51*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*09/14/22 14:04*	*09/16/22 03:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00133	J	0.00402	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	81.0		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.0	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:11	1
Diesel Range Organics (Over C10-C28)	18.9	J	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:11	1
Oll Range Organics (Over C28-C36)	44.1	J B	50.0	15.0	mg/Kg		09/14/22 11:59	09/15/22 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*09/14/22 11:59*	*09/15/22 03:11*	*1*
o-Terphenyl	*71*		*70 - 130*	*09/14/22 11:59*	*09/15/22 03:11*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS22A

Lab Sample ID: 890-2943-17
Matrix: Solid
Date Collected: 09/12/22 13:00
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.3		4.98	0.855	mg/Kg			09/14/22 21:53	1

Client Sample ID: FS27A

Lab Sample ID: 890-2943-18
Matrix: Solid
Date Collected: 09/12/22 13:05
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		09/14/22 14:04	09/16/22 04:12	1
Toluene	0.000516	J	0.00202	0.000461	mg/Kg		09/14/22 14:04	09/16/22 04:12	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		09/14/22 14:04	09/16/22 04:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		09/14/22 14:04	09/16/22 04:12	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		09/14/22 14:04	09/16/22 04:12	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		09/14/22 14:04	09/16/22 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/14/22 14:04*	*09/16/22 04:12*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/14/22 14:04*	*09/16/22 04:12*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	107		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.5	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:30	1
Diesel Range Organics (Over C10-C28)	40.2	J	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:30	1
Oil Range Organics (Over C28-C36)	45.6	J B	49.9	15.0	mg/Kg		09/14/22 11:59	09/15/22 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/14/22 11:59*	*09/15/22 02:30*	*1*
o-Terphenyl	*75*		*70 - 130*	*09/14/22 11:59*	*09/15/22 02:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.7		5.00	0.858	mg/Kg			09/14/22 21:58	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS28A

Lab Sample ID: 890-2943-19
Matrix: Solid
Date Collected: 09/12/22 13:10
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/14/22 14:04	09/16/22 04:32	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/14/22 14:04	09/16/22 04:32	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/14/22 14:04	09/16/22 04:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 04:32	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/14/22 14:04	09/16/22 04:32	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*09/14/22 14:04*	*09/16/22 04:32*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/14/22 14:04*	*09/16/22 04:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**48.7**	**J**	50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**24.5**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:10	1
Oil Range Organics (Over C28-C36)	**24.2**	**J B**	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/14/22 11:59*	*09/14/22 23:10*	*1*
o-Terphenyl	*77*		*70 - 130*	*09/14/22 11:59*	*09/14/22 23:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.7**		5.04	0.865	mg/Kg			09/14/22 22:03	1

Client Sample ID: FS29A

Lab Sample ID: 890-2943-20
Matrix: Solid
Date Collected: 09/12/22 13:15
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00162**	**J**	0.00199	0.000383	mg/Kg		09/16/22 09:35	09/16/22 14:41	1
Toluene	**0.00185**	**J**	0.00199	0.000453	mg/Kg		09/16/22 09:35	09/16/22 14:41	1
Ethylbenzene	**0.00348**		0.00199	0.000562	mg/Kg		09/16/22 09:35	09/16/22 14:41	1
m-Xylene & p-Xylene	**0.00629**		0.00398	0.00100	mg/Kg		09/16/22 09:35	09/16/22 14:41	1
o-Xylene	**0.00317**		0.00199	0.000342	mg/Kg		09/16/22 09:35	09/16/22 14:41	1
Xylenes, Total	**0.00946**		0.00398	0.00100	mg/Kg		09/16/22 09:35	09/16/22 14:41	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS29A

Date Collected: 09/12/22 13:15
Date Received: 09/13/22 08:26
Sample Depth: 4

Lab Sample ID: 890-2943-20
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/16/22 09:35*	*09/16/22 14:41*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*09/16/22 09:35*	*09/16/22 14:41*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0164**		0.00398	0.00100	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**43.4**	**J**	49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**22.4**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:49	1
Oil Range Organics (Over C28-C36)	**21.0**	**J B**	49.9	15.0	mg/Kg		09/14/22 11:59	09/14/22 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*79*		*70 - 130*	*09/14/22 11:59*	*09/14/22 22:49*	*1*
o-Terphenyl	*80*		*70 - 130*	*09/14/22 11:59*	*09/14/22 22:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.90**		5.00	0.858	mg/Kg			09/14/22 22:08	1

Client Sample ID: FS33A

Date Collected: 09/12/22 13:20
Date Received: 09/13/22 08:26
Sample Depth: 4

Lab Sample ID: 890-2943-21
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/14/22 14:04	09/16/22 06:42	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		09/14/22 14:04	09/16/22 06:42	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		09/14/22 14:04	09/16/22 06:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		09/14/22 14:04	09/16/22 06:42	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		09/14/22 14:04	09/16/22 06:42	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		09/14/22 14:04	09/16/22 06:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/14/22 14:04*	*09/16/22 06:42*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/14/22 14:04*	*09/16/22 06:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			09/16/22 10:33	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS33A

Lab Sample ID: 890-2943-21
Matrix: Solid
Date Collected: 09/12/22 13:20
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	129		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	22.1	J *1	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:08	1
Diesel Range Organics (Over C10-C28)	80.5		49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:08	1
Oil Range Organics (Over C28-C36)	26.6	J	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/14/22 11:55*	*09/15/22 02:08*	*1*
o-Terphenyl	*101*		*70 - 130*	*09/14/22 11:55*	*09/15/22 02:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.55		5.03	0.863	mg/Kg			09/14/22 19:35	1

Client Sample ID: FS35A

Lab Sample ID: 890-2943-22
Matrix: Solid
Date Collected: 09/12/22 13:25
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/14/22 14:04	09/16/22 07:03	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/14/22 14:04	09/16/22 07:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/14/22 14:04	09/16/22 07:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 07:03	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/14/22 14:04	09/16/22 07:03	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 07:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/14/22 14:04*	*09/16/22 07:03*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/14/22 14:04*	*09/16/22 07:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	124		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.7	J *1	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:29	1
Diesel Range Organics (Over C10-C28)	75.7		50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:29	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS35A

Lab Sample ID: 890-2943-22
Matrix: Solid
Date Collected: 09/12/22 13:25
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	23.0	J	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*09/14/22 11:55*	*09/15/22 02:29*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/14/22 11:55*	*09/15/22 02:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.3		5.05	0.867	mg/Kg			09/14/22 19:57	1

Client Sample ID: FS37A

Lab Sample ID: 890-2943-23
Matrix: Solid
Date Collected: 09/12/22 13:30
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		09/14/22 14:04	09/16/22 07:23	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		09/14/22 14:04	09/16/22 07:23	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		09/14/22 14:04	09/16/22 07:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/14/22 14:04	09/16/22 07:23	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		09/14/22 14:04	09/16/22 07:23	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/14/22 14:04	09/16/22 07:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*09/14/22 14:04*	*09/16/22 07:23*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/14/22 14:04*	*09/16/22 07:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.3		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.5	J *1	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:50	1
Diesel Range Organics (Over C10-C28)	37.8	J	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:50	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*09/14/22 11:55*	*09/15/22 02:50*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/14/22 11:55*	*09/15/22 02:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.44		5.05	0.867	mg/Kg			09/14/22 20:04	1

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Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS36A

Lab Sample ID: 890-2943-24
Matrix: Solid
Date Collected: 09/12/22 13:35
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		09/14/22 14:04	09/16/22 07:44	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		09/14/22 14:04	09/16/22 07:44	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		09/14/22 14:04	09/16/22 07:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		09/14/22 14:04	09/16/22 07:44	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		09/14/22 14:04	09/16/22 07:44	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		09/14/22 14:04	09/16/22 07:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*09/14/22 14:04*	*09/16/22 07:44*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/14/22 14:04*	*09/16/22 07:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**166**		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**27.6**	**J *1**	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:11	1
Diesel Range Organics (Over C10-C28)	**100**		49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:11	1
Oil Range Organics (Over C28-C36)	**38.8**	**J**	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*09/14/22 11:55*	*09/15/22 03:11*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/14/22 11:55*	*09/15/22 03:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.19**		4.97	0.853	mg/Kg			09/14/22 20:11	1

Client Sample ID: FS38A

Lab Sample ID: 890-2943-25
Matrix: Solid
Date Collected: 09/12/22 13:40
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/14/22 14:04	09/16/22 08:04	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/14/22 14:04	09/16/22 08:04	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/14/22 14:04	09/16/22 08:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 08:04	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/14/22 14:04	09/16/22 08:04	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 08:04	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS38A

Lab Sample ID: 890-2943-25
Matrix: Solid
Date Collected: 09/12/22 13:40
Date Received: 09/13/22 08:26
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/14/22 14:04	09/16/22 08:04	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/14/22 14:04	09/16/22 08:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**72.5**		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**24.0**	**J *1**	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:32	1
Diesel Range Organics (Over C10-C28)	**20.8**		49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:32	1
Oil Range Organics (Over C28-C36)	**27.7**	**J**	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/14/22 11:55	09/15/22 03:32	1
o-Terphenyl	94		70 - 130	09/14/22 11:55	09/15/22 03:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.1**		4.96	0.851	mg/Kg			09/14/22 20:19	1

Client Sample ID: FS40A

Lab Sample ID: 890-2943-26
Matrix: Solid
Date Collected: 09/12/22 13:45
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/14/22 14:04	09/16/22 09:25	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		09/14/22 14:04	09/16/22 09:25	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		09/14/22 14:04	09/16/22 09:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		09/14/22 14:04	09/16/22 09:25	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		09/14/22 14:04	09/16/22 09:25	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		09/14/22 14:04	09/16/22 09:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	09/14/22 14:04	09/16/22 09:25	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/14/22 14:04	09/16/22 09:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			09/16/22 10:33	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS40A

Lab Sample ID: 890-2943-26
Matrix: Solid
Date Collected: 09/12/22 13:45
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	160		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.5	J *1	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:53	1
Diesel Range Organics (Over C10-C28)	109		50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:53	1
Oil Range Organics (Over C28-C36)	25.6	J	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/14/22 11:55*	*09/15/22 03:53*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/14/22 11:55*	*09/15/22 03:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.8		5.00	0.858	mg/Kg			09/14/22 20:40	1

Client Sample ID: FS41A

Lab Sample ID: 890-2943-27
Matrix: Solid
Date Collected: 09/12/22 13:50
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		09/14/22 14:04	09/16/22 09:45	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		09/14/22 14:04	09/16/22 09:45	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		09/14/22 14:04	09/16/22 09:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		09/14/22 14:04	09/16/22 09:45	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		09/14/22 14:04	09/16/22 09:45	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		09/14/22 14:04	09/16/22 09:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/14/22 14:04*	*09/16/22 09:45*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/14/22 14:04*	*09/16/22 09:45*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	142		50.0	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.7	J *1	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 04:15	1
Diesel Range Organics (Over C10-C28)	94.6		50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 04:15	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS41A

Lab Sample ID: 890-2943-27
Matrix: Solid
Date Collected: 09/12/22 13:50
Date Received: 09/13/22 08:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	23.5	J	50.0	15.0	mg/Kg		09/14/22 11:55	09/15/22 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/14/22 11:55*	*09/15/22 04:15*	*1*
o-Terphenyl	*100*		*70 - 130*	*09/14/22 11:55*	*09/15/22 04:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.1		5.00	0.858	mg/Kg			09/14/22 20:48	1

Client Sample ID: FS42A

Lab Sample ID: 890-2943-28
Matrix: Solid
Date Collected: 09/12/22 13:55
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000501	J	0.00201	0.000387	mg/Kg		09/14/22 14:04	09/16/22 10:06	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		09/14/22 14:04	09/16/22 10:06	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		09/14/22 14:04	09/16/22 10:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/14/22 14:04	09/16/22 10:06	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		09/14/22 14:04	09/16/22 10:06	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/14/22 14:04	09/16/22 10:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*09/14/22 14:04*	*09/16/22 10:06*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*09/14/22 14:04*	*09/16/22 10:06*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	69.1		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	22.7	J *1	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 04:36	1
Diesel Range Organics (Over C10-C28)	46.4	J	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 04:36	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/14/22 11:55	09/15/22 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*09/14/22 11:55*	*09/15/22 04:36*	*1*
o-Terphenyl	*90*		*70 - 130*	*09/14/22 11:55*	*09/15/22 04:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.0		5.01	0.860	mg/Kg			09/14/22 20:55	1

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Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS44A

Lab Sample ID: 890-2943-29
Matrix: Solid
Date Collected: 09/12/22 14:00
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000754**	**J**	0.00202	0.000389	mg/Kg		09/14/22 14:04	09/16/22 10:26	1
Toluene	**0.000934**	**J**	0.00202	0.000461	mg/Kg		09/14/22 14:04	09/16/22 10:26	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		09/14/22 14:04	09/16/22 10:26	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		09/14/22 14:04	09/16/22 10:26	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		09/14/22 14:04	09/16/22 10:26	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		09/14/22 14:04	09/16/22 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/14/22 14:04*	*09/16/22 10:26*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*09/14/22 14:04*	*09/16/22 10:26*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00169**	**J**	0.00404	0.00102	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**176**		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		09/15/22 08:44	09/15/22 10:21	1
Diesel Range Organics (Over C10-C28)	**176**		49.9	15.0	mg/Kg		09/15/22 08:44	09/15/22 10:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/15/22 08:44	09/15/22 10:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*09/15/22 08:44*	*09/15/22 10:21*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/15/22 08:44*	*09/15/22 10:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.9**		5.02	0.862	mg/Kg			09/14/22 21:02	1

Client Sample ID: FS46A

Lab Sample ID: 890-2943-30
Matrix: Solid
Date Collected: 09/12/22 14:05
Date Received: 09/13/22 08:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/14/22 14:04	09/16/22 10:47	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/14/22 14:04	09/16/22 10:47	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/14/22 14:04	09/16/22 10:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 10:47	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/14/22 14:04	09/16/22 10:47	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/14/22 14:04	09/16/22 10:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/14/22 14:04*	*09/16/22 10:47*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS46A
Date Collected: 09/12/22 14:05
Date Received: 09/13/22 08:26
Sample Depth: 4

Lab Sample ID: 890-2943-30
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/14/22 14:04*	*09/16/22 10:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			09/16/22 10:33	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**250**		49.9	15.0	mg/Kg			09/15/22 09:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**26.8**	**J**	49.9	15.0	mg/Kg		09/15/22 08:44	09/15/22 11:23	1
Diesel Range Organics (Over C10-C28)	**223**		49.9	15.0	mg/Kg		09/15/22 08:44	09/15/22 11:23	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/15/22 08:44	09/15/22 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*09/15/22 08:44*	*09/15/22 11:23*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/15/22 08:44*	*09/15/22 11:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.94**		5.03	0.863	mg/Kg			09/14/22 21:09	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2943-1	FS18A	101	85
890-2943-1 MS	FS18A	82	106
890-2943-1 MSD	FS18A	112	108
890-2943-2	FS05A	105	103
890-2943-3	FS09A	115	110
890-2943-4	FS07A	83	112
890-2943-5	FS06A	108	110
890-2943-6	FS08A	112	107
890-2943-7	FS03A	113	105
890-2943-8	FS10A	85	107
890-2943-9	FS12A	113	109
890-2943-10	FS11A	106	105
890-2943-11	FS16A	107	104
890-2943-11 MS	FS16A	103	105
890-2943-11 MSD	FS16A	91	109
890-2943-12	FS17A	98	115
890-2943-13	FS20A	101	112
890-2943-14	FS21A	76	113
890-2943-15	FS24A	86	105
890-2943-16	FS23A	108	102
890-2943-17	FS22A	102	111
890-2943-18	FS27A	94	112
890-2943-19	FS28A	90	106
890-2943-20	FS29A	88	122
890-2943-20 MS	FS29A	78	110
890-2943-20 MSD	FS29A	94	98
890-2943-21	FS33A	106	102
890-2943-22	FS35A	85	107
890-2943-23	FS37A	89	109
890-2943-24	FS36A	93	109
890-2943-25	FS38A	102	107
890-2943-26	FS40A	88	106
890-2943-27	FS41A	95	106
890-2943-28	FS42A	92	113
890-2943-29	FS44A	96	119
890-2943-30	FS46A	85	108
LCS 880-34411/1-A	Lab Control Sample	92	98
LCS 880-34412/1-A	Lab Control Sample	116	113
LCS 880-34645/1-A	Lab Control Sample	88	106
LCSD 880-34411/2-A	Lab Control Sample Dup	88	103
LCSD 880-34412/2-A	Lab Control Sample Dup	102	105
LCSD 880-34645/2-A	Lab Control Sample Dup	101	105
MB 880-34179/5-A	Method Blank	104	115
MB 880-34411/5-A	Method Blank	105	112
MB 880-34412/5-B	Method Blank	69 S1-	90
MB 880-34645/5-A	Method Blank	103	116

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-19130-A-12-E MS	Matrix Spike	92	84
880-19130-A-12-F MSD	Matrix Spike Duplicate	94	87
890-2943-1	FS18A	85	79
890-2943-2	FS05A	78	72
890-2943-3	FS09A	82	78
890-2943-3 MS	FS09A	88	80
890-2943-3 MSD	FS09A	84	75
890-2943-4	FS07A	85	78
890-2943-5	FS06A	78	73
890-2943-6	FS08A	81	79
890-2943-7	FS03A	94	88
890-2943-8	FS10A	80	73
890-2943-9	FS12A	77	74
890-2943-10	FS11A	83	80
890-2943-11	FS16A	82	76
890-2943-12	FS17A	79	76
890-2943-13	FS20A	79	77
890-2943-14	FS21A	87	86
890-2943-15	FS24A	88	79
890-2943-16	FS23A	77	76
890-2943-17	FS22A	76	71
890-2943-18	FS27A	82	75
890-2943-19	FS28A	82	77
890-2943-20	FS29A	79	80
890-2943-21	FS33A	104	101
890-2943-22	FS35A	103	99
890-2943-23	FS37A	100	98
890-2943-24	FS36A	99	99
890-2943-25	FS38A	98	94
890-2943-26	FS40A	113	110
890-2943-27	FS41A	104	100
890-2943-28	FS42A	92	90
890-2943-29	FS44A	92	98
890-2943-29 MS	FS44A	102	98
890-2943-29 MSD	FS44A	102	97
890-2943-30	FS46A	100	104
LCS 880-34495/2-A	Lab Control Sample	147 S1+	151 S1+
LCS 880-34497/2-A	Lab Control Sample	75	77
LCS 880-34554/2-A	Lab Control Sample	101	118
LCSD 880-34495/3-A	Lab Control Sample Dup	127	130
LCSD 880-34497/3-A	Lab Control Sample Dup	85	84
LCSD 880-34554/3-A	Lab Control Sample Dup	100	117
MB 880-34495/1-A	Method Blank	121	125
MB 880-34497/1-A	Method Blank	96	100
MB 880-34554/1-A	Method Blank	133 S1+	150 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34179/5-A
Matrix: Solid
Analysis Batch: 34551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34179

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/12/22 08:41	09/15/22 13:44	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/12/22 08:41	09/15/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/12/22 08:41	09/15/22 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/12/22 08:41	09/15/22 13:44	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/12/22 08:41	09/15/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/12/22 08:41	09/15/22 13:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/12/22 08:41*	*09/15/22 13:44*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*09/12/22 08:41*	*09/15/22 13:44*	*1*

Lab Sample ID: MB 880-34411/5-A
Matrix: Solid
Analysis Batch: 34551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34411

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/14/22 14:04	09/16/22 01:20	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/14/22 14:04	09/16/22 01:20	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/14/22 14:04	09/16/22 01:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/14/22 14:04	09/16/22 01:20	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/14/22 14:04	09/16/22 01:20	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/14/22 14:04	09/16/22 01:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/14/22 14:04*	*09/16/22 01:20*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/14/22 14:04*	*09/16/22 01:20*	*1*

Lab Sample ID: LCS 880-34411/1-A
Matrix: Solid
Analysis Batch: 34551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34411

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08722		mg/Kg		87	70 - 130		
Toluene			0.100	0.08408		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08505		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene			0.200	0.1781		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.08951		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-34411/2-A
Matrix: Solid
Analysis Batch: 34551

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34411

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09785		mg/Kg		98	70 - 130	11	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: LCSD 880-34411/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34551 — **Prep Batch: 34411**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08337		mg/Kg		83	70 - 130	1	35
Ethylbenzene			0.100	0.08173		mg/Kg		82	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1685		mg/Kg		84	70 - 130	6	35
o-Xylene			0.100	0.08411		mg/Kg		84	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2943-11 MS — **Client Sample ID: FS16A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34551 — **Prep Batch: 34411**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0998	0.09044		mg/Kg		91	70 - 130
Toluene	<0.00202	U	0.0998	0.08161		mg/Kg		82	70 - 130
Ethylbenzene	<0.00202	U	0.0998	0.07834		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1650		mg/Kg		83	70 - 130
o-Xylene	<0.00202	U	0.0998	0.08482		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2943-11 MSD — **Client Sample ID: FS16A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34551 — **Prep Batch: 34411**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.101	0.09883		mg/Kg		98	70 - 130	9	35
Toluene	<0.00202	U	0.101	0.08083		mg/Kg		80	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.101	0.07642		mg/Kg		76	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.201	0.1581		mg/Kg		79	70 - 130	4	35
o-Xylene	<0.00202	U	0.101	0.08006		mg/Kg		80	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: MB 880-34412/5-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34552 — **Prep Batch: 34412**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/13/22 14:24	09/15/22 20:17	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/13/22 14:24	09/15/22 20:17	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/13/22 14:24	09/15/22 20:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/13/22 14:24	09/15/22 20:17	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: MB 880-34412/5-B
Matrix: Solid
Analysis Batch: 34552

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34412

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/13/22 14:24	09/15/22 20:17	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/13/22 14:24	09/15/22 20:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/13/22 14:24*	*09/15/22 20:17*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/13/22 14:24*	*09/15/22 20:17*	*1*

Lab Sample ID: LCS 880-34412/1-A
Matrix: Solid
Analysis Batch: 34552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1058		mg/Kg		106	70 - 130		
Toluene			0.100	0.09994		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.09683		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1979		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09809		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-34412/2-A
Matrix: Solid
Analysis Batch: 34552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34412

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09397		mg/Kg		94	70 - 130	12	35
Toluene			0.100	0.09151		mg/Kg		92	70 - 130	9	35
Ethylbenzene			0.100	0.08924		mg/Kg		89	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1818		mg/Kg		91	70 - 130	8	35
o-Xylene			0.100	0.08996		mg/Kg		90	70 - 130	9	35

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

Lab Sample ID: 890-2943-1 MS
Matrix: Solid
Analysis Batch: 34552

Client Sample ID: FS18A
Prep Type: Total/NA
Prep Batch: 34412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U F1	0.101	0.06437	F1	mg/Kg		64	70 - 130		
Toluene	<0.00202	U F1	0.101	0.05963	F1	mg/Kg		59	70 - 130		
Ethylbenzene	<0.00202	U F1	0.101	0.05206	F1	mg/Kg		52	70 - 130		
m-Xylene & p-Xylene	<0.00403	U F1	0.202	0.1060	F1	mg/Kg		53	70 - 130		
o-Xylene	<0.00202	U F1	0.101	0.05209	F1	mg/Kg		52	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: 890-2943-1 MS
Matrix: Solid
Analysis Batch: 34552

Client Sample ID: FS18A
Prep Type: Total/NA
Prep Batch: 34412

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-2943-1 MSD
Matrix: Solid
Analysis Batch: 34552

Client Sample ID: FS18A
Prep Type: Total/NA
Prep Batch: 34412

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.0998	0.08357		mg/Kg		84	70 - 130	26	35
Toluene	<0.00202	U F1	0.0998	0.07454		mg/Kg		75	70 - 130	22	35
Ethylbenzene	<0.00202	U F1	0.0998	0.06279	F1	mg/Kg		63	70 - 130	19	35
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1251	F1	mg/Kg		63	70 - 130	17	35
o-Xylene	<0.00202	U F1	0.0998	0.06069	F1	mg/Kg		61	70 - 130	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: MB 880-34645/5-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34645

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/16/22 09:35	09/16/22 14:12	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/16/22 09:35	09/16/22 14:12	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/16/22 09:35	09/16/22 14:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/16/22 09:35	09/16/22 14:12	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/16/22 09:35	09/16/22 14:12	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/16/22 09:35	09/16/22 14:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/16/22 09:35	09/16/22 14:12	1
1,4-Difluorobenzene (Surr)	116		70 - 130	09/16/22 09:35	09/16/22 14:12	1

Lab Sample ID: LCS 880-34645/1-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34645

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1013		mg/Kg		101	70 - 130		
Toluene			0.100	0.08163		mg/Kg		82	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1687		mg/Kg		84	70 - 130		
o-Xylene			0.100	0.08438		mg/Kg		84	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: LCS 880-34645/1-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34645

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-34645/2-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34645

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	3	35
Toluene			0.100	0.09323		mg/Kg		93	70 - 130	13	35
Ethylbenzene			0.100	0.09404		mg/Kg		94	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1899		mg/Kg		95	70 - 130	12	35
o-Xylene			0.100	0.09802		mg/Kg		98	70 - 130	15	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2943-20 MS
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: FS29A
Prep Type: Total/NA
Prep Batch: 34645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	0.00162	J	0.0998	0.1142		mg/Kg		113	70 - 130		
Toluene	0.00185	J	0.0998	0.08756		mg/Kg		86	70 - 130		
Ethylbenzene	0.00348		0.0998	0.08386		mg/Kg		81	70 - 130		
m-Xylene & p-Xylene	0.00629		0.200	0.1663		mg/Kg		80	70 - 130		
o-Xylene	0.00317		0.0998	0.08249		mg/Kg		79	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-2943-20 MSD
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: FS29A
Prep Type: Total/NA
Prep Batch: 34645

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.00162	J	0.0996	0.09661		mg/Kg		95	70 - 130	17	35
Toluene	0.00185	J	0.0996	0.08954		mg/Kg		88	70 - 130	2	35
Ethylbenzene	0.00348		0.0996	0.08965		mg/Kg		87	70 - 130	7	35
m-Xylene & p-Xylene	0.00629		0.199	0.1869		mg/Kg		91	70 - 130	12	35
o-Xylene	0.00317		0.0996	0.09360		mg/Kg		91	70 - 130	13	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: MB 880-34495/1-A
Matrix: Solid
Analysis Batch: 34439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34495

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:55	09/14/22 19:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:55	09/14/22 19:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:55	09/14/22 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*09/14/22 11:55*	*09/14/22 19:42*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/14/22 11:55*	*09/14/22 19:42*	*1*

Lab Sample ID: LCS 880-34495/2-A
Matrix: Solid
Analysis Batch: 34439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34495

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1079		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1089		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*147*	*S1+*	*70 - 130*
o-Terphenyl	*151*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-34495/3-A
Matrix: Solid
Analysis Batch: 34439

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34495

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	874.7	*1	mg/Kg		87	70 - 130	21	20
Diesel Range Organics (Over C10-C28)			1000	949.4		mg/Kg		95	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*130*		*70 - 130*

Lab Sample ID: 880-19130-A-12-E MS
Matrix: Solid
Analysis Batch: 34439

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34495

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	22.6	J *1 F1	996	611.6	F1	mg/Kg		59	70 - 130		
Diesel Range Organics (Over C10-C28)	25.8	J	996	885.8		mg/Kg		86	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: 880-19130-A-12-E MS
Matrix: Solid
Analysis Batch: 34439

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34495

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 880-19130-A-12-F MSD
Matrix: Solid
Analysis Batch: 34439

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34495

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	22.6	J *1 F1	999	623.4	F1	mg/Kg		60	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	25.8	J	999	911.6		mg/Kg		89	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: MB 880-34497/1-A
Matrix: Solid
Analysis Batch: 34433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34497

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	22.18	J	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 19:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 19:20	1
OII Range Organics (Over C28-C36)	17.03	J	50.0	15.0	mg/Kg		09/14/22 11:59	09/14/22 19:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	09/14/22 11:59	09/14/22 19:20	1
o-Terphenyl	100		70 - 130	09/14/22 11:59	09/14/22 19:20	1

Lab Sample ID: LCS 880-34497/2-A
Matrix: Solid
Analysis Batch: 34433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34497

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	957.8		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	867.3		mg/Kg		87	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	77		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: LCSD 880-34497/3-A
Matrix: Solid
Analysis Batch: 34433

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34497

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1026		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	950.7		mg/Kg		95	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

Lab Sample ID: 890-2943-3 MS
Matrix: Solid
Analysis Batch: 34433

Client Sample ID: FS09A
Prep Type: Total/NA
Prep Batch: 34497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	29.7	J B	996	969.4		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	996	784.5		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Lab Sample ID: 890-2943-3 MSD
Matrix: Solid
Analysis Batch: 34433

Client Sample ID: FS09A
Prep Type: Total/NA
Prep Batch: 34497

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	29.7	J B	999	939.2		mg/Kg		91	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	754.2		mg/Kg		75	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: MB 880-34554/1-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34554

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/15/22 08:44	09/15/22 09:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/15/22 08:44	09/15/22 09:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/15/22 08:44	09/15/22 09:19	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: MB 880-34554/1-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34554

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	09/15/22 08:44	09/15/22 09:19	1
o-Terphenyl	150	S1+	70 - 130	09/15/22 08:44	09/15/22 09:19	1

Lab Sample ID: LCS 880-34554/2-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34554

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	830.3		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	901.2		mg/Kg		90	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: LCSD 880-34554/3-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34554

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	805.4		mg/Kg		81	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	890.3		mg/Kg		89	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: 890-2943-29 MS
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: FS44A
Prep Type: Total/NA
Prep Batch: 34554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1049		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	176		996	1029		mg/Kg		86	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Lab Sample ID: 890-2943-29 MSD — **Client Sample ID: FS44A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34548 — **Prep Batch: 34554**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1078		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	176		999	1034		mg/Kg		86	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34501/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 34525

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			09/14/22 19:14	1

Lab Sample ID: LCS 880-34501/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 34525

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.0		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-34501/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 34525

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	239.4		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 890-2943-21 MS — **Client Sample ID: FS33A**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 34525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8.55		252	280.7		mg/Kg		108	90 - 110

Lab Sample ID: 890-2943-21 MSD — **Client Sample ID: FS33A**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 34525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.55		252	268.3		mg/Kg		103	90 - 110	5	20

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-34500/1-A
Matrix: Solid
Analysis Batch: 34532

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			09/14/22 19:42	1

Lab Sample ID: LCS 880-34500/2-A
Matrix: Solid
Analysis Batch: 34532

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	240.9		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-34500/3-A
Matrix: Solid
Analysis Batch: 34532

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	240.9		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 890-2943-1 MS
Matrix: Solid
Analysis Batch: 34532

Client Sample ID: FS18A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	18.8		252	273.5		mg/Kg		101	90 - 110		

Lab Sample ID: 890-2943-1 MSD
Matrix: Solid
Analysis Batch: 34532

Client Sample ID: FS18A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	18.8		252	274.1		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-2943-11 MS
Matrix: Solid
Analysis Batch: 34532

Client Sample ID: FS16A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	18.4		250	270.8		mg/Kg		101	90 - 110		

Lab Sample ID: 890-2943-11 MSD
Matrix: Solid
Analysis Batch: 34532

Client Sample ID: FS16A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	18.4		250	270.8		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

GC VOA

Prep Batch: 34179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34179/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-11	FS16A	Total/NA	Solid	5035	
890-2943-12	FS17A	Total/NA	Solid	5035	
890-2943-13	FS20A	Total/NA	Solid	5035	
890-2943-14	FS21A	Total/NA	Solid	5035	
890-2943-15	FS24A	Total/NA	Solid	5035	
890-2943-16	FS23A	Total/NA	Solid	5035	
890-2943-17	FS22A	Total/NA	Solid	5035	
890-2943-18	FS27A	Total/NA	Solid	5035	
890-2943-19	FS28A	Total/NA	Solid	5035	
890-2943-21	FS33A	Total/NA	Solid	5035	
890-2943-22	FS35A	Total/NA	Solid	5035	
890-2943-23	FS37A	Total/NA	Solid	5035	
890-2943-24	FS36A	Total/NA	Solid	5035	
890-2943-25	FS38A	Total/NA	Solid	5035	
890-2943-26	FS40A	Total/NA	Solid	5035	
890-2943-27	FS41A	Total/NA	Solid	5035	
890-2943-28	FS42A	Total/NA	Solid	5035	
890-2943-29	FS44A	Total/NA	Solid	5035	
890-2943-30	FS46A	Total/NA	Solid	5035	
MB 880-34411/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34411/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34411/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2943-11 MS	FS16A	Total/NA	Solid	5035	
890-2943-11 MSD	FS16A	Total/NA	Solid	5035	

Prep Batch: 34412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Total/NA	Solid	5035	
890-2943-2	FS05A	Total/NA	Solid	5035	
890-2943-3	FS09A	Total/NA	Solid	5035	
890-2943-4	FS07A	Total/NA	Solid	5035	
890-2943-5	FS06A	Total/NA	Solid	5035	
890-2943-6	FS08A	Total/NA	Solid	5035	
890-2943-7	FS03A	Total/NA	Solid	5035	
890-2943-8	FS10A	Total/NA	Solid	5035	
890-2943-9	FS12A	Total/NA	Solid	5035	
890-2943-10	FS11A	Total/NA	Solid	5035	
MB 880-34412/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-34412/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34412/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2943-1 MS	FS18A	Total/NA	Solid	5035	
890-2943-1 MSD	FS18A	Total/NA	Solid	5035	

Analysis Batch: 34551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-11	FS16A	Total/NA	Solid	8021B	34411
890-2943-12	FS17A	Total/NA	Solid	8021B	34411

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

GC VOA (Continued)

Analysis Batch: 34551 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-13	FS20A	Total/NA	Solid	8021B	34411
890-2943-14	FS21A	Total/NA	Solid	8021B	34411
890-2943-15	FS24A	Total/NA	Solid	8021B	34411
890-2943-16	FS23A	Total/NA	Solid	8021B	34411
890-2943-17	FS22A	Total/NA	Solid	8021B	34411
890-2943-18	FS27A	Total/NA	Solid	8021B	34411
890-2943-19	FS28A	Total/NA	Solid	8021B	34411
890-2943-21	FS33A	Total/NA	Solid	8021B	34411
890-2943-22	FS35A	Total/NA	Solid	8021B	34411
890-2943-23	FS37A	Total/NA	Solid	8021B	34411
890-2943-24	FS36A	Total/NA	Solid	8021B	34411
890-2943-25	FS38A	Total/NA	Solid	8021B	34411
890-2943-26	FS40A	Total/NA	Solid	8021B	34411
890-2943-27	FS41A	Total/NA	Solid	8021B	34411
890-2943-28	FS42A	Total/NA	Solid	8021B	34411
890-2943-29	FS44A	Total/NA	Solid	8021B	34411
890-2943-30	FS46A	Total/NA	Solid	8021B	34411
MB 880-34179/5-A	Method Blank	Total/NA	Solid	8021B	34179
MB 880-34411/5-A	Method Blank	Total/NA	Solid	8021B	34411
LCS 880-34411/1-A	Lab Control Sample	Total/NA	Solid	8021B	34411
LCSD 880-34411/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34411
890-2943-11 MS	FS16A	Total/NA	Solid	8021B	34411
890-2943-11 MSD	FS16A	Total/NA	Solid	8021B	34411

Analysis Batch: 34552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Total/NA	Solid	8021B	34412
890-2943-2	FS05A	Total/NA	Solid	8021B	34412
890-2943-3	FS09A	Total/NA	Solid	8021B	34412
890-2943-4	FS07A	Total/NA	Solid	8021B	34412
890-2943-5	FS06A	Total/NA	Solid	8021B	34412
890-2943-6	FS08A	Total/NA	Solid	8021B	34412
890-2943-7	FS03A	Total/NA	Solid	8021B	34412
890-2943-8	FS10A	Total/NA	Solid	8021B	34412
890-2943-9	FS12A	Total/NA	Solid	8021B	34412
890-2943-10	FS11A	Total/NA	Solid	8021B	34412
MB 880-34412/5-B	Method Blank	Total/NA	Solid	8021B	34412
LCS 880-34412/1-A	Lab Control Sample	Total/NA	Solid	8021B	34412
LCSD 880-34412/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34412
890-2943-1 MS	FS18A	Total/NA	Solid	8021B	34412
890-2943-1 MSD	FS18A	Total/NA	Solid	8021B	34412

Analysis Batch: 34644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-20	FS29A	Total/NA	Solid	8021B	34645
MB 880-34645/5-A	Method Blank	Total/NA	Solid	8021B	34645
LCS 880-34645/1-A	Lab Control Sample	Total/NA	Solid	8021B	34645
LCSD 880-34645/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34645
890-2943-20 MS	FS29A	Total/NA	Solid	8021B	34645
890-2943-20 MSD	FS29A	Total/NA	Solid	8021B	34645

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

GC VOA

Prep Batch: 34645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-20	FS29A	Total/NA	Solid	5035	
MB 880-34645/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34645/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34645/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2943-20 MS	FS29A	Total/NA	Solid	5035	
890-2943-20 MSD	FS29A	Total/NA	Solid	5035	

Analysis Batch: 34661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Total/NA	Solid	Total BTEX	
890-2943-2	FS05A	Total/NA	Solid	Total BTEX	
890-2943-3	FS09A	Total/NA	Solid	Total BTEX	
890-2943-4	FS07A	Total/NA	Solid	Total BTEX	
890-2943-5	FS06A	Total/NA	Solid	Total BTEX	
890-2943-6	FS08A	Total/NA	Solid	Total BTEX	
890-2943-7	FS03A	Total/NA	Solid	Total BTEX	
890-2943-8	FS10A	Total/NA	Solid	Total BTEX	
890-2943-9	FS12A	Total/NA	Solid	Total BTEX	
890-2943-10	FS11A	Total/NA	Solid	Total BTEX	
890-2943-11	FS16A	Total/NA	Solid	Total BTEX	
890-2943-12	FS17A	Total/NA	Solid	Total BTEX	
890-2943-13	FS20A	Total/NA	Solid	Total BTEX	
890-2943-14	FS21A	Total/NA	Solid	Total BTEX	
890-2943-15	FS24A	Total/NA	Solid	Total BTEX	
890-2943-16	FS23A	Total/NA	Solid	Total BTEX	
890-2943-17	FS22A	Total/NA	Solid	Total BTEX	
890-2943-18	FS27A	Total/NA	Solid	Total BTEX	
890-2943-19	FS28A	Total/NA	Solid	Total BTEX	
890-2943-20	FS29A	Total/NA	Solid	Total BTEX	
890-2943-21	FS33A	Total/NA	Solid	Total BTEX	
890-2943-22	FS35A	Total/NA	Solid	Total BTEX	
890-2943-23	FS37A	Total/NA	Solid	Total BTEX	
890-2943-24	FS36A	Total/NA	Solid	Total BTEX	
890-2943-25	FS38A	Total/NA	Solid	Total BTEX	
890-2943-26	FS40A	Total/NA	Solid	Total BTEX	
890-2943-27	FS41A	Total/NA	Solid	Total BTEX	
890-2943-28	FS42A	Total/NA	Solid	Total BTEX	
890-2943-29	FS44A	Total/NA	Solid	Total BTEX	
890-2943-30	FS46A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Total/NA	Solid	8015B NM	34497
890-2943-2	FS05A	Total/NA	Solid	8015B NM	34497
890-2943-3	FS09A	Total/NA	Solid	8015B NM	34497
890-2943-4	FS07A	Total/NA	Solid	8015B NM	34497
890-2943-5	FS06A	Total/NA	Solid	8015B NM	34497
890-2943-6	FS08A	Total/NA	Solid	8015B NM	34497
890-2943-7	FS03A	Total/NA	Solid	8015B NM	34497

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

GC Semi VOA (Continued)

Analysis Batch: 34433 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-8	FS10A	Total/NA	Solid	8015B NM	34497
890-2943-9	FS12A	Total/NA	Solid	8015B NM	34497
890-2943-10	FS11A	Total/NA	Solid	8015B NM	34497
890-2943-11	FS16A	Total/NA	Solid	8015B NM	34497
890-2943-12	FS17A	Total/NA	Solid	8015B NM	34497
890-2943-13	FS20A	Total/NA	Solid	8015B NM	34497
890-2943-14	FS21A	Total/NA	Solid	8015B NM	34497
890-2943-15	FS24A	Total/NA	Solid	8015B NM	34497
890-2943-16	FS23A	Total/NA	Solid	8015B NM	34497
890-2943-17	FS22A	Total/NA	Solid	8015B NM	34497
890-2943-18	FS27A	Total/NA	Solid	8015B NM	34497
890-2943-19	FS28A	Total/NA	Solid	8015B NM	34497
890-2943-20	FS29A	Total/NA	Solid	8015B NM	34497
MB 880-34497/1-A	Method Blank	Total/NA	Solid	8015B NM	34497
LCS 880-34497/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34497
LCSD 880-34497/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34497
890-2943-3 MS	FS09A	Total/NA	Solid	8015B NM	34497
890-2943-3 MSD	FS09A	Total/NA	Solid	8015B NM	34497

Analysis Batch: 34439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-21	FS33A	Total/NA	Solid	8015B NM	34495
890-2943-22	FS35A	Total/NA	Solid	8015B NM	34495
890-2943-23	FS37A	Total/NA	Solid	8015B NM	34495
890-2943-24	FS36A	Total/NA	Solid	8015B NM	34495
890-2943-25	FS38A	Total/NA	Solid	8015B NM	34495
890-2943-26	FS40A	Total/NA	Solid	8015B NM	34495
890-2943-27	FS41A	Total/NA	Solid	8015B NM	34495
890-2943-28	FS42A	Total/NA	Solid	8015B NM	34495
MB 880-34495/1-A	Method Blank	Total/NA	Solid	8015B NM	34495
LCS 880-34495/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34495
LCSD 880-34495/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34495
880-19130-A-12-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34495
880-19130-A-12-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34495

Prep Batch: 34495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-21	FS33A	Total/NA	Solid	8015NM Prep	
890-2943-22	FS35A	Total/NA	Solid	8015NM Prep	
890-2943-23	FS37A	Total/NA	Solid	8015NM Prep	
890-2943-24	FS36A	Total/NA	Solid	8015NM Prep	
890-2943-25	FS38A	Total/NA	Solid	8015NM Prep	
890-2943-26	FS40A	Total/NA	Solid	8015NM Prep	
890-2943-27	FS41A	Total/NA	Solid	8015NM Prep	
890-2943-28	FS42A	Total/NA	Solid	8015NM Prep	
MB 880-34495/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34495/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34495/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-12-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-12-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

GC Semi VOA

Prep Batch: 34497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Total/NA	Solid	8015NM Prep	
890-2943-2	FS05A	Total/NA	Solid	8015NM Prep	
890-2943-3	FS09A	Total/NA	Solid	8015NM Prep	
890-2943-4	FS07A	Total/NA	Solid	8015NM Prep	
890-2943-5	FS06A	Total/NA	Solid	8015NM Prep	
890-2943-6	FS08A	Total/NA	Solid	8015NM Prep	
890-2943-7	FS03A	Total/NA	Solid	8015NM Prep	
890-2943-8	FS10A	Total/NA	Solid	8015NM Prep	
890-2943-9	FS12A	Total/NA	Solid	8015NM Prep	
890-2943-10	FS11A	Total/NA	Solid	8015NM Prep	
890-2943-11	FS16A	Total/NA	Solid	8015NM Prep	
890-2943-12	FS17A	Total/NA	Solid	8015NM Prep	
890-2943-13	FS20A	Total/NA	Solid	8015NM Prep	
890-2943-14	FS21A	Total/NA	Solid	8015NM Prep	
890-2943-15	FS24A	Total/NA	Solid	8015NM Prep	
890-2943-16	FS23A	Total/NA	Solid	8015NM Prep	
890-2943-17	FS22A	Total/NA	Solid	8015NM Prep	
890-2943-18	FS27A	Total/NA	Solid	8015NM Prep	
890-2943-19	FS28A	Total/NA	Solid	8015NM Prep	
890-2943-20	FS29A	Total/NA	Solid	8015NM Prep	
MB 880-34497/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34497/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34497/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2943-3 MS	FS09A	Total/NA	Solid	8015NM Prep	
890-2943-3 MSD	FS09A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-29	FS44A	Total/NA	Solid	8015B NM	34554
890-2943-30	FS46A	Total/NA	Solid	8015B NM	34554
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015B NM	34554
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34554
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34554
890-2943-29 MS	FS44A	Total/NA	Solid	8015B NM	34554
890-2943-29 MSD	FS44A	Total/NA	Solid	8015B NM	34554

Prep Batch: 34554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-29	FS44A	Total/NA	Solid	8015NM Prep	
890-2943-30	FS46A	Total/NA	Solid	8015NM Prep	
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2943-29 MS	FS44A	Total/NA	Solid	8015NM Prep	
890-2943-29 MSD	FS44A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Total/NA	Solid	8015 NM	
890-2943-2	FS05A	Total/NA	Solid	8015 NM	
890-2943-3	FS09A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

GC Semi VOA (Continued)

Analysis Batch: 34563 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-4	FS07A	Total/NA	Solid	8015 NM	
890-2943-5	FS06A	Total/NA	Solid	8015 NM	
890-2943-6	FS08A	Total/NA	Solid	8015 NM	
890-2943-7	FS03A	Total/NA	Solid	8015 NM	
890-2943-8	FS10A	Total/NA	Solid	8015 NM	
890-2943-9	FS12A	Total/NA	Solid	8015 NM	
890-2943-10	FS11A	Total/NA	Solid	8015 NM	
890-2943-11	FS16A	Total/NA	Solid	8015 NM	
890-2943-12	FS17A	Total/NA	Solid	8015 NM	
890-2943-13	FS20A	Total/NA	Solid	8015 NM	
890-2943-14	FS21A	Total/NA	Solid	8015 NM	
890-2943-15	FS24A	Total/NA	Solid	8015 NM	
890-2943-16	FS23A	Total/NA	Solid	8015 NM	
890-2943-17	FS22A	Total/NA	Solid	8015 NM	
890-2943-18	FS27A	Total/NA	Solid	8015 NM	
890-2943-19	FS28A	Total/NA	Solid	8015 NM	
890-2943-20	FS29A	Total/NA	Solid	8015 NM	
890-2943-21	FS33A	Total/NA	Solid	8015 NM	
890-2943-22	FS35A	Total/NA	Solid	8015 NM	
890-2943-23	FS37A	Total/NA	Solid	8015 NM	
890-2943-24	FS36A	Total/NA	Solid	8015 NM	
890-2943-25	FS38A	Total/NA	Solid	8015 NM	
890-2943-26	FS40A	Total/NA	Solid	8015 NM	
890-2943-27	FS41A	Total/NA	Solid	8015 NM	
890-2943-28	FS42A	Total/NA	Solid	8015 NM	
890-2943-29	FS44A	Total/NA	Solid	8015 NM	
890-2943-30	FS46A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Soluble	Solid	DI Leach	
890-2943-2	FS05A	Soluble	Solid	DI Leach	
890-2943-3	FS09A	Soluble	Solid	DI Leach	
890-2943-4	FS07A	Soluble	Solid	DI Leach	
890-2943-5	FS06A	Soluble	Solid	DI Leach	
890-2943-6	FS08A	Soluble	Solid	DI Leach	
890-2943-7	FS03A	Soluble	Solid	DI Leach	
890-2943-8	FS10A	Soluble	Solid	DI Leach	
890-2943-9	FS12A	Soluble	Solid	DI Leach	
890-2943-10	FS11A	Soluble	Solid	DI Leach	
890-2943-11	FS16A	Soluble	Solid	DI Leach	
890-2943-12	FS17A	Soluble	Solid	DI Leach	
890-2943-13	FS20A	Soluble	Solid	DI Leach	
890-2943-14	FS21A	Soluble	Solid	DI Leach	
890-2943-15	FS24A	Soluble	Solid	DI Leach	
890-2943-16	FS23A	Soluble	Solid	DI Leach	
890-2943-17	FS22A	Soluble	Solid	DI Leach	
890-2943-18	FS27A	Soluble	Solid	DI Leach	
890-2943-19	FS28A	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

HPLC/IC (Continued)

Leach Batch: 34500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-20	FS29A	Soluble	Solid	DI Leach	
MB 880-34500/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34500/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34500/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2943-1 MS	FS18A	Soluble	Solid	DI Leach	
890-2943-1 MSD	FS18A	Soluble	Solid	DI Leach	
890-2943-11 MS	FS16A	Soluble	Solid	DI Leach	
890-2943-11 MSD	FS16A	Soluble	Solid	DI Leach	

Leach Batch: 34501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-21	FS33A	Soluble	Solid	DI Leach	
890-2943-22	FS35A	Soluble	Solid	DI Leach	
890-2943-23	FS37A	Soluble	Solid	DI Leach	
890-2943-24	FS36A	Soluble	Solid	DI Leach	
890-2943-25	FS38A	Soluble	Solid	DI Leach	
890-2943-26	FS40A	Soluble	Solid	DI Leach	
890-2943-27	FS41A	Soluble	Solid	DI Leach	
890-2943-28	FS42A	Soluble	Solid	DI Leach	
890-2943-29	FS44A	Soluble	Solid	DI Leach	
890-2943-30	FS46A	Soluble	Solid	DI Leach	
MB 880-34501/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34501/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34501/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2943-21 MS	FS33A	Soluble	Solid	DI Leach	
890-2943-21 MSD	FS33A	Soluble	Solid	DI Leach	

Analysis Batch: 34525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-21	FS33A	Soluble	Solid	300.0	34501
890-2943-22	FS35A	Soluble	Solid	300.0	34501
890-2943-23	FS37A	Soluble	Solid	300.0	34501
890-2943-24	FS36A	Soluble	Solid	300.0	34501
890-2943-25	FS38A	Soluble	Solid	300.0	34501
890-2943-26	FS40A	Soluble	Solid	300.0	34501
890-2943-27	FS41A	Soluble	Solid	300.0	34501
890-2943-28	FS42A	Soluble	Solid	300.0	34501
890-2943-29	FS44A	Soluble	Solid	300.0	34501
890-2943-30	FS46A	Soluble	Solid	300.0	34501
MB 880-34501/1-A	Method Blank	Soluble	Solid	300.0	34501
LCS 880-34501/2-A	Lab Control Sample	Soluble	Solid	300.0	34501
LCSD 880-34501/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34501
890-2943-21 MS	FS33A	Soluble	Solid	300.0	34501
890-2943-21 MSD	FS33A	Soluble	Solid	300.0	34501

Analysis Batch: 34532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-1	FS18A	Soluble	Solid	300.0	34500
890-2943-2	FS05A	Soluble	Solid	300.0	34500
890-2943-3	FS09A	Soluble	Solid	300.0	34500
890-2943-4	FS07A	Soluble	Solid	300.0	34500

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

HPLC/IC (Continued)

Analysis Batch: 34532 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2943-5	FS06A	Soluble	Solid	300.0	34500
890-2943-6	FS08A	Soluble	Solid	300.0	34500
890-2943-7	FS03A	Soluble	Solid	300.0	34500
890-2943-8	FS10A	Soluble	Solid	300.0	34500
890-2943-9	FS12A	Soluble	Solid	300.0	34500
890-2943-10	FS11A	Soluble	Solid	300.0	34500
890-2943-11	FS16A	Soluble	Solid	300.0	34500
890-2943-12	FS17A	Soluble	Solid	300.0	34500
890-2943-13	FS20A	Soluble	Solid	300.0	34500
890-2943-14	FS21A	Soluble	Solid	300.0	34500
890-2943-15	FS24A	Soluble	Solid	300.0	34500
890-2943-16	FS23A	Soluble	Solid	300.0	34500
890-2943-17	FS22A	Soluble	Solid	300.0	34500
890-2943-18	FS27A	Soluble	Solid	300.0	34500
890-2943-19	FS28A	Soluble	Solid	300.0	34500
890-2943-20	FS29A	Soluble	Solid	300.0	34500
MB 880-34500/1-A	Method Blank	Soluble	Solid	300.0	34500
LCS 880-34500/2-A	Lab Control Sample	Soluble	Solid	300.0	34500
LCSD 880-34500/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34500
890-2943-1 MS	FS18A	Soluble	Solid	300.0	34500
890-2943-1 MSD	FS18A	Soluble	Solid	300.0	34500
890-2943-11 MS	FS16A	Soluble	Solid	300.0	34500
890-2943-11 MSD	FS16A	Soluble	Solid	300.0	34500

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS18A
Date Collected: 09/12/22 10:40
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 20:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 01:09	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 19:57	CH	EET MID

Client Sample ID: FS05A
Date Collected: 09/12/22 10:45
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 21:08	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 03:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:11	CH	EET MID

Client Sample ID: FS09A
Date Collected: 09/12/22 10:50
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 21:34	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 20:23	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:16	CH	EET MID

Client Sample ID: FS07A
Date Collected: 09/12/22 10:55
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 21:59	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS07A
Date Collected: 09/12/22 10:55
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-4
Matrix: Solid

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			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 02:50	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:21	CH	EET MID

Client Sample ID: FS06A
Date Collected: 09/12/22 11:00
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 22:25	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 02:10	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:26	CH	EET MID

Client Sample ID: FS08A
Date Collected: 09/12/22 11:05
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 22:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 21:26	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:40	CH	EET MID

Client Sample ID: FS03A
Date Collected: 09/12/22 11:10
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 23:16	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 01:49	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS03A
Date Collected: 09/12/22 11:10
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:45	CH	EET MID

Client Sample ID: FS10A
Date Collected: 09/12/22 11:15
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/15/22 23:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 23:50	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:50	CH	EET MID

Client Sample ID: FS12A
Date Collected: 09/12/22 11:20
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/16/22 00:07	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 00:10	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 20:55	CH	EET MID

Client Sample ID: FS11A
Date Collected: 09/12/22 11:25
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34412	09/13/22 14:24	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34552	09/16/22 00:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 21:47	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:00	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS16A
Date Collected: 09/12/22 11:30
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 01:48	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 23:30	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:05	CH	EET MID

Client Sample ID: FS17A
Date Collected: 09/12/22 11:35
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 02:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 22:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:19	CH	EET MID

Client Sample ID: FS20A
Date Collected: 09/12/22 12:40
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 02:29	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 00:49	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:24	CH	EET MID

Client Sample ID: FS21A
Date Collected: 09/12/22 12:45
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 02:50	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS21A
Date Collected: 09/12/22 12:45
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-14
Matrix: Solid

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			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 22:29	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:39	CH	EET MID

Client Sample ID: FS24A
Date Collected: 09/12/22 12:50
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 03:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 03:51	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:44	CH	EET MID

Client Sample ID: FS23A
Date Collected: 09/12/22 12:55
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 03:31	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 01:29	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:48	CH	EET MID

Client Sample ID: FS22A
Date Collected: 09/12/22 13:00
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 03:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 03:11	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS22A
Date Collected: 09/12/22 13:00
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:53	CH	EET MID

Client Sample ID: FS27A
Date Collected: 09/12/22 13:05
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 04:12	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/15/22 02:30	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 21:58	CH	EET MID

Client Sample ID: FS28A
Date Collected: 09/12/22 13:10
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 04:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 23:10	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 22:03	CH	EET MID

Client Sample ID: FS29A
Date Collected: 09/12/22 13:15
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34645	09/16/22 09:35	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/16/22 14:41	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34497	09/14/22 11:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 22:49	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34500	09/14/22 13:10	SMC	EET MID
Soluble	Analysis	300.0		1			34532	09/14/22 22:08	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS33A
Date Collected: 09/12/22 13:20
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 06:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 02:08	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 19:35	CH	EET MID

Client Sample ID: FS35A
Date Collected: 09/12/22 13:25
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 07:03	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 02:29	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 19:57	CH	EET MID

Client Sample ID: FS37A
Date Collected: 09/12/22 13:30
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 07:23	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 02:50	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 20:04	CH	EET MID

Client Sample ID: FS36A
Date Collected: 09/12/22 13:35
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 07:44	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS36A
Date Collected: 09/12/22 13:35
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-24
Matrix: Solid

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			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 03:11	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 20:11	CH	EET MID

Client Sample ID: FS38A
Date Collected: 09/12/22 13:40
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 08:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 03:32	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 20:19	CH	EET MID

Client Sample ID: FS40A
Date Collected: 09/12/22 13:45
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 09:25	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 03:53	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 20:40	CH	EET MID

Client Sample ID: FS41A
Date Collected: 09/12/22 13:50
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 09:45	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 04:15	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Client Sample ID: FS41A
Date Collected: 09/12/22 13:50
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 20:48	CH	EET MID

Client Sample ID: FS42A
Date Collected: 09/12/22 13:55
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 10:06	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 04:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 20:55	CH	EET MID

Client Sample ID: FS44A
Date Collected: 09/12/22 14:00
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 10:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34548	09/15/22 10:21	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 21:02	CH	EET MID

Client Sample ID: FS46A
Date Collected: 09/12/22 14:05
Date Received: 09/13/22 08:26

Lab Sample ID: 890-2943-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34411	09/14/22 14:04	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34551	09/16/22 10:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34661	09/16/22 10:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34563	09/15/22 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34548	09/15/22 11:23	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34501	09/14/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34525	09/14/22 21:09	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2943-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2943-1	FS18A	Solid	09/12/22 10:40	09/13/22 08:26	4
890-2943-2	FS05A	Solid	09/12/22 10:45	09/13/22 08:26	4
890-2943-3	FS09A	Solid	09/12/22 10:50	09/13/22 08:26	4
890-2943-4	FS07A	Solid	09/12/22 10:55	09/13/22 08:26	4
890-2943-5	FS06A	Solid	09/12/22 11:00	09/13/22 08:26	4
890-2943-6	FS08A	Solid	09/12/22 11:05	09/13/22 08:26	4
890-2943-7	FS03A	Solid	09/12/22 11:10	09/13/22 08:26	4
890-2943-8	FS10A	Solid	09/12/22 11:15	09/13/22 08:26	4
890-2943-9	FS12A	Solid	09/12/22 11:20	09/13/22 08:26	4
890-2943-10	FS11A	Solid	09/12/22 11:25	09/13/22 08:26	4
890-2943-11	FS16A	Solid	09/12/22 11:30	09/13/22 08:26	4
890-2943-12	FS17A	Solid	09/12/22 11:35	09/13/22 08:26	4
890-2943-13	FS20A	Solid	09/12/22 12:40	09/13/22 08:26	4
890-2943-14	FS21A	Solid	09/12/22 12:45	09/13/22 08:26	4
890-2943-15	FS24A	Solid	09/12/22 12:50	09/13/22 08:26	4
890-2943-16	FS23A	Solid	09/12/22 12:55	09/13/22 08:26	4
890-2943-17	FS22A	Solid	09/12/22 13:00	09/13/22 08:26	4
890-2943-18	FS27A	Solid	09/12/22 13:05	09/13/22 08:26	4
890-2943-19	FS28A	Solid	09/12/22 13:10	09/13/22 08:26	4
890-2943-20	FS29A	Solid	09/12/22 13:15	09/13/22 08:26	4
890-2943-21	FS33A	Solid	09/12/22 13:20	09/13/22 08:26	4
890-2943-22	FS35A	Solid	09/12/22 13:25	09/13/22 08:26	4
890-2943-23	FS37A	Solid	09/12/22 13:30	09/13/22 08:26	4
890-2943-24	FS36A	Solid	09/12/22 13:35	09/13/22 08:26	4
890-2943-25	FS38A	Solid	09/12/22 13:40	09/13/22 08:26	4
890-2943-26	FS40A	Solid	09/12/22 13:45	09/13/22 08:26	4
890-2943-27	FS41A	Solid	09/12/22 13:50	09/13/22 08:26	4
890-2943-28	FS42A	Solid	09/12/22 13:55	09/13/22 08:26	4
890-2943-29	FS44A	Solid	09/12/22 14:00	09/13/22 08:26	4
890-2943-30	FS46A	Solid	09/12/22 14:05	09/13/22 08:26	4

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B	Turn Around	☑ Routine ☐ Rush
Project Number:	03C2077002	Due Date:	
Project Location:	32.5649, -103.3183	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TMM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.8
Total Containers:		Corrected Temperature:	1.6

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
FS18A	S	9/12/2022	10:40	4'				x	x	x
FS05A	S	9/12/2022	10:45	4'				x	x	x
FS09A	S	9/12/2022	10:50	4'				x	x	x
FS07A	S	9/12/2022	10:55	4'				x	x	x
FS06A	S	9/12/2022	11:00	4'				x	x	x
FS08A	S	9/12/2022	11:05	4'				x	x	x
FS03A	S	9/12/2022	11:10	4'				x	x	x
FS10A	S	9/12/2022	11:15	4'				x	x	x
FS12A	S	9/12/2022	11:20	4'				x	x	x
FS11A	S	9/12/2022	11:25	4'				x	x	x

890-2943 Chain of Custody

Sample Comments

Incident ID:
NAPP2206638414
Cost Center:
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			9.14.22			
3				4		
5				6		

Revised Date: 08/25/2020 Rev 2020.2

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Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B	**Turn Around**	
Project Number:	03C2077002	☑ Routine ☐ Rush	
Project Location:	32.5649, -103.3183	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2S0_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS16A	S	9/12/2022	11:30	4'				x	x	x	Incident ID:
FS17A	S	9/12/2022	11:35	4'				x	x	x	NAPP2206638414
FS20A	S	9/12/2022	12:40	4'				x	x	x	Cost Center:
FS21A	S	9/12/2022	12:45	4'				x	x	x	
FS24A	S	9/12/2022	12:50	4'				x	x	x	AFE:
FS23A	S	9/12/2022	12:55	4'				x	x	x	
FS22A	S	9/12/2022	13:00	4'				x	x	x	
FS27A	S	9/12/2022	13:05	4'				x	x	x	
FS28A	S	9/12/2022	13:10	4'				x	x	x	
FS29A	S	9/12/2022	13:15	4'				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 SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			2		
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2

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Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B	**Turn Around**	
Project Number:	03C2077002	☑ Routine ☐ Rush	
Project Location:	32.5649, -103.3183	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS33A	S	9/12/2022	13:20	4'				x	x	x	Incident ID:
FS35A	S	9/12/2022	13:25	4'				x	x	x	NAPP2206638414
FS37A	S	9/12/2022	13:30	4'				x	x	x	Cost Center:
FS36A	S	9/12/2022	13:35	4'				x	x	x	
FS38A	S	9/12/2022	13:40	4'				x	x	x	AFE:
FS40A	S	9/12/2022	13:45	4'				x	x	x	
FS41A	S	9/12/2022	13:50	4'				x	x	x	
FS42A	S	9/12/2022	13:55	4'				x	x	x	
FS44A	S	9/12/2022	14:00	4'				x	x	x	
FS46A	S	9/12/2022	14:05	4'				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 SiO_2 Na Sr Tl Sn U V Zn

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

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
1			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Page 66 of 68

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2943-1
SDG Number: 03C2077002

Login Number: 2943
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2943-1
SDG Number: 03C2077002

Login Number: 2943
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/14/22 11:07 AM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2951-1
Laboratory Sample Delivery Group: 03C2077002
Client Project/Site: EMSU B

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
9/20/2022 11:28:26 AM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: EMSU B

Laboratory Job ID: 890-2951-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Job ID: 890-2951-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2951-1

Receipt
The samples were received on 9/13/2022 4:42 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 26.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34593 and analytical batch 880-34713 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS49 (890-2951-2), FS53 (890-2951-6), FS57 (890-2951-10) and FS62 (890-2951-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34693 and analytical batch 880-34745 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34689 and analytical batch 880-34832 were outside control limits. Sample matrix interference and/or non-homogeneity are 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.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-34554 and analytical batch 880-34548 was outside the upper control limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34595 and analytical batch 880-34546 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-34595/1-A). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS48

Lab Sample ID: 890-2951-1
Matrix: Solid
Date Collected: 09/13/22 11:15
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:24	100
Toluene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:24	100
Ethylbenzene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:24	100
m-Xylene & p-Xylene	<0.401	U	0.401		mg/Kg		09/15/22 13:32	09/17/22 17:24	100
o-Xylene	**0.308**		0.200		mg/Kg		09/15/22 13:32	09/17/22 17:24	100
Xylenes, Total	<0.401	U	0.401		mg/Kg		09/15/22 13:32	09/17/22 17:24	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*09/15/22 13:32*	*09/17/22 17:24*	*100*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/15/22 13:32*	*09/17/22 17:24*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.401	U	0.401		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**6640**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/15/22 20:49	5
Diesel Range Organics (Over C10-C28)	**5100**		250		mg/Kg		09/15/22 14:21	09/15/22 20:49	5
Oil Range Organics (Over C28-C36)	**1540**		250		mg/Kg		09/15/22 14:21	09/15/22 20:49	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*09/15/22 14:21*	*09/15/22 20:49*	*5*
o-Terphenyl	*90*		*70 - 130*	*09/15/22 14:21*	*09/15/22 20:49*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**303**		4.97		mg/Kg			09/15/22 21:57	1

Client Sample ID: FS49

Lab Sample ID: 890-2951-2
Matrix: Solid
Date Collected: 09/13/22 11:20
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.164**	**F1**	0.0504		mg/Kg		09/15/22 13:32	09/17/22 16:02	25
Toluene	<0.0504	U F1	0.0504		mg/Kg		09/15/22 13:32	09/17/22 16:02	25
Ethylbenzene	<0.0504	U F1	0.0504		mg/Kg		09/15/22 13:32	09/17/22 16:02	25
m-Xylene & p-Xylene	<0.101	U F1	0.101		mg/Kg		09/15/22 13:32	09/17/22 16:02	25
o-Xylene	<0.0504	U F1	0.0504		mg/Kg		09/15/22 13:32	09/17/22 16:02	25
Xylenes, Total	<0.101	U F1	0.101		mg/Kg		09/15/22 13:32	09/17/22 16:02	25

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS49

Date Collected: 09/13/22 11:20
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Lab Sample ID: 890-2951-2
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*09/15/22 13:32*	*09/17/22 16:02*	*25*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/15/22 13:32*	*09/17/22 16:02*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.164**		0.101		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1580**		49.9		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 14:21	09/15/22 19:46	1
Diesel Range Organics (Over C10-C28)	**1240**	**F1**	49.9		mg/Kg		09/15/22 14:21	09/15/22 19:46	1
Oil Range Organics (Over C28-C36)	**337**		49.9		mg/Kg		09/15/22 14:21	09/15/22 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*99*		*70 - 130*	*09/15/22 14:21*	*09/15/22 19:46*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/15/22 14:21*	*09/15/22 19:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48.5**		5.04		mg/Kg			09/15/22 22:11	1

Client Sample ID: FS50

Date Collected: 09/13/22 11:25
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Lab Sample ID: 890-2951-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:45	100
Toluene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:45	100
Ethylbenzene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:45	100
m-Xylene & p-Xylene	<0.400	U	0.400		mg/Kg		09/15/22 13:32	09/17/22 17:45	100
o-Xylene	<0.200	U	0.200		mg/Kg		09/15/22 13:32	09/17/22 17:45	100
Xylenes, Total	<0.400	U	0.400		mg/Kg		09/15/22 13:32	09/17/22 17:45	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*09/15/22 13:32*	*09/17/22 17:45*	*100*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*09/15/22 13:32*	*09/17/22 17:45*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.400	U	0.400		mg/Kg			09/19/22 09:47	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS50

Lab Sample ID: 890-2951-3
Matrix: Solid
Date Collected: 09/13/22 11:25
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5500**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/15/22 21:09	5
Diesel Range Organics (Over C10-C28)	**4600**		250		mg/Kg		09/15/22 14:21	09/15/22 21:09	5
Oil Range Organics (Over C28-C36)	**902**		250		mg/Kg		09/15/22 14:21	09/15/22 21:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*09/15/22 14:21*	*09/15/22 21:09*	*5*
o-Terphenyl	*102*		*70 - 130*	*09/15/22 14:21*	*09/15/22 21:09*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**154**		5.02		mg/Kg			09/15/22 22:16	1

Client Sample ID: FS51

Lab Sample ID: 890-2951-4
Matrix: Solid
Date Collected: 09/13/22 11:30
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 18:05	100
Toluene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 18:05	100
Ethylbenzene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 18:05	100
m-Xylene & p-Xylene	<0.397	U	0.397		mg/Kg		09/15/22 13:32	09/17/22 18:05	100
o-Xylene	**0.333**		0.198		mg/Kg		09/15/22 13:32	09/17/22 18:05	100
Xylenes, Total	<0.397	U	0.397		mg/Kg		09/15/22 13:32	09/17/22 18:05	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*09/15/22 13:32*	*09/17/22 18:05*	*100*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*09/15/22 13:32*	*09/17/22 18:05*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.397	U	0.397		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4430**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/15/22 21:30	5
Diesel Range Organics (Over C10-C28)	**3630**		250		mg/Kg		09/15/22 14:21	09/15/22 21:30	5

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS51

Lab Sample ID: 890-2951-4
Matrix: Solid
Date Collected: 09/13/22 11:30
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	**798**		250		mg/Kg		09/15/22 14:21	09/15/22 21:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*09/15/22 14:21*	*09/15/22 21:30*	*5*
o-Terphenyl	*97*		*70 - 130*	*09/15/22 14:21*	*09/15/22 21:30*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**231**		5.02		mg/Kg			09/15/22 22:21	1

Client Sample ID: FS52

Lab Sample ID: 890-2951-5
Matrix: Solid
Date Collected: 09/13/22 11:35
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 18:26	100
Toluene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 18:26	100
Ethylbenzene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 18:26	100
m-Xylene & p-Xylene	<0.404	U	0.404		mg/Kg		09/15/22 13:32	09/17/22 18:26	100
o-Xylene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 18:26	100
Xylenes, Total	<0.404	U	0.404		mg/Kg		09/15/22 13:32	09/17/22 18:26	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*09/15/22 13:32*	*09/17/22 18:26*	*100*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/15/22 13:32*	*09/17/22 18:26*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.404	U	0.404		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7650**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/15/22 21:51	5
Diesel Range Organics (Over C10-C28)	**5730**		250		mg/Kg		09/15/22 14:21	09/15/22 21:51	5
Oil Range Organics (Over C28-C36)	**1920**		250		mg/Kg		09/15/22 14:21	09/15/22 21:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*09/15/22 14:21*	*09/15/22 21:51*	*5*
o-Terphenyl	*112*		*70 - 130*	*09/15/22 14:21*	*09/15/22 21:51*	*5*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS52

Lab Sample ID: 890-2951-5
Matrix: Solid
Date Collected: 09/13/22 11:35
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**216**		4.98		mg/Kg			09/15/22 22:26	1

Client Sample ID: FS53

Lab Sample ID: 890-2951-6
Matrix: Solid
Date Collected: 09/13/22 11:40
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0994	U	0.0994		mg/Kg		09/15/22 13:32	09/17/22 16:23	50
Toluene	**0.141**		0.0994		mg/Kg		09/15/22 13:32	09/17/22 16:23	50
Ethylbenzene	<0.0994	U	0.0994		mg/Kg		09/15/22 13:32	09/17/22 16:23	50
m-Xylene & p-Xylene	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 16:23	50
o-Xylene	<0.0994	U	0.0994		mg/Kg		09/15/22 13:32	09/17/22 16:23	50
Xylenes, Total	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 16:23	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*09/15/22 13:32*	*09/17/22 16:23*	*50*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/15/22 13:32*	*09/17/22 16:23*	*50*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.199	U	0.199		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7070**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/15/22 22:11	5
Diesel Range Organics (Over C10-C28)	**5740**		250		mg/Kg		09/15/22 14:21	09/15/22 22:11	5
Oil Range Organics (Over C28-C36)	**1330**		250		mg/Kg		09/15/22 14:21	09/15/22 22:11	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*09/15/22 14:21*	*09/15/22 22:11*	*5*
o-Terphenyl	*104*		*70 - 130*	*09/15/22 14:21*	*09/15/22 22:11*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**477**		4.99		mg/Kg			09/15/22 22:40	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS54

Lab Sample ID: 890-2951-7
Matrix: Solid
Date Collected: 09/13/22 11:45
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0718**		0.0496		mg/Kg		09/15/22 13:32	09/17/22 16:43	25
Toluene	**0.0990**		0.0496		mg/Kg		09/15/22 13:32	09/17/22 16:43	25
Ethylbenzene	**0.0664**		0.0496		mg/Kg		09/15/22 13:32	09/17/22 16:43	25
m-Xylene & p-Xylene	**0.243**		0.0992		mg/Kg		09/15/22 13:32	09/17/22 16:43	25
o-Xylene	**0.233**		0.0496		mg/Kg		09/15/22 13:32	09/17/22 16:43	25
Xylenes, Total	**0.476**		0.0992		mg/Kg		09/15/22 13:32	09/17/22 16:43	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*09/15/22 13:32*	*09/17/22 16:43*	*25*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/15/22 13:32*	*09/17/22 16:43*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.713**		0.0992		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1430**		50.0		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:21	09/15/22 22:32	1
Diesel Range Organics (Over C10-C28)	**1130**		50.0		mg/Kg		09/15/22 14:21	09/15/22 22:32	1
Oil Range Organics (Over C28-C36)	**297**		50.0		mg/Kg		09/15/22 14:21	09/15/22 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*09/15/22 14:21*	*09/15/22 22:32*	*1*
o-Terphenyl	*100*		*70 - 130*	*09/15/22 14:21*	*09/15/22 22:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**251**		25.0		mg/Kg			09/15/22 22:45	5

Client Sample ID: FS55

Lab Sample ID: 890-2951-8
Matrix: Solid
Date Collected: 09/13/22 11:50
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0503	U	0.0503		mg/Kg		09/15/22 13:32	09/17/22 17:04	25
Toluene	**0.0712**		0.0503		mg/Kg		09/15/22 13:32	09/17/22 17:04	25
Ethylbenzene	<0.0503	U	0.0503		mg/Kg		09/15/22 13:32	09/17/22 17:04	25
m-Xylene & p-Xylene	<0.101	U	0.101		mg/Kg		09/15/22 13:32	09/17/22 17:04	25
o-Xylene	**0.0937**		0.0503		mg/Kg		09/15/22 13:32	09/17/22 17:04	25
Xylenes, Total	<0.101	U	0.101		mg/Kg		09/15/22 13:32	09/17/22 17:04	25

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS55

Lab Sample ID: 890-2951-8
Matrix: Solid
Date Collected: 09/13/22 11:50
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/15/22 13:32*	*09/17/22 17:04*	*25*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/15/22 13:32*	*09/17/22 17:04*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.165**		0.101		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2400**		50.0		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:21	09/15/22 22:53	1
Diesel Range Organics (Over C10-C28)	**1800**		50.0		mg/Kg		09/15/22 14:21	09/15/22 22:53	1
Oil Range Organics (Over C28-C36)	**599**		50.0		mg/Kg		09/15/22 14:21	09/15/22 22:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*105*		*70 - 130*	*09/15/22 14:21*	*09/15/22 22:53*	*1*
o-Terphenyl	*106*		*70 - 130*	*09/15/22 14:21*	*09/15/22 22:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**89.2**		5.01		mg/Kg			09/15/22 22:50	1

Client Sample ID: FS56

Lab Sample ID: 890-2951-9
Matrix: Solid
Date Collected: 09/13/22 11:55
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 18:46	100
Toluene	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 18:46	100
Ethylbenzene	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 18:46	100
m-Xylene & p-Xylene	<0.398	U	0.398		mg/Kg		09/15/22 13:32	09/17/22 18:46	100
o-Xylene	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 18:46	100
Xylenes, Total	<0.398	U	0.398		mg/Kg		09/15/22 13:32	09/17/22 18:46	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*09/15/22 13:32*	*09/17/22 18:46*	*100*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*09/15/22 13:32*	*09/17/22 18:46*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.398	U	0.398		mg/Kg			09/19/22 09:47	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS56

Lab Sample ID: 890-2951-9
Matrix: Solid
Date Collected: 09/13/22 11:55
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5280**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/15/22 23:13	5
Diesel Range Organics (Over C10-C28)	**4300**		250		mg/Kg		09/15/22 14:21	09/15/22 23:13	5
Oil Range Organics (Over C28-C36)	**978**		250		mg/Kg		09/15/22 14:21	09/15/22 23:13	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*09/15/22 14:21*	*09/15/22 23:13*	*5*
o-Terphenyl	*104*		*70 - 130*	*09/15/22 14:21*	*09/15/22 23:13*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**514**		5.02		mg/Kg			09/15/22 22:55	1

Client Sample ID: FS57

Lab Sample ID: 890-2951-10
Matrix: Solid
Date Collected: 09/13/22 12:00
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 19:07	100
Toluene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 19:07	100
Ethylbenzene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 19:07	100
m-Xylene & p-Xylene	<0.402	U	0.402		mg/Kg		09/15/22 13:32	09/17/22 19:07	100
o-Xylene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 19:07	100
Xylenes, Total	<0.402	U	0.402		mg/Kg		09/15/22 13:32	09/17/22 19:07	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*09/15/22 13:32*	*09/17/22 19:07*	*100*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*09/15/22 13:32*	*09/17/22 19:07*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.402	U	0.402		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5420**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 14:21	09/15/22 23:34	5
Diesel Range Organics (Over C10-C28)	**4640**		249		mg/Kg		09/15/22 14:21	09/15/22 23:34	5

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS57

Lab Sample ID: 890-2951-10
Matrix: Solid
Date Collected: 09/13/22 12:00
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	**780**		249		mg/Kg		09/15/22 14:21	09/15/22 23:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*09/15/22 14:21*	*09/15/22 23:34*	*5*
o-Terphenyl	*100*		*70 - 130*	*09/15/22 14:21*	*09/15/22 23:34*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**503**		5.02		mg/Kg			09/15/22 23:00	1

Client Sample ID: FS58

Lab Sample ID: 890-2951-11
Matrix: Solid
Date Collected: 09/13/22 12:05
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 22:32	100
Toluene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 22:32	100
Ethylbenzene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 22:32	100
m-Xylene & p-Xylene	<0.403	U	0.403		mg/Kg		09/15/22 13:32	09/17/22 22:32	100
o-Xylene	<0.202	U	0.202		mg/Kg		09/15/22 13:32	09/17/22 22:32	100
Xylenes, Total	<0.403	U	0.403		mg/Kg		09/15/22 13:32	09/17/22 22:32	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*09/15/22 13:32*	*09/17/22 22:32*	*100*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/15/22 13:32*	*09/17/22 22:32*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.403	U	0.403		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3970**		49.9		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 14:21	09/16/22 00:14	1
Diesel Range Organics (Over C10-C28)	**3000**		49.9		mg/Kg		09/15/22 14:21	09/16/22 00:14	1
Oll Range Organics (Over C28-C36)	**969**		49.9		mg/Kg		09/15/22 14:21	09/16/22 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*09/15/22 14:21*	*09/16/22 00:14*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/15/22 14:21*	*09/16/22 00:14*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS58

Lab Sample ID: 890-2951-11
Matrix: Solid
Date Collected: 09/13/22 12:05
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**487**		25.0		mg/Kg			09/15/22 23:05	5

Client Sample ID: FS59

Lab Sample ID: 890-2951-12
Matrix: Solid
Date Collected: 09/13/22 12:10
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.186**		0.0994		mg/Kg		09/15/22 13:32	09/17/22 20:29	50
Toluene	<0.0994	U	0.0994		mg/Kg		09/15/22 13:32	09/17/22 20:29	50
Ethylbenzene	<0.0994	U	0.0994		mg/Kg		09/15/22 13:32	09/17/22 20:29	50
m-Xylene & p-Xylene	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 20:29	50
o-Xylene	<0.0994	U	0.0994		mg/Kg		09/15/22 13:32	09/17/22 20:29	50
Xylenes, Total	<0.199	U	0.199		mg/Kg		09/15/22 13:32	09/17/22 20:29	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*09/15/22 13:32*	*09/17/22 20:29*	*50*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/15/22 13:32*	*09/17/22 20:29*	*50*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.199	U	0.199		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5040**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 14:21	09/16/22 00:35	5
Diesel Range Organics (Over C10-C28)	**4230**		249		mg/Kg		09/15/22 14:21	09/16/22 00:35	5
Oil Range Organics (Over C28-C36)	**813**		249		mg/Kg		09/15/22 14:21	09/16/22 00:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*09/15/22 14:21*	*09/16/22 00:35*	*5*
o-Terphenyl	*110*		*70 - 130*	*09/15/22 14:21*	*09/16/22 00:35*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**428**		5.00		mg/Kg			09/15/22 23:19	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS60

Lab Sample ID: 890-2951-13
Matrix: Solid
Date Collected: 09/13/22 12:15
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.178**		0.0499		mg/Kg		09/15/22 13:32	09/17/22 20:49	25
Toluene	<0.0499	U	0.0499		mg/Kg		09/15/22 13:32	09/17/22 20:49	25
Ethylbenzene	<0.0499	U	0.0499		mg/Kg		09/15/22 13:32	09/17/22 20:49	25
m-Xylene & p-Xylene	<0.0998	U	0.0998		mg/Kg		09/15/22 13:32	09/17/22 20:49	25
o-Xylene	<0.0499	U	0.0499		mg/Kg		09/15/22 13:32	09/17/22 20:49	25
Xylenes, Total	<0.0998	U	0.0998		mg/Kg		09/15/22 13:32	09/17/22 20:49	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*09/15/22 13:32*	*09/17/22 20:49*	*25*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/15/22 13:32*	*09/17/22 20:49*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.178**		0.0998		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5470**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/16/22 00:55	5
Diesel Range Organics (Over C10-C28)	**4290**		250		mg/Kg		09/15/22 14:21	09/16/22 00:55	5
Oil Range Organics (Over C28-C36)	**1180**		250		mg/Kg		09/15/22 14:21	09/16/22 00:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*09/15/22 14:21*	*09/16/22 00:55*	*5*
o-Terphenyl	*106*		*70 - 130*	*09/15/22 14:21*	*09/16/22 00:55*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**154**		5.03		mg/Kg			09/15/22 23:24	1

Client Sample ID: FS61

Lab Sample ID: 890-2951-14
Matrix: Solid
Date Collected: 09/13/22 12:20
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.164**		0.0500		mg/Kg		09/15/22 13:32	09/17/22 21:10	25
Toluene	**0.0554**		0.0500		mg/Kg		09/15/22 13:32	09/17/22 21:10	25
Ethylbenzene	<0.0500	U	0.0500		mg/Kg		09/15/22 13:32	09/17/22 21:10	25
m-Xylene & p-Xylene	<0.100	U	0.100		mg/Kg		09/15/22 13:32	09/17/22 21:10	25
o-Xylene	**0.132**		0.0500		mg/Kg		09/15/22 13:32	09/17/22 21:10	25
Xylenes, Total	**0.132**		0.100		mg/Kg		09/15/22 13:32	09/17/22 21:10	25

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS61

Lab Sample ID: 890-2951-14
Matrix: Solid
Date Collected: 09/13/22 12:20
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/15/22 13:32*	*09/17/22 21:10*	*25*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/15/22 13:32*	*09/17/22 21:10*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.351**		0.100		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4170**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/16/22 01:15	5
Diesel Range Organics (Over C10-C28)	**3500**		250		mg/Kg		09/15/22 14:21	09/16/22 01:15	5
Oil Range Organics (Over C28-C36)	**673**		250		mg/Kg		09/15/22 14:21	09/16/22 01:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*99*		*70 - 130*	*09/15/22 14:21*	*09/16/22 01:15*	*5*
o-Terphenyl	*107*		*70 - 130*	*09/15/22 14:21*	*09/16/22 01:15*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**148**		5.00		mg/Kg			09/15/22 23:39	1

Client Sample ID: FS62

Lab Sample ID: 890-2951-15
Matrix: Solid
Date Collected: 09/13/22 12:25
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.164**		0.0495		mg/Kg		09/15/22 13:32	09/17/22 21:30	25
Toluene	**0.0827**		0.0495		mg/Kg		09/15/22 13:32	09/17/22 21:30	25
Ethylbenzene	<0.0495	U	0.0495		mg/Kg		09/15/22 13:32	09/17/22 21:30	25
m-Xylene & p-Xylene	<0.0990	U	0.0990		mg/Kg		09/15/22 13:32	09/17/22 21:30	25
o-Xylene	<0.0495	U	0.0495		mg/Kg		09/15/22 13:32	09/17/22 21:30	25
Xylenes, Total	<0.0990	U	0.0990		mg/Kg		09/15/22 13:32	09/17/22 21:30	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*160*	*S1+*	*70 - 130*	*09/15/22 13:32*	*09/17/22 21:30*	*25*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/15/22 13:32*	*09/17/22 21:30*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.247**		0.0990		mg/Kg			09/19/22 09:47	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS62

Lab Sample ID: 890-2951-15
Matrix: Solid
Date Collected: 09/13/22 12:25
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**8190**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/16/22 01:36	5
Diesel Range Organics (Over C10-C28)	**6340**		250		mg/Kg		09/15/22 14:21	09/16/22 01:36	5
Oil Range Organics (Over C28-C36)	**1850**		250		mg/Kg		09/15/22 14:21	09/16/22 01:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*09/15/22 14:21*	*09/16/22 01:36*	*5*
o-Terphenyl	*112*		*70 - 130*	*09/15/22 14:21*	*09/16/22 01:36*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**255**		5.04		mg/Kg			09/15/22 23:44	1

Client Sample ID: FS63

Lab Sample ID: 890-2951-16
Matrix: Solid
Date Collected: 09/13/22 12:30
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 22:52	100
Toluene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 22:52	100
Ethylbenzene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 22:52	100
m-Xylene & p-Xylene	<0.402	U	0.402		mg/Kg		09/15/22 13:32	09/17/22 22:52	100
o-Xylene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 22:52	100
Xylenes, Total	<0.402	U	0.402		mg/Kg		09/15/22 13:32	09/17/22 22:52	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*09/15/22 13:32*	*09/17/22 22:52*	*100*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/15/22 13:32*	*09/17/22 22:52*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.402	U	0.402		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7970**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 14:21	09/16/22 01:57	5
Diesel Range Organics (Over C10-C28)	**6330**		249		mg/Kg		09/15/22 14:21	09/16/22 01:57	5

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS63

Lab Sample ID: 890-2951-16
Matrix: Solid
Date Collected: 09/13/22 12:30
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	**1640**		249		mg/Kg		09/15/22 14:21	09/16/22 01:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*09/15/22 14:21*	*09/16/22 01:57*	*5*
o-Terphenyl	*108*		*70 - 130*	*09/15/22 14:21*	*09/16/22 01:57*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**442**		4.95		mg/Kg			09/15/22 23:48	1

Client Sample ID: FS64

Lab Sample ID: 890-2951-17
Matrix: Solid
Date Collected: 09/13/22 12:35
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.180**		0.0504		mg/Kg		09/15/22 13:32	09/17/22 21:51	25
Toluene	**0.0696**		0.0504		mg/Kg		09/15/22 13:32	09/17/22 21:51	25
Ethylbenzene	<0.0504	U	0.0504		mg/Kg		09/15/22 13:32	09/17/22 21:51	25
m-Xylene & p-Xylene	<0.101	U	0.101		mg/Kg		09/15/22 13:32	09/17/22 21:51	25
o-Xylene	<0.0504	U	0.0504		mg/Kg		09/15/22 13:32	09/17/22 21:51	25
Xylenes, Total	<0.101	U	0.101		mg/Kg		09/15/22 13:32	09/17/22 21:51	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*09/15/22 13:32*	*09/17/22 21:51*	*25*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/15/22 13:32*	*09/17/22 21:51*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.250**		0.101		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5840**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/16/22 02:18	5
Diesel Range Organics (Over C10-C28)	**4470**		250		mg/Kg		09/15/22 14:21	09/16/22 02:18	5
Oil Range Organics (Over C28-C36)	**1370**		250		mg/Kg		09/15/22 14:21	09/16/22 02:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*09/15/22 14:21*	*09/16/22 02:18*	*5*
o-Terphenyl	*99*		*70 - 130*	*09/15/22 14:21*	*09/16/22 02:18*	*5*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS64

Lab Sample ID: 890-2951-17
Matrix: Solid
Date Collected: 09/13/22 12:35
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**339**		4.99		mg/Kg			09/15/22 23:53	1

Client Sample ID: FS65

Lab Sample ID: 890-2951-18
Matrix: Solid
Date Collected: 09/13/22 12:40
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.189**		0.0499		mg/Kg		09/15/22 13:32	09/17/22 22:11	25
Toluene	**0.0553**		0.0499		mg/Kg		09/15/22 13:32	09/17/22 22:11	25
Ethylbenzene	<0.0499	U	0.0499		mg/Kg		09/15/22 13:32	09/17/22 22:11	25
m-Xylene & p-Xylene	<0.0998	U	0.0998		mg/Kg		09/15/22 13:32	09/17/22 22:11	25
o-Xylene	**0.101**		0.0499		mg/Kg		09/15/22 13:32	09/17/22 22:11	25
Xylenes, Total	**0.101**		0.0998		mg/Kg		09/15/22 13:32	09/17/22 22:11	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/15/22 13:32*	*09/17/22 22:11*	*25*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*09/15/22 13:32*	*09/17/22 22:11*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.345**		0.0998		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7300**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 14:21	09/16/22 02:38	5
Diesel Range Organics (Over C10-C28)	**5690**		249		mg/Kg		09/15/22 14:21	09/16/22 02:38	5
Oil Range Organics (Over C28-C36)	**1610**		249		mg/Kg		09/15/22 14:21	09/16/22 02:38	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*09/15/22 14:21*	*09/16/22 02:38*	*5*
o-Terphenyl	*101*		*70 - 130*	*09/15/22 14:21*	*09/16/22 02:38*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**482**		4.97		mg/Kg			09/15/22 23:58	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS66

Lab Sample ID: 890-2951-19
Matrix: Solid
Date Collected: 09/13/22 12:45
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 23:13	100
Toluene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 23:13	100
Ethylbenzene	<0.201	U	0.201		mg/Kg		09/15/22 13:32	09/17/22 23:13	100
m-Xylene & p-Xylene	**0.737**		0.402		mg/Kg		09/15/22 13:32	09/17/22 23:13	100
o-Xylene	**0.289**		0.201		mg/Kg		09/15/22 13:32	09/17/22 23:13	100
Xylenes, Total	**1.03**		0.402		mg/Kg		09/15/22 13:32	09/17/22 23:13	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*09/15/22 13:32*	*09/17/22 23:13*	*100*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/15/22 13:32*	*09/17/22 23:13*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**1.03**		0.402		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4190**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 14:21	09/16/22 02:59	5
Diesel Range Organics (Over C10-C28)	**3430**		250		mg/Kg		09/15/22 14:21	09/16/22 02:59	5
Oil Range Organics (Over C28-C36)	**759**		250		mg/Kg		09/15/22 14:21	09/16/22 02:59	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*09/15/22 14:21*	*09/16/22 02:59*	*5*
o-Terphenyl	*97*		*70 - 130*	*09/15/22 14:21*	*09/16/22 02:59*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**206**		5.03		mg/Kg			09/16/22 00:03	1

Client Sample ID: FS67

Lab Sample ID: 890-2951-20
Matrix: Solid
Date Collected: 09/13/22 12:50
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 23:33	100
Toluene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 23:33	100
Ethylbenzene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 23:33	100
m-Xylene & p-Xylene	<0.397	U	0.397		mg/Kg		09/15/22 13:32	09/17/22 23:33	100
o-Xylene	<0.198	U	0.198		mg/Kg		09/15/22 13:32	09/17/22 23:33	100
Xylenes, Total	<0.397	U	0.397		mg/Kg		09/15/22 13:32	09/17/22 23:33	100

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS67

Lab Sample ID: 890-2951-20
Matrix: Solid
Date Collected: 09/13/22 12:50
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/15/22 13:32*	*09/17/22 23:33*	*100*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*09/15/22 13:32*	*09/17/22 23:33*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.397	U	0.397		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4410**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 14:21	09/16/22 03:20	5
Diesel Range Organics (Over C10-C28)	**3550**		249		mg/Kg		09/15/22 14:21	09/16/22 03:20	5
Oil Range Organics (Over C28-C36)	**855**		249		mg/Kg		09/15/22 14:21	09/16/22 03:20	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*91*		*70 - 130*	*09/15/22 14:21*	*09/16/22 03:20*	*5*
o-Terphenyl	*102*		*70 - 130*	*09/15/22 14:21*	*09/16/22 03:20*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1080**		24.9		mg/Kg			09/16/22 00:08	5

Client Sample ID: FS68

Lab Sample ID: 890-2951-21
Matrix: Solid
Date Collected: 09/13/22 12:55
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0503	U	0.0503		mg/Kg		09/16/22 15:45	09/19/22 20:37	25
Toluene	<0.0503	U	0.0503		mg/Kg		09/16/22 15:45	09/19/22 20:37	25
Ethylbenzene	<0.0503	U	0.0503		mg/Kg		09/16/22 15:45	09/19/22 20:37	25
m-Xylene & p-Xylene	<0.101	U	0.101		mg/Kg		09/16/22 15:45	09/19/22 20:37	25
o-Xylene	<0.0503	U	0.0503		mg/Kg		09/16/22 15:45	09/19/22 20:37	25
Xylenes, Total	<0.101	U	0.101		mg/Kg		09/16/22 15:45	09/19/22 20:37	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*09/16/22 15:45*	*09/19/22 20:37*	*25*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/16/22 15:45*	*09/19/22 20:37*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.101	U	0.101		mg/Kg			09/19/22 09:47	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS68

Lab Sample ID: 890-2951-21
Matrix: Solid
Date Collected: 09/13/22 12:55
Date Received: 09/13/22 16:42
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**6430**		250		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		09/15/22 08:44	09/15/22 13:47	5
Diesel Range Organics (Over C10-C28)	**6430**		250		mg/Kg		09/15/22 08:44	09/15/22 13:47	5
OII Range Organics (Over C28-C36)	<250	U	250		mg/Kg		09/15/22 08:44	09/15/22 13:47	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/15/22 08:44*	*09/15/22 13:47*	*5*
o-Terphenyl	*100*		*70 - 130*	*09/15/22 08:44*	*09/15/22 13:47*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**648**		4.97		mg/Kg			09/15/22 15:42	1

Client Sample ID: FS69

Lab Sample ID: 890-2951-22
Matrix: Solid
Date Collected: 09/13/22 13:00
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0998	U	0.0998		mg/Kg		09/16/22 16:25	09/19/22 11:42	50
Toluene	<0.0998	U	0.0998		mg/Kg		09/16/22 16:25	09/19/22 11:42	50
Ethylbenzene	<0.0998	U	0.0998		mg/Kg		09/16/22 16:25	09/19/22 11:42	50
m-Xylene & p-Xylene	<0.200	U	0.200		mg/Kg		09/16/22 16:25	09/19/22 11:42	50
o-Xylene	<0.0998	U	0.0998		mg/Kg		09/16/22 16:25	09/19/22 11:42	50
Xylenes, Total	<0.200	U	0.200		mg/Kg		09/16/22 16:25	09/19/22 11:42	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*09/16/22 16:25*	*09/19/22 11:42*	*50*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/16/22 16:25*	*09/19/22 11:42*	*50*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.200	U	0.200		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**8980**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 08:44	09/15/22 15:14	5
Diesel Range Organics (Over C10-C28)	**8980**		249		mg/Kg		09/15/22 08:44	09/15/22 15:14	5
OII Range Organics (Over C28-C36)	<249	U	249		mg/Kg		09/15/22 08:44	09/15/22 15:14	5

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS69

Lab Sample ID: 890-2951-22
Matrix: Solid
Date Collected: 09/13/22 13:00
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*96*		*70 - 130*	*09/15/22 08:44*	*09/15/22 15:14*	*5*
o-Terphenyl	*101*		*70 - 130*	*09/15/22 08:44*	*09/15/22 15:14*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**194**		5.00	mg/Kg			09/15/22 15:47	1

Client Sample ID: FS70

Lab Sample ID: 890-2951-23
Matrix: Solid
Date Collected: 09/13/22 13:05
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0996	U	0.0996	mg/Kg		09/16/22 16:25	09/19/22 12:02	50
Toluene	<0.0996	U	0.0996	mg/Kg		09/16/22 16:25	09/19/22 12:02	50
Ethylbenzene	<0.0996	U	0.0996	mg/Kg		09/16/22 16:25	09/19/22 12:02	50
m-Xylene & p-Xylene	<0.199	U	0.199	mg/Kg		09/16/22 16:25	09/19/22 12:02	50
o-Xylene	<0.0996	U	0.0996	mg/Kg		09/16/22 16:25	09/19/22 12:02	50
Xylenes, Total	<0.199	U	0.199	mg/Kg		09/16/22 16:25	09/19/22 12:02	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*09/16/22 16:25*	*09/19/22 12:02*	*50*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/16/22 16:25*	*09/19/22 12:02*	*50*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.199	U	0.199	mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16100**		499	mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**4330**		499	mg/Kg		09/15/22 08:44	09/15/22 14:53	10
Diesel Range Organics (Over C10-C28)	**11800**		499	mg/Kg		09/15/22 08:44	09/15/22 14:53	10
Oil Range Organics (Over C28-C36)	<499	U	499	mg/Kg		09/15/22 08:44	09/15/22 14:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*104*		*70 - 130*	*09/15/22 08:44*	*09/15/22 14:53*	*10*
o-Terphenyl	*107*		*70 - 130*	*09/15/22 08:44*	*09/15/22 14:53*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**151**		5.00	mg/Kg			09/15/22 15:54	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS71

Date Collected: 09/13/22 13:10
Date Received: 09/13/22 16:42
Sample Depth: 0.5

Lab Sample ID: 890-2951-24

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0499	U	0.0499		mg/Kg		09/16/22 15:45	09/19/22 20:58	25
Toluene	<0.0499	U	0.0499		mg/Kg		09/16/22 15:45	09/19/22 20:58	25
Ethylbenzene	<0.0499	U	0.0499		mg/Kg		09/16/22 15:45	09/19/22 20:58	25
m-Xylene & p-Xylene	<0.0998	U	0.0998		mg/Kg		09/16/22 15:45	09/19/22 20:58	25
o-Xylene	<0.0499	U	0.0499		mg/Kg		09/16/22 15:45	09/19/22 20:58	25
Xylenes, Total	<0.0998	U	0.0998		mg/Kg		09/16/22 15:45	09/19/22 20:58	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/16/22 15:45*	*09/19/22 20:58*	*25*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/16/22 15:45*	*09/19/22 20:58*	*25*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0998	U	0.0998		mg/Kg			09/19/22 09:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**6940**		249		mg/Kg			09/15/22 17:29	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		09/15/22 08:44	09/15/22 14:08	5
Diesel Range Organics (Over C10-C28)	**6940**		249		mg/Kg		09/15/22 08:44	09/15/22 14:08	5
Oil Range Organics (Over C28-C36)	<249	U	249		mg/Kg		09/15/22 08:44	09/15/22 14:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/15/22 08:44*	*09/15/22 14:08*	*5*
o-Terphenyl	*107*		*70 - 130*	*09/15/22 08:44*	*09/15/22 14:08*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**304**		4.99		mg/Kg			09/15/22 16:00	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-19317-A-1-G MS	Matrix Spike	108	94										
880-19317-A-1-H MSD	Matrix Spike Duplicate	106	99										
890-2951-1	FS48	132 S1+	92										
890-2951-2	FS49	148 S1+	106										
890-2951-2 MS	FS49	111	101										
890-2951-2 MSD	FS49	113	105										
890-2951-3	FS50	126	86										
890-2951-4	FS51	120	89										
890-2951-5	FS52	127	92										
890-2951-6	FS53	137 S1+	102										
890-2951-7	FS54	90	108										
890-2951-8	FS55	105	108										
890-2951-9	FS56	132 S1+	95										
890-2951-10	FS57	134 S1+	88										
890-2951-11	FS58	124	91										
890-2951-12	FS59	118	102										
890-2951-13	FS60	118	103										
890-2951-14	FS61	95	109										
890-2951-15	FS62	160 S1+	104										
890-2951-16	FS63	124	96										
890-2951-17	FS64	80	108										
890-2951-18	FS65	94	111										
890-2951-19	FS66	127	93										
890-2951-20	FS67	112	85										
890-2951-21	FS68	89	97										
890-2951-22	FS69	93	100										
890-2951-23	FS70	89	104										
890-2951-24	FS71	88	94										
890-2984-A-1-F MS	Matrix Spike	112	103										
890-2984-A-1-G MSD	Matrix Spike Duplicate	66 S1-	112										
LCS 880-34593/1-A	Lab Control Sample	119	111										
LCS 880-34689/1-A	Lab Control Sample	105	100										
LCS 880-34693/1-A	Lab Control Sample	107	98										
LCSD 880-34593/2-A	Lab Control Sample Dup	115	106										
LCSD 880-34689/2-A	Lab Control Sample Dup	102	103										
LCSD 880-34693/2-A	Lab Control Sample Dup	106	99										
MB 880-34410/5-B	Method Blank	104	117										
MB 880-34593/5-A	Method Blank	95	87										
MB 880-34689/5-B	Method Blank	101	117										
MB 880-34693/5-A	Method Blank	101	112										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2943-A-29-E MS	Matrix Spike	102	98
890-2943-A-29-F MSD	Matrix Spike Duplicate	102	97
890-2951-1	FS48	80	90
890-2951-2	FS49	99	99
890-2951-2 MS	FS49	88	77
890-2951-2 MSD	FS49	89	77
890-2951-3	FS50	90	102
890-2951-4	FS51	90	97
890-2951-5	FS52	98	112
890-2951-6	FS53	90	104
890-2951-7	FS54	93	100
890-2951-8	FS55	105	106
890-2951-9	FS56	95	104
890-2951-10	FS57	93	100
890-2951-11	FS58	92	98
890-2951-12	FS59	103	110
890-2951-13	FS60	95	106
890-2951-14	FS61	99	107
890-2951-15	FS62	95	112
890-2951-16	FS63	95	108
890-2951-17	FS64	90	99
890-2951-18	FS65	89	101
890-2951-19	FS66	87	97
890-2951-20	FS67	91	102
890-2951-21	FS68	94	100
890-2951-22	FS69	96	101
890-2951-23	FS70	104	107
890-2951-24	FS71	104	107
LCS 880-34554/2-A	Lab Control Sample	101	118
LCS 880-34595/2-A	Lab Control Sample	90	108
LCSD 880-34554/3-A	Lab Control Sample Dup	100	117
LCSD 880-34595/3-A	Lab Control Sample Dup	92	117
MB 880-34554/1-A	Method Blank	133 S1+	150 S1+
MB 880-34595/1-A	Method Blank	110	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34410/5-B
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34410

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/13/22 14:00	09/18/22 17:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/13/22 14:00	09/18/22 17:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/13/22 14:00*	*09/18/22 17:48*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*09/13/22 14:00*	*09/18/22 17:48*	*1*

Lab Sample ID: MB 880-34593/5-A
Matrix: Solid
Analysis Batch: 34713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34593

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/15/22 13:32	09/17/22 15:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/15/22 13:32	09/17/22 15:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/15/22 13:32	09/17/22 15:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/15/22 13:32	09/17/22 15:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/15/22 13:32	09/17/22 15:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/15/22 13:32	09/17/22 15:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/15/22 13:32*	*09/17/22 15:41*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*09/15/22 13:32*	*09/17/22 15:41*	*1*

Lab Sample ID: LCS 880-34593/1-A
Matrix: Solid
Analysis Batch: 34713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34593

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09947		mg/Kg		99	70 - 130		
Toluene			0.100	0.09060		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.1001		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.2042		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1149		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-34593/2-A
Matrix: Solid
Analysis Batch: 34713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34593

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08719		mg/Kg		87	70 - 130	13	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: LCSD 880-34593/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34713 — **Prep Batch: 34593**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08142		mg/Kg		81	70 - 130	11	35
Ethylbenzene			0.100	0.08739		mg/Kg		87	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1814		mg/Kg		91	70 - 130	12	35
o-Xylene			0.100	0.1027		mg/Kg		103	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 890-2951-2 MS — **Client Sample ID: FS49**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34713 — **Prep Batch: 34593**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.164	F1	0.0996	2.149	F1	mg/Kg		1993	70 - 130
Toluene	<0.0504	U F1	0.0996	2.015	F1	mg/Kg		1982	70 - 130
Ethylbenzene	<0.0504	U F1	0.0996	2.129	F1	mg/Kg		2122	70 - 130
m-Xylene & p-Xylene	<0.101	U F1	0.199	4.317	F1	mg/Kg		2149	70 - 130
o-Xylene	<0.0504	U F1	0.0996	2.445	F1	mg/Kg		2443	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-2951-2 MSD — **Client Sample ID: FS49**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34713 — **Prep Batch: 34593**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.164	F1	0.101	2.318	F1	mg/Kg		2136	70 - 130	8	35
Toluene	<0.0504	U F1	0.101	2.120	F1	mg/Kg		2063	70 - 130	5	35
Ethylbenzene	<0.0504	U F1	0.101	2.205	F1	mg/Kg		2172	70 - 130	4	35
m-Xylene & p-Xylene	<0.101	U F1	0.202	4.596	F1	mg/Kg		2262	70 - 130	6	35
o-Xylene	<0.0504	U F1	0.101	2.612	F1	mg/Kg		2579	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 880-34689/5-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 34832 — **Prep Batch: 34689**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 15:45	09/19/22 17:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 15:45	09/19/22 17:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 15:45	09/19/22 17:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 15:45	09/19/22 17:24	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: MB 880-34689/5-B
Matrix: Solid
Analysis Batch: 34832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34689

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 15:45	09/19/22 17:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 15:45	09/19/22 17:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/16/22 15:45*	*09/19/22 17:24*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*09/16/22 15:45*	*09/19/22 17:24*	*1*

Lab Sample ID: LCS 880-34689/1-A
Matrix: Solid
Analysis Batch: 34832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34689

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09148		mg/Kg		91	70 - 130		
Toluene			0.100	0.09608		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09681		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2046		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1027		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-34689/2-A
Matrix: Solid
Analysis Batch: 34832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34689

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09765		mg/Kg		98	70 - 130	7	35
Toluene			0.100	0.09126		mg/Kg		91	70 - 130	5	35
Ethylbenzene			0.100	0.08993		mg/Kg		90	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1909		mg/Kg		95	70 - 130	7	35
o-Xylene			0.100	0.09752		mg/Kg		98	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-2984-A-1-F MS
Matrix: Solid
Analysis Batch: 34832

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U F1	0.0998	0.08170		mg/Kg		82	70 - 130		
Toluene	<0.00200	U F2 F1	0.0998	0.07915		mg/Kg		79	70 - 130		
Ethylbenzene	<0.00200	U F2 F1	0.0998	0.07827		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.1597		mg/Kg		80	70 - 130		
o-Xylene	<0.00200	U F2 F1	0.0998	0.08156		mg/Kg		82	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: 890-2984-A-1-F MS
Matrix: Solid
Analysis Batch: 34832

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34689

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-2984-A-1-G MSD
Matrix: Solid
Analysis Batch: 34832

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.06928	F1	mg/Kg		69	70 - 130	16	35
Toluene	<0.00200	U F2 F1	0.100	0.05454	F2 F1	mg/Kg		54	70 - 130	37	35
Ethylbenzene	<0.00200	U F2 F1	0.100	0.05045	F2 F1	mg/Kg		50	70 - 130	43	35
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.201	0.1004	F2 F1	mg/Kg		50	70 - 130	46	35
o-Xylene	<0.00200	U F2 F1	0.100	0.05598	F2 F1	mg/Kg		56	70 - 130	37	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-34693/5-A
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34693

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 16:25	09/19/22 05:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 16:25	09/19/22 05:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/16/22 16:25	09/19/22 05:25	1
1,4-Difluorobenzene (Surr)	112		70 - 130	09/16/22 16:25	09/19/22 05:25	1

Lab Sample ID: LCS 880-34693/1-A
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34693

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08533		mg/Kg		85	70 - 130		
Toluene			0.100	0.08574		mg/Kg		86	70 - 130		
Ethylbenzene			0.100	0.08382		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1705		mg/Kg		85	70 - 130		
o-Xylene			0.100	0.08599		mg/Kg		86	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: LCS 880-34693/1-A
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34693

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-34693/2-A
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34693

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08638		mg/Kg		86	70 - 130	1	35
Toluene			0.100	0.08834		mg/Kg		88	70 - 130	3	35
Ethylbenzene			0.100	0.08742		mg/Kg		87	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1843		mg/Kg		92	70 - 130	8	35
o-Xylene			0.100	0.09310		mg/Kg		93	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-19317-A-1-G MS
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.0998	0.06447	F1	mg/Kg		65	70 - 130		
Toluene	<0.00199	U F1	0.0998	0.06048	F1	mg/Kg		61	70 - 130		
Ethylbenzene	<0.00199	U F1	0.0998	0.06015	F1	mg/Kg		60	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1217	F1	mg/Kg		61	70 - 130		
o-Xylene	<0.00199	U F1	0.0998	0.06506	F1	mg/Kg		65	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-19317-A-1-H MSD
Matrix: Solid
Analysis Batch: 34745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.07072		mg/Kg		70	70 - 130	9	35
Toluene	<0.00199	U F1	0.100	0.05975	F1	mg/Kg		60	70 - 130	1	35
Ethylbenzene	<0.00199	U F1	0.100	0.05638	F1	mg/Kg		56	70 - 130	6	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1156	F1	mg/Kg		58	70 - 130	5	35
o-Xylene	<0.00199	U F1	0.100	0.06056	F1	mg/Kg		60	70 - 130	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: MB 880-34554/1-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34554

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*09/15/22 08:44*	*09/15/22 09:19*	*1*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*09/15/22 08:44*	*09/15/22 09:19*	*1*

Lab Sample ID: LCS 880-34554/2-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34554

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	830.3		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	901.2		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: LCSD 880-34554/3-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34554

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	805.4		mg/Kg		81	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	890.3		mg/Kg		89	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 890-2943-A-29-E MS
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1049		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	176		996	1029		mg/Kg		86	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: 890-2943-A-29-E MS
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34554

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-2943-A-29-F MSD
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34554

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1078		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	176		999	1034		mg/Kg		86	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: MB 880-34595/1-A
Matrix: Solid
Analysis Batch: 34546

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34595

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:21	09/15/22 18:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 14:21	09/15/22 18:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 14:21	09/15/22 18:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/15/22 14:21	09/15/22 18:43	1
o-Terphenyl	133	S1+	70 - 130	09/15/22 14:21	09/15/22 18:43	1

Lab Sample ID: LCS 880-34595/2-A
Matrix: Solid
Analysis Batch: 34546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34595

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	950.7		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1073		mg/Kg		107	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	108		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Lab Sample ID: LCSD 880-34595/3-A
Matrix: Solid
Analysis Batch: 34546

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34595

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	933.5		mg/Kg		93	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1016		mg/Kg		102	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 890-2951-2 MS
Matrix: Solid
Analysis Batch: 34546

Client Sample ID: FS49
Prep Type: Total/NA
Prep Batch: 34595

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1112		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)	1240	F1	996	1844	F1	mg/Kg		60	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*77*		*70 - 130*

Lab Sample ID: 890-2951-2 MSD
Matrix: Solid
Analysis Batch: 34546

Client Sample ID: FS49
Prep Type: Total/NA
Prep Batch: 34595

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1125		mg/Kg		113	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1240	F1	999	1835	F1	mg/Kg		59	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*77*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34582/1-A
Matrix: Solid
Analysis Batch: 34594

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/15/22 12:37	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-34582/2-A
Matrix: Solid
Analysis Batch: 34594

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	235.3		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-34582/3-A
Matrix: Solid
Analysis Batch: 34594

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	236.0		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-19192-A-3-C MS
Matrix: Solid
Analysis Batch: 34594

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	382		249	612.3		mg/Kg		93	90 - 110		

Lab Sample ID: 880-19192-A-3-D MSD
Matrix: Solid
Analysis Batch: 34594

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	382		249	618.5		mg/Kg		95	90 - 110	1	20

Lab Sample ID: MB 880-34583/1-A
Matrix: Solid
Analysis Batch: 34605

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/15/22 21:42	1

Lab Sample ID: LCS 880-34583/2-A
Matrix: Solid
Analysis Batch: 34605

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	248.0		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-34583/3-A
Matrix: Solid
Analysis Batch: 34605

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	249.2		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2951-1 MS
Matrix: Solid
Analysis Batch: 34605

Client Sample ID: FS48
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	303		249	532.9		mg/Kg		93	90 - 110		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2951-1 MSD
Matrix: Solid
Analysis Batch: 34605

Client Sample ID: FS48
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	303		249	533.9		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 890-2951-11 MS
Matrix: Solid
Analysis Batch: 34605

Client Sample ID: FS58
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	487		1250	1793		mg/Kg		105	90 - 110

Lab Sample ID: 890-2951-11 MSD
Matrix: Solid
Analysis Batch: 34605

Client Sample ID: FS58
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	487		1250	1792		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

GC VOA

Prep Batch: 34410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34410/5-B	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Total/NA	Solid	5035	
890-2951-2	FS49	Total/NA	Solid	5035	
890-2951-3	FS50	Total/NA	Solid	5035	
890-2951-4	FS51	Total/NA	Solid	5035	
890-2951-5	FS52	Total/NA	Solid	5035	
890-2951-6	FS53	Total/NA	Solid	5035	
890-2951-7	FS54	Total/NA	Solid	5035	
890-2951-8	FS55	Total/NA	Solid	5035	
890-2951-9	FS56	Total/NA	Solid	5035	
890-2951-10	FS57	Total/NA	Solid	5035	
890-2951-11	FS58	Total/NA	Solid	5035	
890-2951-12	FS59	Total/NA	Solid	5035	
890-2951-13	FS60	Total/NA	Solid	5035	
890-2951-14	FS61	Total/NA	Solid	5035	
890-2951-15	FS62	Total/NA	Solid	5035	
890-2951-16	FS63	Total/NA	Solid	5035	
890-2951-17	FS64	Total/NA	Solid	5035	
890-2951-18	FS65	Total/NA	Solid	5035	
890-2951-19	FS66	Total/NA	Solid	5035	
890-2951-20	FS67	Total/NA	Solid	5035	
MB 880-34593/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34593/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34593/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2951-2 MS	FS49	Total/NA	Solid	5035	
890-2951-2 MSD	FS49	Total/NA	Solid	5035	

Prep Batch: 34689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-21	FS68	Total/NA	Solid	5035	
890-2951-24	FS71	Total/NA	Solid	5035	
MB 880-34689/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-34689/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34689/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2984-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-2984-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 34693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-22	FS69	Total/NA	Solid	5035	
890-2951-23	FS70	Total/NA	Solid	5035	
MB 880-34693/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34693/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34693/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19317-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-19317-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

GC VOA

Analysis Batch: 34713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Total/NA	Solid	8021B	34593
890-2951-2	FS49	Total/NA	Solid	8021B	34593
890-2951-3	FS50	Total/NA	Solid	8021B	34593
890-2951-4	FS51	Total/NA	Solid	8021B	34593
890-2951-5	FS52	Total/NA	Solid	8021B	34593
890-2951-6	FS53	Total/NA	Solid	8021B	34593
890-2951-7	FS54	Total/NA	Solid	8021B	34593
890-2951-8	FS55	Total/NA	Solid	8021B	34593
890-2951-9	FS56	Total/NA	Solid	8021B	34593
890-2951-10	FS57	Total/NA	Solid	8021B	34593
890-2951-11	FS58	Total/NA	Solid	8021B	34593
890-2951-12	FS59	Total/NA	Solid	8021B	34593
890-2951-13	FS60	Total/NA	Solid	8021B	34593
890-2951-14	FS61	Total/NA	Solid	8021B	34593
890-2951-15	FS62	Total/NA	Solid	8021B	34593
890-2951-16	FS63	Total/NA	Solid	8021B	34593
890-2951-17	FS64	Total/NA	Solid	8021B	34593
890-2951-18	FS65	Total/NA	Solid	8021B	34593
890-2951-19	FS66	Total/NA	Solid	8021B	34593
890-2951-20	FS67	Total/NA	Solid	8021B	34593
MB 880-34593/5-A	Method Blank	Total/NA	Solid	8021B	34593
LCS 880-34593/1-A	Lab Control Sample	Total/NA	Solid	8021B	34593
LCSD 880-34593/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34593
890-2951-2 MS	FS49	Total/NA	Solid	8021B	34593
890-2951-2 MSD	FS49	Total/NA	Solid	8021B	34593

Analysis Batch: 34745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-22	FS69	Total/NA	Solid	8021B	34693
890-2951-23	FS70	Total/NA	Solid	8021B	34693
MB 880-34410/5-B	Method Blank	Total/NA	Solid	8021B	34410
MB 880-34693/5-A	Method Blank	Total/NA	Solid	8021B	34693
LCS 880-34693/1-A	Lab Control Sample	Total/NA	Solid	8021B	34693
LCSD 880-34693/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34693
880-19317-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	34693
880-19317-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34693

Analysis Batch: 34797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Total/NA	Solid	Total BTEX	
890-2951-2	FS49	Total/NA	Solid	Total BTEX	
890-2951-3	FS50	Total/NA	Solid	Total BTEX	
890-2951-4	FS51	Total/NA	Solid	Total BTEX	
890-2951-5	FS52	Total/NA	Solid	Total BTEX	
890-2951-6	FS53	Total/NA	Solid	Total BTEX	
890-2951-7	FS54	Total/NA	Solid	Total BTEX	
890-2951-8	FS55	Total/NA	Solid	Total BTEX	
890-2951-9	FS56	Total/NA	Solid	Total BTEX	
890-2951-10	FS57	Total/NA	Solid	Total BTEX	
890-2951-11	FS58	Total/NA	Solid	Total BTEX	
890-2951-12	FS59	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

GC VOA (Continued)

Analysis Batch: 34797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-13	FS60	Total/NA	Solid	Total BTEX	
890-2951-14	FS61	Total/NA	Solid	Total BTEX	
890-2951-15	FS62	Total/NA	Solid	Total BTEX	
890-2951-16	FS63	Total/NA	Solid	Total BTEX	
890-2951-17	FS64	Total/NA	Solid	Total BTEX	
890-2951-18	FS65	Total/NA	Solid	Total BTEX	
890-2951-19	FS66	Total/NA	Solid	Total BTEX	
890-2951-20	FS67	Total/NA	Solid	Total BTEX	
890-2951-21	FS68	Total/NA	Solid	Total BTEX	
890-2951-22	FS69	Total/NA	Solid	Total BTEX	
890-2951-23	FS70	Total/NA	Solid	Total BTEX	
890-2951-24	FS71	Total/NA	Solid	Total BTEX	

Analysis Batch: 34832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-21	FS68	Total/NA	Solid	8021B	34689
890-2951-24	FS71	Total/NA	Solid	8021B	34689
MB 880-34689/5-B	Method Blank	Total/NA	Solid	8021B	34689
LCS 880-34689/1-A	Lab Control Sample	Total/NA	Solid	8021B	34689
LCSD 880-34689/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34689
890-2984-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	34689
890-2984-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34689

GC Semi VOA

Analysis Batch: 34546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Total/NA	Solid	8015B NM	34595
890-2951-2	FS49	Total/NA	Solid	8015B NM	34595
890-2951-3	FS50	Total/NA	Solid	8015B NM	34595
890-2951-4	FS51	Total/NA	Solid	8015B NM	34595
890-2951-5	FS52	Total/NA	Solid	8015B NM	34595
890-2951-6	FS53	Total/NA	Solid	8015B NM	34595
890-2951-7	FS54	Total/NA	Solid	8015B NM	34595
890-2951-8	FS55	Total/NA	Solid	8015B NM	34595
890-2951-9	FS56	Total/NA	Solid	8015B NM	34595
890-2951-10	FS57	Total/NA	Solid	8015B NM	34595
890-2951-11	FS58	Total/NA	Solid	8015B NM	34595
890-2951-12	FS59	Total/NA	Solid	8015B NM	34595
890-2951-13	FS60	Total/NA	Solid	8015B NM	34595
890-2951-14	FS61	Total/NA	Solid	8015B NM	34595
890-2951-15	FS62	Total/NA	Solid	8015B NM	34595
890-2951-16	FS63	Total/NA	Solid	8015B NM	34595
890-2951-17	FS64	Total/NA	Solid	8015B NM	34595
890-2951-18	FS65	Total/NA	Solid	8015B NM	34595
890-2951-19	FS66	Total/NA	Solid	8015B NM	34595
890-2951-20	FS67	Total/NA	Solid	8015B NM	34595
MB 880-34595/1-A	Method Blank	Total/NA	Solid	8015B NM	34595
LCS 880-34595/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34595
LCSD 880-34595/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34595
890-2951-2 MS	FS49	Total/NA	Solid	8015B NM	34595

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

GC Semi VOA (Continued)

Analysis Batch: 34546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-2 MSD	FS49	Total/NA	Solid	8015B NM	34595

Analysis Batch: 34548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-21	FS68	Total/NA	Solid	8015B NM	34554
890-2951-22	FS69	Total/NA	Solid	8015B NM	34554
890-2951-23	FS70	Total/NA	Solid	8015B NM	34554
890-2951-24	FS71	Total/NA	Solid	8015B NM	34554
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015B NM	34554
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34554
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34554
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34554
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34554

Prep Batch: 34554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-21	FS68	Total/NA	Solid	8015NM Prep	
890-2951-22	FS69	Total/NA	Solid	8015NM Prep	
890-2951-23	FS70	Total/NA	Solid	8015NM Prep	
890-2951-24	FS71	Total/NA	Solid	8015NM Prep	
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 34595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Total/NA	Solid	8015NM Prep	
890-2951-2	FS49	Total/NA	Solid	8015NM Prep	
890-2951-3	FS50	Total/NA	Solid	8015NM Prep	
890-2951-4	FS51	Total/NA	Solid	8015NM Prep	
890-2951-5	FS52	Total/NA	Solid	8015NM Prep	
890-2951-6	FS53	Total/NA	Solid	8015NM Prep	
890-2951-7	FS54	Total/NA	Solid	8015NM Prep	
890-2951-8	FS55	Total/NA	Solid	8015NM Prep	
890-2951-9	FS56	Total/NA	Solid	8015NM Prep	
890-2951-10	FS57	Total/NA	Solid	8015NM Prep	
890-2951-11	FS58	Total/NA	Solid	8015NM Prep	
890-2951-12	FS59	Total/NA	Solid	8015NM Prep	
890-2951-13	FS60	Total/NA	Solid	8015NM Prep	
890-2951-14	FS61	Total/NA	Solid	8015NM Prep	
890-2951-15	FS62	Total/NA	Solid	8015NM Prep	
890-2951-16	FS63	Total/NA	Solid	8015NM Prep	
890-2951-17	FS64	Total/NA	Solid	8015NM Prep	
890-2951-18	FS65	Total/NA	Solid	8015NM Prep	
890-2951-19	FS66	Total/NA	Solid	8015NM Prep	
890-2951-20	FS67	Total/NA	Solid	8015NM Prep	
MB 880-34595/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34595/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34595/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

GC Semi VOA (Continued)

Prep Batch: 34595 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-2 MS	FS49	Total/NA	Solid	8015NM Prep	
890-2951-2 MSD	FS49	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Total/NA	Solid	8015 NM	
890-2951-2	FS49	Total/NA	Solid	8015 NM	
890-2951-3	FS50	Total/NA	Solid	8015 NM	
890-2951-4	FS51	Total/NA	Solid	8015 NM	
890-2951-5	FS52	Total/NA	Solid	8015 NM	
890-2951-6	FS53	Total/NA	Solid	8015 NM	
890-2951-7	FS54	Total/NA	Solid	8015 NM	
890-2951-8	FS55	Total/NA	Solid	8015 NM	
890-2951-9	FS56	Total/NA	Solid	8015 NM	
890-2951-10	FS57	Total/NA	Solid	8015 NM	
890-2951-11	FS58	Total/NA	Solid	8015 NM	
890-2951-12	FS59	Total/NA	Solid	8015 NM	
890-2951-13	FS60	Total/NA	Solid	8015 NM	
890-2951-14	FS61	Total/NA	Solid	8015 NM	
890-2951-15	FS62	Total/NA	Solid	8015 NM	
890-2951-16	FS63	Total/NA	Solid	8015 NM	
890-2951-17	FS64	Total/NA	Solid	8015 NM	
890-2951-18	FS65	Total/NA	Solid	8015 NM	
890-2951-19	FS66	Total/NA	Solid	8015 NM	
890-2951-20	FS67	Total/NA	Solid	8015 NM	
890-2951-21	FS68	Total/NA	Solid	8015 NM	
890-2951-22	FS69	Total/NA	Solid	8015 NM	
890-2951-23	FS70	Total/NA	Solid	8015 NM	
890-2951-24	FS71	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-21	FS68	Soluble	Solid	DI Leach	
890-2951-22	FS69	Soluble	Solid	DI Leach	
890-2951-23	FS70	Soluble	Solid	DI Leach	
890-2951-24	FS71	Soluble	Solid	DI Leach	
MB 880-34582/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34582/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34582/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19192-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19192-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 34583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Soluble	Solid	DI Leach	
890-2951-2	FS49	Soluble	Solid	DI Leach	
890-2951-3	FS50	Soluble	Solid	DI Leach	
890-2951-4	FS51	Soluble	Solid	DI Leach	
890-2951-5	FS52	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

HPLC/IC (Continued)

Leach Batch: 34583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-6	FS53	Soluble	Solid	DI Leach	
890-2951-7	FS54	Soluble	Solid	DI Leach	
890-2951-8	FS55	Soluble	Solid	DI Leach	
890-2951-9	FS56	Soluble	Solid	DI Leach	
890-2951-10	FS57	Soluble	Solid	DI Leach	
890-2951-11	FS58	Soluble	Solid	DI Leach	
890-2951-12	FS59	Soluble	Solid	DI Leach	
890-2951-13	FS60	Soluble	Solid	DI Leach	
890-2951-14	FS61	Soluble	Solid	DI Leach	
890-2951-15	FS62	Soluble	Solid	DI Leach	
890-2951-16	FS63	Soluble	Solid	DI Leach	
890-2951-17	FS64	Soluble	Solid	DI Leach	
890-2951-18	FS65	Soluble	Solid	DI Leach	
890-2951-19	FS66	Soluble	Solid	DI Leach	
890-2951-20	FS67	Soluble	Solid	DI Leach	
MB 880-34583/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34583/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34583/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2951-1 MS	FS48	Soluble	Solid	DI Leach	
890-2951-1 MSD	FS48	Soluble	Solid	DI Leach	
890-2951-11 MS	FS58	Soluble	Solid	DI Leach	
890-2951-11 MSD	FS58	Soluble	Solid	DI Leach	

Analysis Batch: 34594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-21	FS68	Soluble	Solid	300.0	34582
890-2951-22	FS69	Soluble	Solid	300.0	34582
890-2951-23	FS70	Soluble	Solid	300.0	34582
890-2951-24	FS71	Soluble	Solid	300.0	34582
MB 880-34582/1-A	Method Blank	Soluble	Solid	300.0	34582
LCS 880-34582/2-A	Lab Control Sample	Soluble	Solid	300.0	34582
LCSD 880-34582/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34582
880-19192-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	34582
880-19192-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34582

Analysis Batch: 34605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-1	FS48	Soluble	Solid	300.0	34583
890-2951-2	FS49	Soluble	Solid	300.0	34583
890-2951-3	FS50	Soluble	Solid	300.0	34583
890-2951-4	FS51	Soluble	Solid	300.0	34583
890-2951-5	FS52	Soluble	Solid	300.0	34583
890-2951-6	FS53	Soluble	Solid	300.0	34583
890-2951-7	FS54	Soluble	Solid	300.0	34583
890-2951-8	FS55	Soluble	Solid	300.0	34583
890-2951-9	FS56	Soluble	Solid	300.0	34583
890-2951-10	FS57	Soluble	Solid	300.0	34583
890-2951-11	FS58	Soluble	Solid	300.0	34583
890-2951-12	FS59	Soluble	Solid	300.0	34583
890-2951-13	FS60	Soluble	Solid	300.0	34583
890-2951-14	FS61	Soluble	Solid	300.0	34583

QC Association Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

HPLC/IC (Continued)

Analysis Batch: 34605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2951-15	FS62	Soluble	Solid	300.0	34583
890-2951-16	FS63	Soluble	Solid	300.0	34583
890-2951-17	FS64	Soluble	Solid	300.0	34583
890-2951-18	FS65	Soluble	Solid	300.0	34583
890-2951-19	FS66	Soluble	Solid	300.0	34583
890-2951-20	FS67	Soluble	Solid	300.0	34583
MB 880-34583/1-A	Method Blank	Soluble	Solid	300.0	34583
LCS 880-34583/2-A	Lab Control Sample	Soluble	Solid	300.0	34583
LCSD 880-34583/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34583
890-2951-1 MS	FS48	Soluble	Solid	300.0	34583
890-2951-1 MSD	FS48	Soluble	Solid	300.0	34583
890-2951-11 MS	FS58	Soluble	Solid	300.0	34583
890-2951-11 MSD	FS58	Soluble	Solid	300.0	34583

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS48
Date Collected: 09/13/22 11:15
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 17:24	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 20:49	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 21:57	CH	EET MID

Client Sample ID: FS49
Date Collected: 09/13/22 11:20
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 16:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34546	09/15/22 19:46	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:11	CH	EET MID

Client Sample ID: FS50
Date Collected: 09/13/22 11:25
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 17:45	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 21:09	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:16	CH	EET MID

Client Sample ID: FS51
Date Collected: 09/13/22 11:30
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 18:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS51
Date Collected: 09/13/22 11:30
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-4
Matrix: Solid

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			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 21:30	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:21	CH	EET MID

Client Sample ID: FS52
Date Collected: 09/13/22 11:35
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 18:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 21:51	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:26	CH	EET MID

Client Sample ID: FS53
Date Collected: 09/13/22 11:40
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	34713	09/17/22 16:23	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 22:11	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:40	CH	EET MID

Client Sample ID: FS54
Date Collected: 09/13/22 11:45
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 16:43	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34546	09/15/22 22:32	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS54
Date Collected: 09/13/22 11:45
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		5			34605	09/15/22 22:45	CH	EET MID

Client Sample ID: FS55
Date Collected: 09/13/22 11:50
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 17:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34546	09/15/22 22:53	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:50	CH	EET MID

Client Sample ID: FS56
Date Collected: 09/13/22 11:55
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 18:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 23:13	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 22:55	CH	EET MID

Client Sample ID: FS57
Date Collected: 09/13/22 12:00
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 19:07	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/15/22 23:34	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:00	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS58

Lab Sample ID: 890-2951-11

Date Collected: 09/13/22 12:05
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 22:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34546	09/16/22 00:14	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		5			34605	09/15/22 23:05	CH	EET MID

Client Sample ID: FS59

Lab Sample ID: 890-2951-12

Date Collected: 09/13/22 12:10
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	34713	09/17/22 20:29	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 00:35	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:19	CH	EET MID

Client Sample ID: FS60

Lab Sample ID: 890-2951-13

Date Collected: 09/13/22 12:15
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 20:49	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 00:55	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:24	CH	EET MID

Client Sample ID: FS61

Lab Sample ID: 890-2951-14

Date Collected: 09/13/22 12:20
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 21:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS61

Date Collected: 09/13/22 12:20
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-14
Matrix: Solid

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			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 01:15	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:39	CH	EET MID

Client Sample ID: FS62

Date Collected: 09/13/22 12:25
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 21:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 01:36	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:44	CH	EET MID

Client Sample ID: FS63

Date Collected: 09/13/22 12:30
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 22:52	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 01:57	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:48	CH	EET MID

Client Sample ID: FS64

Date Collected: 09/13/22 12:35
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 21:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 02:18	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS64

Date Collected: 09/13/22 12:35
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:53	CH	EET MID

Client Sample ID: FS65

Date Collected: 09/13/22 12:40
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34713	09/17/22 22:11	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 02:38	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/15/22 23:58	CH	EET MID

Client Sample ID: FS66

Date Collected: 09/13/22 12:45
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 23:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 02:59	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		1			34605	09/16/22 00:03	CH	EET MID

Client Sample ID: FS67

Date Collected: 09/13/22 12:50
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	34593	09/15/22 13:32	EL	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34713	09/17/22 23:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34595	09/15/22 14:21	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34546	09/16/22 03:20	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34583	09/15/22 11:18	SMC	EET MID
Soluble	Analysis	300.0		5			34605	09/16/22 00:08	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS68

Lab Sample ID: 890-2951-21

Date Collected: 09/13/22 12:55
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34689	09/16/22 15:45	MR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34832	09/19/22 20:37	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34548	09/15/22 13:47	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34582	09/15/22 11:12	SMC	EET MID
Soluble	Analysis	300.0		1			34594	09/15/22 15:42	CH	EET MID

Client Sample ID: FS69

Lab Sample ID: 890-2951-22

Date Collected: 09/13/22 13:00
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34693	09/16/22 16:25	MR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	34745	09/19/22 11:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34548	09/15/22 15:14	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34582	09/15/22 11:12	SMC	EET MID
Soluble	Analysis	300.0		1			34594	09/15/22 15:47	CH	EET MID

Client Sample ID: FS70

Lab Sample ID: 890-2951-23

Date Collected: 09/13/22 13:05
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34693	09/16/22 16:25	MR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	34745	09/19/22 12:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	34548	09/15/22 14:53	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34582	09/15/22 11:12	SMC	EET MID
Soluble	Analysis	300.0		1			34594	09/15/22 15:54	CH	EET MID

Client Sample ID: FS71

Lab Sample ID: 890-2951-24

Date Collected: 09/13/22 13:10
Matrix: Solid
Date Received: 09/13/22 16:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34689	09/16/22 15:45	MR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34832	09/19/22 20:58	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34797	09/19/22 09:47	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Client Sample ID: FS71

Date Collected: 09/13/22 13:10
Date Received: 09/13/22 16:42

Lab Sample ID: 890-2951-24

Matrix: Solid

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			34620	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34548	09/15/22 14:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34582	09/15/22 11:12	SMC	EET MID
Soluble	Analysis	300.0		1			34594	09/15/22 16:00	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EMSU B

Job ID: 890-2951-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2951-1	FS48	Solid	09/13/22 11:15	09/13/22 16:42	0.5
890-2951-2	FS49	Solid	09/13/22 11:20	09/13/22 16:42	0.5
890-2951-3	FS50	Solid	09/13/22 11:25	09/13/22 16:42	0.5
890-2951-4	FS51	Solid	09/13/22 11:30	09/13/22 16:42	0.5
890-2951-5	FS52	Solid	09/13/22 11:35	09/13/22 16:42	0.5
890-2951-6	FS53	Solid	09/13/22 11:40	09/13/22 16:42	0.5
890-2951-7	FS54	Solid	09/13/22 11:45	09/13/22 16:42	0.5
890-2951-8	FS55	Solid	09/13/22 11:50	09/13/22 16:42	0.5
890-2951-9	FS56	Solid	09/13/22 11:55	09/13/22 16:42	0.5
890-2951-10	FS57	Solid	09/13/22 12:00	09/13/22 16:42	0.5
890-2951-11	FS58	Solid	09/13/22 12:05	09/13/22 16:42	0.5
890-2951-12	FS59	Solid	09/13/22 12:10	09/13/22 16:42	0.5
890-2951-13	FS60	Solid	09/13/22 12:15	09/13/22 16:42	0.5
890-2951-14	FS61	Solid	09/13/22 12:20	09/13/22 16:42	0.5
890-2951-15	FS62	Solid	09/13/22 12:25	09/13/22 16:42	0.5
890-2951-16	FS63	Solid	09/13/22 12:30	09/13/22 16:42	0.5
890-2951-17	FS64	Solid	09/13/22 12:35	09/13/22 16:42	0.5
890-2951-18	FS65	Solid	09/13/22 12:40	09/13/22 16:42	0.5
890-2951-19	FS66	Solid	09/13/22 12:45	09/13/22 16:42	0.5
890-2951-20	FS67	Solid	09/13/22 12:50	09/13/22 16:42	0.5
890-2951-21	FS68	Solid	09/13/22 12:55	09/13/22 16:42	0.5
890-2951-22	FS69	Solid	09/13/22 13:00	09/13/22 16:42	0.5
890-2951-23	FS70	Solid	09/13/22 13:05	09/13/22 16:42	0.5
890-2951-24	FS71	Solid	09/13/22 13:10	09/13/22 16:42	0.5

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissy	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B
Project Number:	03C2077002
Project Location:	32.5649, -103.3183
Sampler's Name:	Kase Parker
PO #:	

Turn Around

☐ Routine ☑ Rush
Due Date: 2day TAT
TAT starts the day received by the lab, if received by 4:30pm

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TWmod1	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	26.2	
Total Containers:		Corrected Temperature:	26.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
FS48	S	9/13/2022	11:15	0.5'				x	x	x
FS49	S	9/13/2022	11:20	0.5'				x	x	x
FS50	S	9/13/2022	11:25	0.5'				x	x	x
FS51	S	9/13/2022	11:30	0.5'				x	x	x
FS52	S	9/13/2022	11:35	0.5'				x	x	x
FS53	S	9/13/2022	11:40	0.5'				x	x	x
FS54	S	9/13/2022	11:45	0.5'				x	x	x
FS55	S	9/13/2022	11:50	0.5'				x	x	x
FS56	S	9/13/2022	11:55	0.5'				x	x	x
FS57	S	9/13/2022	12:00	0.5'				x	x	x

890-2951 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID:
NAPP2206638414
Cost Center:
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			9.13.22 1642	4		
				6		

Revised Date 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM
Released to Imaging: 10/13/2023 10:56:27 AM

9/20/2022

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager:	Tacoma Morrissy	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B	Turn Around	
Project Number:	03C2077002	☐ Routine ☑ Rush	
Project Location:	32.5649, -103.3183	Due Date: 2day TAT	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021	Sample Comments
FS58	S	9/13/2022	12:05	0.5'				x	x	x	Incident ID:
FS59	S	9/13/2022	12:10	0.5'				x	x	x	NAPP2206638414
FS60	S	9/13/2022	12:15	0.5'				x	x	x	Cost Center:
FS61	S	9/13/2022	12:20	0.5'				x	x	x	
FS62	S	9/13/2022	12:25	0.5'				x	x	x	AFE:
FS63	S	9/13/2022	12:30	0.5'				x	x	x	
FS64	S	9/13/2022	12:35	0.5'				x	x	x	
FS65	S	9/13/2022	12:40	0.5'				x	x	x	
FS66	S	9/13/2022	12:45	0.5'				x	x	x	
FS67	S	9/13/2022	12:50	0.5'				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 SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Tacoma Morrissy	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B	**Turn Around**	
Project Number:	03C2077002	☐ Routine ☑ Rush	
Project Location:	32.5649, -103.3183	Due Date: 2day TAT	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS68	S	9/13/2022	12:55	0.5'			x	x	x	Incident ID:
FS69	S	9/13/2022	13:00	0.5'			x	x	x	NAPP2206638414
FS70	S	9/13/2022	13:05	0.5'			x	x	x	Cost Center:
FS71	S	9/13/2022	13:10	0.5'			x	x	x	
										AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2951-1
SDG Number: 03C2077002

Login Number: 2951
List Number: 1
Creator: Clifton, Cloe

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2951-1
SDG Number: 03C2077002

Login Number: 2951
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/15/22 10:32 AM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-3112-1
Laboratory Sample Delivery Group: 03C2077001
Client Project/Site: EMSU Satellite Battery #10

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
10/10/2022 10:11:24 AM

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

LINKS
Review your project results through my EOL
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Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Laboratory Job ID: 890-3112-1
SDG: 03C2077001

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Job ID: 890-3112-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3112-1

Receipt
The samples were received on 9/29/2022 1:19 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 14.0°C

GC VOA
Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-36449 and analytical batch 880-36442 recovered outside control limits for the following analytes: Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene Due to a misinjection.

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH05A (890-3112-2), PH06 (890-3112-3) and (LCS 880-36449/1-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-35915/2-A) and (LCSD 880-35915/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3112-A-1-B MS) and (890-3112-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Released to Imaging: 10/13/2023 10:56:27 AM

Client Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH05

Date Collected: 09/29/22 08:50
Date Received: 09/29/22 13:19
Sample Depth: 2'

Lab Sample ID: 890-3112-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 08:33	1
Toluene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 08:33	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 08:33	1
m-Xylene & p-Xylene	<0.00401	U *- *1	0.00401		mg/Kg		10/08/22 12:21	10/09/22 08:33	1
o-Xylene	<0.00200	U *+ *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 08:33	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/08/22 12:21	10/09/22 08:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*10/08/22 12:21*	*10/09/22 08:33*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*10/08/22 12:21*	*10/09/22 08:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/10/22 10:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/04/22 09:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 11:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 11:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*10/03/22 08:31*	*10/03/22 11:03*	*1*
o-Terphenyl	*88*		*70 - 130*	*10/03/22 08:31*	*10/03/22 11:03*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**269**		4.97		mg/Kg			10/06/22 13:06	1

Client Sample ID: PH05A

Date Collected: 09/29/22 08:55
Date Received: 09/29/22 13:19
Sample Depth: 4'

Lab Sample ID: 890-3112-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		10/08/22 12:21	10/09/22 08:54	1
Toluene	<0.00199	U *- *1	0.00199		mg/Kg		10/08/22 12:21	10/09/22 08:54	1
Ethylbenzene	<0.00199	U *- *1	0.00199		mg/Kg		10/08/22 12:21	10/09/22 08:54	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		10/08/22 12:21	10/09/22 08:54	1
o-Xylene	<0.00199	U *+ *1	0.00199		mg/Kg		10/08/22 12:21	10/09/22 08:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/08/22 12:21	10/09/22 08:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*10/08/22 12:21*	*10/09/22 08:54*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH05A

Date Collected: 09/29/22 08:55
Date Received: 09/29/22 13:19
Sample Depth: 4'

Lab Sample ID: 890-3112-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*10/08/22 12:21*	*10/09/22 08:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/10/22 10:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/04/22 09:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/03/22 08:31	10/03/22 12:05	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/03/22 08:31	10/03/22 12:05	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/03/22 08:31	10/03/22 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*10/03/22 08:31*	*10/03/22 12:05*	*1*
o-Terphenyl	*81*		*70 - 130*	*10/03/22 08:31*	*10/03/22 12:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**775**		4.95	mg/Kg			10/06/22 13:12	1

Client Sample ID: PH06

Date Collected: 09/29/22 09:00
Date Received: 09/29/22 13:19
Sample Depth: 1'

Lab Sample ID: 890-3112-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 09:14	1
Toluene	<0.00199	U *- *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 09:14	1
Ethylbenzene	<0.00199	U *- *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 09:14	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398	mg/Kg		10/08/22 12:21	10/09/22 09:14	1
o-Xylene	<0.00199	U *+ *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 09:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/08/22 12:21	10/09/22 09:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*10/08/22 12:21*	*10/09/22 09:14*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/08/22 12:21*	*10/09/22 09:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/10/22 10:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/04/22 09:15	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH06

Date Collected: 09/29/22 09:00
Date Received: 09/29/22 13:19
Sample Depth: 1'

Lab Sample ID: 890-3112-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/03/22 08:31	10/03/22 12:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/03/22 08:31	10/03/22 12:25	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/03/22 08:31	10/03/22 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*10/03/22 08:31*	*10/03/22 12:25*	*1*
o-Terphenyl	*83*		*70 - 130*	*10/03/22 08:31*	*10/03/22 12:25*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92.4**		5.01		mg/Kg			10/06/22 13:17	1

Client Sample ID: PH06A

Date Collected: 09/29/22 09:05
Date Received: 09/29/22 13:19
Sample Depth: 2'

Lab Sample ID: 890-3112-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 09:35	1
Toluene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 09:35	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 09:35	1
m-Xylene & p-Xylene	<0.00400	U *- *1	0.00400		mg/Kg		10/08/22 12:21	10/09/22 09:35	1
o-Xylene	<0.00200	U *+ *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 09:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/08/22 12:21	10/09/22 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*10/08/22 12:21*	*10/09/22 09:35*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*10/08/22 12:21*	*10/09/22 09:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/10/22 10:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/04/22 09:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/03/22 08:31	10/03/22 12:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/03/22 08:31	10/03/22 12:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/03/22 08:31	10/03/22 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*10/03/22 08:31*	*10/03/22 12:46*	*1*
o-Terphenyl	*83*		*70 - 130*	*10/03/22 08:31*	*10/03/22 12:46*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH06A

Lab Sample ID: 890-3112-4
Matrix: Solid
Date Collected: 09/29/22 09:05
Date Received: 09/29/22 13:19
Sample Depth: 2'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	408		4.97		mg/Kg			10/06/22 13:35	1

Client Sample ID: PH07

Lab Sample ID: 890-3112-5
Matrix: Solid
Date Collected: 09/29/22 09:15
Date Received: 09/29/22 13:19
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *- *1	0.00202		mg/Kg		10/08/22 12:21	10/09/22 09:55	1
Toluene	<0.00202	U *- *1	0.00202		mg/Kg		10/08/22 12:21	10/09/22 09:55	1
Ethylbenzene	<0.00202	U *- *1	0.00202		mg/Kg		10/08/22 12:21	10/09/22 09:55	1
m-Xylene & p-Xylene	<0.00404	U *- *1	0.00404		mg/Kg		10/08/22 12:21	10/09/22 09:55	1
o-Xylene	<0.00202	U *+ *1	0.00202		mg/Kg		10/08/22 12:21	10/09/22 09:55	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/08/22 12:21	10/09/22 09:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*10/08/22 12:21*	*10/09/22 09:55*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*10/08/22 12:21*	*10/09/22 09:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/10/22 10:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/04/22 09:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 13:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 13:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/03/22 08:31*	*10/03/22 13:06*	*1*
o-Terphenyl	*90*		*70 - 130*	*10/03/22 08:31*	*10/03/22 13:06*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	284		5.00		mg/Kg			10/06/22 13:41	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH07A

Date Collected: 09/29/22 09:20
Date Received: 09/29/22 13:19
Sample Depth: 4'

Lab Sample ID: 890-3112-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 10:16	1
Toluene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 10:16	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 10:16	1
m-Xylene & p-Xylene	<0.00399	U *- *1	0.00399		mg/Kg		10/08/22 12:21	10/09/22 10:16	1
o-Xylene	<0.00200	U *+ *1	0.00200		mg/Kg		10/08/22 12:21	10/09/22 10:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/08/22 12:21	10/09/22 10:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*10/08/22 12:21*	*10/09/22 10:16*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/08/22 12:21*	*10/09/22 10:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/10/22 10:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/04/22 09:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 13:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 13:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/03/22 08:31*	*10/03/22 13:27*	*1*
o-Terphenyl	*97*		*70 - 130*	*10/03/22 08:31*	*10/03/22 13:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**758**		4.96		mg/Kg			10/06/22 13:58	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3089-A-1-F MS	Matrix Spike	106	91
890-3089-A-1-G MSD	Matrix Spike Duplicate	96	81
890-3112-1	PH05	78	73
890-3112-2	PH05A	78	69 S1-
890-3112-3	PH06	66 S1-	100
890-3112-4	PH06A	83	82
890-3112-5	PH07	74	99
890-3112-6	PH07A	74	94
LCS 880-36449/1-A	Lab Control Sample	171 S1+	117
LCSD 880-36449/2-A	Lab Control Sample Dup	98	94
MB 880-36293/5-A	Method Blank	83	92
MB 880-36449/5-A	Method Blank	87	87

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3112-1	PH05	84	88
890-3112-1 MS	PH05	72	67 S1-
890-3112-1 MSD	PH05	72	66 S1-
890-3112-2	PH05A	76	81
890-3112-3	PH06	81	83
890-3112-4	PH06A	78	83
890-3112-5	PH07	85	90
890-3112-6	PH07A	91	97
LCS 880-35915/2-A	Lab Control Sample	122	131 S1+
LCSD 880-35915/3-A	Lab Control Sample Dup	129	139 S1+
MB 880-35915/1-A	Method Blank	106	118

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36293/5-A
Matrix: Solid
Analysis Batch: 36442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36293

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/06/22 15:51	10/08/22 15:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/06/22 15:51	10/08/22 15:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/06/22 15:51	10/08/22 15:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/06/22 15:51	10/08/22 15:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/06/22 15:51	10/08/22 15:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/06/22 15:51	10/08/22 15:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*10/06/22 15:51*	*10/08/22 15:47*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*10/06/22 15:51*	*10/08/22 15:47*	*1*

Lab Sample ID: MB 880-36449/5-A
Matrix: Solid
Analysis Batch: 36442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36449

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/08/22 12:21	10/09/22 02:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/08/22 12:21	10/09/22 02:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/08/22 12:21	10/09/22 02:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/08/22 12:21	10/09/22 02:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/08/22 12:21	10/09/22 02:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/08/22 12:21	10/09/22 02:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*10/08/22 12:21*	*10/09/22 02:23*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*10/08/22 12:21*	*10/09/22 02:23*	*1*

Lab Sample ID: LCS 880-36449/1-A
Matrix: Solid
Analysis Batch: 36442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36449

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.01884	*-	mg/Kg		19	70 - 130		
Toluene			0.100	0.01832	*-	mg/Kg		18	70 - 130		
Ethylbenzene			0.100	0.02039	*-	mg/Kg		20	70 - 130		
m-Xylene & p-Xylene			0.200	0.05373	*-	mg/Kg		27	70 - 130		
o-Xylene			0.100	0.3177	*+	mg/Kg		318	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*171*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: LCSD 880-36449/2-A
Matrix: Solid
Analysis Batch: 36442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 36449

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09908	*1	mg/Kg		99	70 - 130	136	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

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

Lab Sample ID: LCSD 880-36449/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36442 — **Prep Batch: 36449**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08768	*1	mg/Kg		88	70 - 130	131	35
Ethylbenzene			0.100	0.08396	*1	mg/Kg		84	70 - 130	122	35
m-Xylene & p-Xylene			0.200	0.1727	*1	mg/Kg		86	70 - 130	105	35
o-Xylene			0.100	0.09883	*1	mg/Kg		99	70 - 130	105	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 890-3089-A-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36442 — **Prep Batch: 36449**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U *- *1 F1	0.0998	0.04456	F1	mg/Kg		45	70 - 130
Toluene	<0.00202	U *- *1 F1	0.0998	0.04470	F1	mg/Kg		45	70 - 130
Ethylbenzene	<0.00202	U *- *1 F1	0.0998	0.04470	F1	mg/Kg		45	70 - 130
m-Xylene & p-Xylene	<0.00403	U *- *1 F1	0.200	0.07327	F1	mg/Kg		37	70 - 130
o-Xylene	<0.00202	U *+ *1 F1	0.0998	0.04861	F1	mg/Kg		49	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-3089-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36442 — **Prep Batch: 36449**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U *- *1 F1	0.101	0.03882	F1	mg/Kg		39	70 - 130	14	35
Toluene	<0.00202	U *- *1 F1	0.101	0.04506	F1	mg/Kg		45	70 - 130	1	35
Ethylbenzene	<0.00202	U *- *1 F1	0.101	0.04374	F1	mg/Kg		43	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U *- *1 F1	0.201	0.06634	F1	mg/Kg		33	70 - 130	10	35
o-Xylene	<0.00202	U *+ *1 F1	0.101	0.04504	F1	mg/Kg		45	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*

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

Lab Sample ID: MB 880-35915/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35895 — **Prep Batch: 35915**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 09:56	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

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

Lab Sample ID: MB 880-35915/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35895 — **Prep Batch: 35915**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 09:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/03/22 08:31	10/03/22 09:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*10/03/22 08:31*	*10/03/22 09:56*	*1*
o-Terphenyl	*118*		*70 - 130*	*10/03/22 08:31*	*10/03/22 09:56*	*1*

Lab Sample ID: LCS 880-35915/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35895 — **Prep Batch: 35915**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1044		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*131*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-35915/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35895 — **Prep Batch: 35915**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1064		mg/Kg		106	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1157		mg/Kg		116	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*129*		*70 - 130*
o-Terphenyl	*139*	*S1+*	*70 - 130*

Lab Sample ID: 890-3112-1 MS — **Client Sample ID: PH05**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35895 — **Prep Batch: 35915**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	881.5		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	796.4		mg/Kg		78	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*72*		*70 - 130*
o-Terphenyl	*67*	*S1-*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

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

Lab Sample ID: 890-3112-1 MSD — **Client Sample ID: PH05**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 35895 — **Prep Batch: 35915**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	845.9		mg/Kg		83	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	794.2		mg/Kg		77	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*72*		*70 - 130*
o-Terphenyl	*66*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36006/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 36264

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/06/22 11:38	1

Lab Sample ID: LCS 880-36006/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 36264

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	241.3		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-36006/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 36264

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	258.0		mg/Kg		103	90 - 110	7	20

Lab Sample ID: 890-3112-3 MS — **Client Sample ID: PH06**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 36264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	92.4		251	350.1		mg/Kg		103	90 - 110		

Lab Sample ID: 890-3112-3 MSD — **Client Sample ID: PH06**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 36264

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	92.4		251	334.5		mg/Kg		97	90 - 110	5	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

GC VOA

Prep Batch: 36293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-36293/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 36442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Total/NA	Solid	8021B	36449
890-3112-2	PH05A	Total/NA	Solid	8021B	36449
890-3112-3	PH06	Total/NA	Solid	8021B	36449
890-3112-4	PH06A	Total/NA	Solid	8021B	36449
890-3112-5	PH07	Total/NA	Solid	8021B	36449
890-3112-6	PH07A	Total/NA	Solid	8021B	36449
MB 880-36293/5-A	Method Blank	Total/NA	Solid	8021B	36293
MB 880-36449/5-A	Method Blank	Total/NA	Solid	8021B	36449
LCS 880-36449/1-A	Lab Control Sample	Total/NA	Solid	8021B	36449
LCSD 880-36449/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36449
890-3089-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	36449
890-3089-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36449

Prep Batch: 36449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Total/NA	Solid	5035	
890-3112-2	PH05A	Total/NA	Solid	5035	
890-3112-3	PH06	Total/NA	Solid	5035	
890-3112-4	PH06A	Total/NA	Solid	5035	
890-3112-5	PH07	Total/NA	Solid	5035	
890-3112-6	PH07A	Total/NA	Solid	5035	
MB 880-36449/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36449/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36449/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3089-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-3089-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Total/NA	Solid	Total BTEX	
890-3112-2	PH05A	Total/NA	Solid	Total BTEX	
890-3112-3	PH06	Total/NA	Solid	Total BTEX	
890-3112-4	PH06A	Total/NA	Solid	Total BTEX	
890-3112-5	PH07	Total/NA	Solid	Total BTEX	
890-3112-6	PH07A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Total/NA	Solid	8015B NM	35915
890-3112-2	PH05A	Total/NA	Solid	8015B NM	35915
890-3112-3	PH06	Total/NA	Solid	8015B NM	35915
890-3112-4	PH06A	Total/NA	Solid	8015B NM	35915
890-3112-5	PH07	Total/NA	Solid	8015B NM	35915
890-3112-6	PH07A	Total/NA	Solid	8015B NM	35915
MB 880-35915/1-A	Method Blank	Total/NA	Solid	8015B NM	35915

QC Association Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

GC Semi VOA (Continued)

Analysis Batch: 35895 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-35915/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35915
LCSD 880-35915/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35915
890-3112-1 MS	PH05	Total/NA	Solid	8015B NM	35915
890-3112-1 MSD	PH05	Total/NA	Solid	8015B NM	35915

Prep Batch: 35915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Total/NA	Solid	8015NM Prep	
890-3112-2	PH05A	Total/NA	Solid	8015NM Prep	
890-3112-3	PH06	Total/NA	Solid	8015NM Prep	
890-3112-4	PH06A	Total/NA	Solid	8015NM Prep	
890-3112-5	PH07	Total/NA	Solid	8015NM Prep	
890-3112-6	PH07A	Total/NA	Solid	8015NM Prep	
MB 880-35915/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35915/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35915/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3112-1 MS	PH05	Total/NA	Solid	8015NM Prep	
890-3112-1 MSD	PH05	Total/NA	Solid	8015NM Prep	

Analysis Batch: 36039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Total/NA	Solid	8015 NM	
890-3112-2	PH05A	Total/NA	Solid	8015 NM	
890-3112-3	PH06	Total/NA	Solid	8015 NM	
890-3112-4	PH06A	Total/NA	Solid	8015 NM	
890-3112-5	PH07	Total/NA	Solid	8015 NM	
890-3112-6	PH07A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 36006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Soluble	Solid	DI Leach	
890-3112-2	PH05A	Soluble	Solid	DI Leach	
890-3112-3	PH06	Soluble	Solid	DI Leach	
890-3112-4	PH06A	Soluble	Solid	DI Leach	
890-3112-5	PH07	Soluble	Solid	DI Leach	
890-3112-6	PH07A	Soluble	Solid	DI Leach	
MB 880-36006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3112-3 MS	PH06	Soluble	Solid	DI Leach	
890-3112-3 MSD	PH06	Soluble	Solid	DI Leach	

Analysis Batch: 36264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-1	PH05	Soluble	Solid	300.0	36006
890-3112-2	PH05A	Soluble	Solid	300.0	36006
890-3112-3	PH06	Soluble	Solid	300.0	36006
890-3112-4	PH06A	Soluble	Solid	300.0	36006
890-3112-5	PH07	Soluble	Solid	300.0	36006

QC Association Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

HPLC/IC (Continued)

Analysis Batch: 36264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3112-6	PH07A	Soluble	Solid	300.0	36006
MB 880-36006/1-A	Method Blank	Soluble	Solid	300.0	36006
LCS 880-36006/2-A	Lab Control Sample	Soluble	Solid	300.0	36006
LCSD 880-36006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36006
890-3112-3 MS	PH06	Soluble	Solid	300.0	36006
890-3112-3 MSD	PH06	Soluble	Solid	300.0	36006

Lab Chronicle

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH05

Date Collected: 09/29/22 08:50
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 08:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36561	10/10/22 10:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36039	10/04/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35915	10/03/22 08:31	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35895	10/03/22 11:03	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	36006	10/03/22 14:32	KS	EET MID
Soluble	Analysis	300.0		1			36264	10/06/22 13:06	CH	EET MID

Client Sample ID: PH05A

Date Collected: 09/29/22 08:55
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 08:54	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36561	10/10/22 10:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36039	10/04/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	35915	10/03/22 08:31	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35895	10/03/22 12:05	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	36006	10/03/22 14:32	KS	EET MID
Soluble	Analysis	300.0		1			36264	10/06/22 13:12	CH	EET MID

Client Sample ID: PH06

Date Collected: 09/29/22 09:00
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 09:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36561	10/10/22 10:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36039	10/04/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35915	10/03/22 08:31	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35895	10/03/22 12:25	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	36006	10/03/22 14:32	KS	EET MID
Soluble	Analysis	300.0		1			36264	10/06/22 13:17	CH	EET MID

Client Sample ID: PH06A

Date Collected: 09/29/22 09:05
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 09:35	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36561	10/10/22 10:40	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Client Sample ID: PH06A
Date Collected: 09/29/22 09:05
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-4
Matrix: Solid

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			36039	10/04/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35915	10/03/22 08:31	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35895	10/03/22 12:46	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	36006	10/03/22 14:32	KS	EET MID
Soluble	Analysis	300.0		1			36264	10/06/22 13:35	CH	EET MID

Client Sample ID: PH07
Date Collected: 09/29/22 09:15
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 09:55	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36561	10/10/22 10:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36039	10/04/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35915	10/03/22 08:31	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35895	10/03/22 13:06	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	36006	10/03/22 14:32	KS	EET MID
Soluble	Analysis	300.0		1			36264	10/06/22 13:41	CH	EET MID

Client Sample ID: PH07A
Date Collected: 09/29/22 09:20
Date Received: 09/29/22 13:19

Lab Sample ID: 890-3112-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 10:16	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36561	10/10/22 10:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36039	10/04/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35915	10/03/22 08:31	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35895	10/03/22 13:27	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	36006	10/03/22 14:32	KS	EET MID
Soluble	Analysis	300.0		1			36264	10/06/22 13:58	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EMSU Satellite Battery #10

Job ID: 890-3112-1
SDG: 03C2077001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3112-1	PH05	Solid	09/29/22 08:50	09/29/22 13:19	2'
890-3112-2	PH05A	Solid	09/29/22 08:55	09/29/22 13:19	4'
890-3112-3	PH06	Solid	09/29/22 09:00	09/29/22 13:19	1'
890-3112-4	PH06A	Solid	09/29/22 09:05	09/29/22 13:19	2'
890-3112-5	PH07	Solid	09/29/22 09:15	09/29/22 13:19	2'
890-3112-6	PH07A	Solid	09/29/22 09:20	09/29/22 13:19	4'

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10/10/2022

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU Satellite Battery #10	Turn Around	
Project Number:	03C2077001	☑ Routine ☐ Rush	
Project Location:	32.481208, -103.273891	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TAM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	14.2	
Total Containers:		Corrected Temperature:	14.0	

ANALYSIS REQUEST

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
PH05	S	9/29/2022	8:50	2'				x	x	x
PH05A	S	9/29/2022	8:55	4'				x	x	x
PH06	S	9/29/2022	9:00	1'				x	x	x
PH06A	S	9/29/2022	9:05	2'				x	x	x
PH07	S	9/29/2022	9:15	2'				x	x	x
PH07A	S	9/29/2022	9:20	4'				x	x	x

Parameters

890-3112 Chain of Custody

Sample Comments

Incident ID:
NAPP2223850551
Cost Center:
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1		Miranda Stef	9/29/22 13:9			
3				4		
5				6		

Revised Date: 08/25/2020 Rev: 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3112-1
SDG Number: 03C2077001

Login Number: 3112
List Number: 1
Creator: Stutzman, Amanda

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3112-1
SDG Number: 03C2077001

Login Number: 3112
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/03/22 01:12 PM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-3231-1
Laboratory Sample Delivery Group: 03E2077002
Client Project/Site: EMSU B Facility

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
10/24/2022 4:09:12 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3231-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Job ID: 890-3231-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3231-1

Receipt
The sample was received on 10/19/2022 4:11 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

Receipt Exceptions
The following sampleswere received and analyzed from an unpreserved bulk soil jar: FS18B (890-3231-1).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-37502 and analytical batch 880-37521 was outside the upper control limits.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Client Sample ID: FS18B

Date Collected: 10/19/22 14:00
Date Received: 10/19/22 16:11
Sample Depth: 5

Lab Sample ID: 890-3231-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 21:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 21:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 21:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/21/22 13:50	10/21/22 21:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 21:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/21/22 13:50	10/21/22 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*10/21/22 13:50*	*10/21/22 21:47*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/21/22 13:50*	*10/21/22 21:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/24/22 14:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/24/22 09:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/21/22 13:00	10/21/22 18:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/21/22 13:00	10/21/22 18:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/21/22 13:00	10/21/22 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/21/22 13:00*	*10/21/22 18:48*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/21/22 13:00*	*10/21/22 18:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23.0**		4.99		mg/Kg			10/23/22 14:16	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20416-A-1-H MS	Matrix Spike	98	111
880-20416-A-1-I MSD	Matrix Spike Duplicate	104	111
890-3231-1	FS18B	82	94
LCS 880-37502/1-A	Lab Control Sample	113	114
LCSD 880-37502/2-A	Lab Control Sample Dup	105	96
MB 880-37502/5-A	Method Blank	66 S1-	100

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20579-A-1-C MS	Matrix Spike	77	78
880-20579-A-1-D MSD	Matrix Spike Duplicate	84	83
890-3231-1	FS18B	85	98
LCS 880-37446/2-A	Lab Control Sample	96	105
LCSD 880-37446/3-A	Lab Control Sample Dup	98	102
MB 880-37446/1-A	Method Blank	116	130

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37502/5-A
Matrix: Solid
Analysis Batch: 37521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37502

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 20:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 20:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 20:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/21/22 13:50	10/21/22 20:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/21/22 13:50	10/21/22 20:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/21/22 13:50	10/21/22 20:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*10/21/22 13:50*	*10/21/22 20:03*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/21/22 13:50*	*10/21/22 20:03*	*1*

Lab Sample ID: LCS 880-37502/1-A
Matrix: Solid
Analysis Batch: 37521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37502

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1134		mg/Kg		113	70 - 130		
Toluene			0.100	0.1034		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.1119		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene			0.200	0.2215		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1082		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: LCSD 880-37502/2-A
Matrix: Solid
Analysis Batch: 37521

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 37502

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1014		mg/Kg		101	70 - 130	11	35
Toluene			0.100	0.09765		mg/Kg		98	70 - 130	6	35
Ethylbenzene			0.100	0.1075		mg/Kg		107	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2082		mg/Kg		104	70 - 130	6	35
o-Xylene			0.100	0.1009		mg/Kg		101	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 880-20416-A-1-H MS
Matrix: Solid
Analysis Batch: 37521

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 37502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.09693		mg/Kg		96	70 - 130		
Toluene	<0.00201	U	0.101	0.09043		mg/Kg		90	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

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

Lab Sample ID: 880-20416-A-1-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 37521 — **Prep Batch: 37502**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.09475		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1881		mg/Kg		93	70 - 130
o-Xylene	<0.00201	U	0.101	0.09367		mg/Kg		93	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-20416-A-1-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 37521 — **Prep Batch: 37502**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.1087		mg/Kg		109	70 - 130	11	35
Toluene	<0.00201	U	0.0998	0.09783		mg/Kg		98	70 - 130	8	35
Ethylbenzene	<0.00201	U	0.0998	0.09670		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1999		mg/Kg		100	70 - 130	6	35
o-Xylene	<0.00201	U	0.0998	0.1002		mg/Kg		100	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-37446/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 37444 — **Prep Batch: 37446**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/21/22 07:36	10/21/22 08:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/22 07:36	10/21/22 08:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 07:36	10/21/22 08:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*10/21/22 07:36*	*10/21/22 08:48*	*1*
o-Terphenyl	*130*		*70 - 130*	*10/21/22 07:36*	*10/21/22 08:48*	*1*

Lab Sample ID: LCS 880-37446/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 37444 — **Prep Batch: 37446**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	977.4		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	900.1		mg/Kg		90	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

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

Lab Sample ID: LCS 880-37446/2-A
Matrix: Solid
Analysis Batch: 37444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37446

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-37446/3-A
Matrix: Solid
Analysis Batch: 37444

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 37446

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1058		mg/Kg		106	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	970.9		mg/Kg		97	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 880-20579-A-1-C MS
Matrix: Solid
Analysis Batch: 37444

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 37446

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	888.0		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	717.3		mg/Kg		72	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	78		70 - 130

Lab Sample ID: 880-20579-A-1-D MSD
Matrix: Solid
Analysis Batch: 37444

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 37446

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1056		mg/Kg		101	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	767.2		mg/Kg		77	70 - 130	7	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	83		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37509/1-A
Matrix: Solid
Analysis Batch: 37596

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/23/22 14:01	1

Lab Sample ID: LCS 880-37509/2-A
Matrix: Solid
Analysis Batch: 37596

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	256.3		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-37509/3-A
Matrix: Solid
Analysis Batch: 37596

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	255.9		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-3231-1 MS
Matrix: Solid
Analysis Batch: 37596

Client Sample ID: FS18B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	23.0		250	275.5		mg/Kg		101	90 - 110		

Lab Sample ID: 890-3231-1 MSD
Matrix: Solid
Analysis Batch: 37596

Client Sample ID: FS18B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	23.0		250	277.0		mg/Kg		102	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

GC VOA

Prep Batch: 37502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Total/NA	Solid	5035	
MB 880-37502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20416-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
880-20416-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 37521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Total/NA	Solid	8021B	37502
MB 880-37502/5-A	Method Blank	Total/NA	Solid	8021B	37502
LCS 880-37502/1-A	Lab Control Sample	Total/NA	Solid	8021B	37502
LCSD 880-37502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37502
880-20416-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	37502
880-20416-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37502

Analysis Batch: 37690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Total/NA	Solid	8015B NM	37446
MB 880-37446/1-A	Method Blank	Total/NA	Solid	8015B NM	37446
LCS 880-37446/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37446
LCSD 880-37446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37446
880-20579-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	37446
880-20579-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37446

Prep Batch: 37446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Total/NA	Solid	8015NM Prep	
MB 880-37446/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37446/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20579-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-20579-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Soluble	Solid	DI Leach	
MB 880-37509/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37509/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37509/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

HPLC/IC (Continued)

Leach Batch: 37509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1 MS	FS18B	Soluble	Solid	DI Leach	
890-3231-1 MSD	FS18B	Soluble	Solid	DI Leach	

Analysis Batch: 37596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3231-1	FS18B	Soluble	Solid	300.0	37509
MB 880-37509/1-A	Method Blank	Soluble	Solid	300.0	37509
LCS 880-37509/2-A	Lab Control Sample	Soluble	Solid	300.0	37509
LCSD 880-37509/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37509
890-3231-1 MS	FS18B	Soluble	Solid	300.0	37509
890-3231-1 MSD	FS18B	Soluble	Solid	300.0	37509

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Client Sample ID: FS18B

Date Collected: 10/19/22 14:00
Date Received: 10/19/22 16:11

Lab Sample ID: 890-3231-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	37502	10/21/22 13:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37521	10/21/22 21:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37690	10/24/22 14:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			37625	10/24/22 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37446	10/21/22 13:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37444	10/21/22 18:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37509	10/21/22 14:09	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37596	10/23/22 14:16	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3231-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3231-1	FS18B	Solid	10/19/22 14:00	10/19/22 16:11	5

Released to Imaging: 10/13/2023 10:56:27 AM
Received by OCD: 7/19/2023 1:46:39 PM

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	a.a.
Company Name:	Ensolum LLC	Company Name:	
Address:	3122 Nat'l Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	337-257-8307	Email:	tmorrissey@ensolum.com

Work Order Comments

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

Project Name:	EMSU B Facility	Turn Around	☑ Routine ☐ Rush
Project Number:	08E207702	Due Date:	
Project Location:	32.5649393, -103.7582001	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Juliana Falcomata		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	Thm007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.2	
Total Containers:		Corrected Temperature:	4.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chlorides	TPH	BTEX
FS13B	S	10-19-22	1400	5'	C	1		✓	✓	✓

890-3231 Chain of Custody

Preservative Codes

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

Sample Comments

Incident#
NAPP2206238414

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1	Falcomata		10.19.22 1691			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3231-1
SDG Number: 03E2077002

Login Number: 3231
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3231-1
SDG Number: 03E2077002

Login Number: 3231
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/21/22 10:46 AM

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

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-3280-1
Laboratory Sample Delivery Group: 03E2077002
Client Project/Site: EMSU B Facility

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
10/31/2022 1:18:11 PM

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

LINKS
Review your project results through my EOL
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3280-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Qualifiers

GC 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
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/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Job ID: 890-3280-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3280-1

Receipt
The samples were received on 10/25/2022 3:20 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 11.9°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS03B (890-3280-1), FS06B (890-3280-2), FS07B (890-3280-3) and FS13A (890-3280-4).

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Client Sample ID: FS03B

Date Collected: 10/25/22 12:45
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:24	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/28/22 14:11	10/30/22 23:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/28/22 14:11	10/30/22 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:24*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 04:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 04:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*10/27/22 13:56*	*10/30/22 04:23*	*1*
o-Terphenyl	*102*		*70 - 130*	*10/27/22 13:56*	*10/30/22 04:23*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.7**		5.00		mg/Kg			10/29/22 21:15	1

Client Sample ID: FS06B

Date Collected: 10/25/22 12:50
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/30/22 23:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/30/22 23:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/30/22 23:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/28/22 14:11	10/30/22 23:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/28/22 14:11	10/30/22 23:45	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/28/22 14:11	10/30/22 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:45*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Client Sample ID: FS06B

Date Collected: 10/25/22 12:50
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 04:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 04:45	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/22 13:56	10/30/22 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*10/27/22 13:56*	*10/30/22 04:45*	*1*
o-Terphenyl	*106*		*70 - 130*	*10/27/22 13:56*	*10/30/22 04:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.4**		4.96	mg/Kg			10/29/22 21:35	1

Client Sample ID: FS07B

Date Collected: 10/25/22 12:55
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/28/22 14:11	10/31/22 00:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/28/22 14:11	10/31/22 00:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/28/22 14:11	10/31/22 00:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/28/22 14:11	10/31/22 00:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/28/22 14:11	10/31/22 00:05	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/28/22 14:11	10/31/22 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*10/28/22 14:11*	*10/31/22 00:05*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*10/28/22 14:11*	*10/31/22 00:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/31/22 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/31/22 13:36	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Client Sample ID: FS07B

Date Collected: 10/25/22 12:55
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 05:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 05:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/30/22 05:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*10/27/22 13:56*	*10/30/22 05:06*	*1*
o-Terphenyl	*109*		*70 - 130*	*10/27/22 13:56*	*10/30/22 05:06*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.6**		5.04		mg/Kg			10/29/22 21:41	1

Client Sample ID: FS13A

Date Collected: 10/25/22 13:00
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 00:26	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 00:26	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 00:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/28/22 14:11	10/31/22 00:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/22 14:11	10/31/22 00:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/28/22 14:11	10/31/22 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*10/28/22 14:11*	*10/31/22 00:26*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*10/28/22 14:11*	*10/31/22 00:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/31/22 10:18	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/31/22 13:36	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 05:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 05:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/27/22 13:56	10/30/22 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*10/27/22 13:56*	*10/30/22 05:27*	*1*
o-Terphenyl	*90*		*70 - 130*	*10/27/22 13:56*	*10/30/22 05:27*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Client Sample ID: FS13A
Date Collected: 10/25/22 13:00
Date Received: 10/25/22 15:20
Sample Depth: 5'

Lab Sample ID: 890-3280-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.9		4.97		mg/Kg			10/29/22 21:48	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3280-1	FS03B	119	91
890-3280-1 MS	FS03B	86	100
890-3280-1 MSD	FS03B	87	106
890-3280-2	FS06B	125	112
890-3280-3	FS07B	125	112
890-3280-4	FS13A	118	107
LCS 880-38106/1-A	Lab Control Sample	91	101
LCSD 880-38106/2-A	Lab Control Sample Dup	93	100
MB 880-37947/5-A	Method Blank	96	91
MB 880-38106/5-A	Method Blank	105	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3280-1	FS03B	90	102
890-3280-2	FS06B	96	106
890-3280-3	FS07B	100	109
890-3280-4	FS13A	78	90
890-3285-A-1-C MS	Matrix Spike	76	81
890-3285-A-1-D MSD	Matrix Spike Duplicate	88	89
LCS 880-38023/2-A	Lab Control Sample	105	124
LCSD 880-38023/3-A	Lab Control Sample Dup	103	120
MB 880-38023/1-A	Method Blank	79	91

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37947/5-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37947

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/26/22 16:25	10/30/22 12:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/26/22 16:25	10/30/22 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/26/22 16:25*	*10/30/22 12:16*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/26/22 16:25*	*10/30/22 12:16*	*1*

Lab Sample ID: MB 880-38106/5-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38106

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/22 14:11	10/30/22 23:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/28/22 14:11	10/30/22 23:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:02*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/28/22 14:11*	*10/30/22 23:02*	*1*

Lab Sample ID: LCS 880-38106/1-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08696		mg/Kg		87	70 - 130		
Toluene			0.100	0.08889		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08632		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.1636		mg/Kg		82	70 - 130		
o-Xylene			0.100	0.09346		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-38106/2-A
Matrix: Solid
Analysis Batch: 38172

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38106

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09188		mg/Kg		92	70 - 130	6	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-38106/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38172 — **Prep Batch: 38106**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09274		mg/Kg		93	70 - 130	4	35
Ethylbenzene			0.100	0.09100		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1709		mg/Kg		85	70 - 130	4	35
o-Xylene			0.100	0.09803		mg/Kg		98	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-3280-1 MS — **Client Sample ID: FS03B**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38172 — **Prep Batch: 38106**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.08943		mg/Kg		89	70 - 130
Toluene	<0.00200	U	0.0998	0.09103		mg/Kg		91	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08402		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1535		mg/Kg		77	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08661		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-3280-1 MSD — **Client Sample ID: FS03B**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38172 — **Prep Batch: 38106**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08552		mg/Kg		85	70 - 130	4	35
Toluene	<0.00200	U	0.0990	0.08543		mg/Kg		86	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0990	0.08179		mg/Kg		83	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1488		mg/Kg		75	70 - 130	3	35
o-Xylene	<0.00200	U	0.0990	0.08418		mg/Kg		85	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-38023/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38137 — **Prep Batch: 38023**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-38023/1-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38023

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/27/22 13:56	10/29/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/27/22 13:56*	*10/29/22 21:37*	*1*

Lab Sample ID: LCS 880-38023/2-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.8		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	748.0		mg/Kg		75	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: LCSD 880-38023/3-A
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38023

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.5		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	738.0		mg/Kg		74	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 890-3285-A-1-C MS
Matrix: Solid
Analysis Batch: 38137

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	927.7		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	80.1		998	808.7		mg/Kg		73	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3285-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38137 — **Prep Batch: 38023**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.7		mg/Kg		80	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	80.1		998	921.4		mg/Kg		84	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38006/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/29/22 20:55	1

Lab Sample ID: LCS 880-38006/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38006/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3280-1 MS — **Client Sample ID: FS03B**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	34.7		250	285.4		mg/Kg		100	90 - 110		

Lab Sample ID: 890-3280-1 MSD — **Client Sample ID: FS03B**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 38162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	34.7		250	286.4		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

GC VOA

Prep Batch: 37947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37947/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 38106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Total/NA	Solid	5035	
890-3280-2	FS06B	Total/NA	Solid	5035	
890-3280-3	FS07B	Total/NA	Solid	5035	
890-3280-4	FS13A	Total/NA	Solid	5035	
MB 880-38106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3280-1 MS	FS03B	Total/NA	Solid	5035	
890-3280-1 MSD	FS03B	Total/NA	Solid	5035	

Analysis Batch: 38172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Total/NA	Solid	8021B	38106
890-3280-2	FS06B	Total/NA	Solid	8021B	38106
890-3280-3	FS07B	Total/NA	Solid	8021B	38106
890-3280-4	FS13A	Total/NA	Solid	8021B	38106
MB 880-37947/5-A	Method Blank	Total/NA	Solid	8021B	37947
MB 880-38106/5-A	Method Blank	Total/NA	Solid	8021B	38106
LCS 880-38106/1-A	Lab Control Sample	Total/NA	Solid	8021B	38106
LCSD 880-38106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38106
890-3280-1 MS	FS03B	Total/NA	Solid	8021B	38106
890-3280-1 MSD	FS03B	Total/NA	Solid	8021B	38106

Analysis Batch: 38257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Total/NA	Solid	Total BTEX	
890-3280-2	FS06B	Total/NA	Solid	Total BTEX	
890-3280-3	FS07B	Total/NA	Solid	Total BTEX	
890-3280-4	FS13A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Total/NA	Solid	8015NM Prep	
890-3280-2	FS06B	Total/NA	Solid	8015NM Prep	
890-3280-3	FS07B	Total/NA	Solid	8015NM Prep	
890-3280-4	FS13A	Total/NA	Solid	8015NM Prep	
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Total/NA	Solid	8015B NM	38023

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

GC Semi VOA (Continued)

Analysis Batch: 38137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-2	FS06B	Total/NA	Solid	8015B NM	38023
890-3280-3	FS07B	Total/NA	Solid	8015B NM	38023
890-3280-4	FS13A	Total/NA	Solid	8015B NM	38023
MB 880-38023/1-A	Method Blank	Total/NA	Solid	8015B NM	38023
LCS 880-38023/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38023
LCSD 880-38023/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38023
890-3285-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38023
890-3285-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38023

Analysis Batch: 38291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Total/NA	Solid	8015 NM	
890-3280-2	FS06B	Total/NA	Solid	8015 NM	
890-3280-3	FS07B	Total/NA	Solid	8015 NM	
890-3280-4	FS13A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Soluble	Solid	DI Leach	
890-3280-2	FS06B	Soluble	Solid	DI Leach	
890-3280-3	FS07B	Soluble	Solid	DI Leach	
890-3280-4	FS13A	Soluble	Solid	DI Leach	
MB 880-38006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3280-1 MS	FS03B	Soluble	Solid	DI Leach	
890-3280-1 MSD	FS03B	Soluble	Solid	DI Leach	

Analysis Batch: 38162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3280-1	FS03B	Soluble	Solid	300.0	38006
890-3280-2	FS06B	Soluble	Solid	300.0	38006
890-3280-3	FS07B	Soluble	Solid	300.0	38006
890-3280-4	FS13A	Soluble	Solid	300.0	38006
MB 880-38006/1-A	Method Blank	Soluble	Solid	300.0	38006
LCS 880-38006/2-A	Lab Control Sample	Soluble	Solid	300.0	38006
LCSD 880-38006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38006
890-3280-1 MS	FS03B	Soluble	Solid	300.0	38006
890-3280-1 MSD	FS03B	Soluble	Solid	300.0	38006

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Client Sample ID: FS03B
Date Collected: 10/25/22 12:45
Date Received: 10/25/22 15:20

Lab Sample ID: 890-3280-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/30/22 23:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38257	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38291	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 04:23	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 21:15	CH	EET MID

Client Sample ID: FS06B
Date Collected: 10/25/22 12:50
Date Received: 10/25/22 15:20

Lab Sample ID: 890-3280-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/30/22 23:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38257	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38291	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 04:45	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 21:35	CH	EET MID

Client Sample ID: FS07B
Date Collected: 10/25/22 12:55
Date Received: 10/25/22 15:20

Lab Sample ID: 890-3280-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 00:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38257	10/31/22 10:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38291	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 05:06	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 21:41	CH	EET MID

Client Sample ID: FS13A
Date Collected: 10/25/22 13:00
Date Received: 10/25/22 15:20

Lab Sample ID: 890-3280-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	38106	10/28/22 14:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38172	10/31/22 00:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38257	10/31/22 10:18	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Client Sample ID: FS13A

Date Collected: 10/25/22 13:00
Date Received: 10/25/22 15:20

Lab Sample ID: 890-3280-4

Matrix: Solid

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			38291	10/31/22 13:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38023	10/27/22 13:56	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38137	10/30/22 05:27	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38006	10/27/22 11:22	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38162	10/29/22 21:48	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3280-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3280-1	FS03B	Solid	10/25/22 12:45	10/25/22 15:20	5'
890-3280-2	FS06B	Solid	10/25/22 12:50	10/25/22 15:20	5'
890-3280-3	FS07B	Solid	10/25/22 12:55	10/25/22 15:20	5'
890-3280-4	FS13A	Solid	10/25/22 13:00	10/25/22 15:20	5'

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10/31/2022

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tyeoma Morrissey	Bill to: (if different)	Tyeoma Morrissey
Company Name:	Ensolum	Company Name:	
Address:	5122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	337-257-8307	Email:	t.morrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	☐ Routine ☑ Rush
Project Number:	03E2077002	Due Date:	24hr
Project Location:	32.5644, -103.3183	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TAM-007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	12.1
Total Containers:		Corrected Temperature:	11.9

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH	Chlorides
FS03B	S	10/24/22	1245	5'	G	1				
FS06B			1250			1				
FS07B			1255			1				
FS13H			1300			1				ICP

890-3280 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident #:
NAPP2206638414

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1	Amanda Eslup	10/25/22 1520	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3280-1
SDG Number: 03E2077002

Login Number: 3280
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3280-1
SDG Number: 03E2077002

Login Number: 3280
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/27/22 10:25 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-3341-1
Laboratory Sample Delivery Group: 03E2077002
Client Project/Site: EMSU B FACILITY

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Tacoma Morrissey

JKramer

Authorized for release by:
11/3/2022 3:18:07 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

LINKS
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Have a Question? Ask The Expert
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: EMSU B FACILITY

Laboratory Job ID: 890-3341-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Job ID: 890-3341-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3341-1

Receipt
The samples were received on 10/31/2022 3:55 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 3.2°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS20B (890-3341-1), FS23B (890-3341-2), FS24B (890-3341-3), FS27B (890-3341-4), FS33B (890-3341-5), FS35B (890-3341-6), FS36B (890-3341-7), FS40B (890-3341-8), FS41B (890-3341-9), FS44B (890-3341-10) and FS46B (890-3341-11).

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-38419 and analytical batch 880-38443 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS24B (890-3341-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-38448/2-A). Evidence of matrix interferences is not obvious.

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 and precision for preparation batch 880-38445 and analytical batch 880-38533 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS20B

Date Collected: 10/31/22 11:45
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 13:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 13:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 13:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/02/22 10:00	11/02/22 13:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 13:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/02/22 10:00	11/02/22 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/02/22 10:00*	*11/02/22 13:46*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/02/22 10:00*	*11/02/22 13:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/02/22 14:26	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/22 08:53	11/02/22 13:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/22 08:53	11/02/22 13:59	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/22 08:53	11/02/22 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*11/02/22 08:53*	*11/02/22 13:59*	*1*
o-Terphenyl	*93*		*70 - 130*	*11/02/22 08:53*	*11/02/22 13:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.8**		5.00		mg/Kg			11/02/22 17:09	1

Client Sample ID: FS23B

Date Collected: 10/31/22 11:50
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 14:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 14:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 14:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/02/22 10:00	11/02/22 14:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 14:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/02/22 10:00	11/02/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*11/02/22 10:00*	*11/02/22 14:06*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS23B

Date Collected: 10/31/22 11:50
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/02/22 10:00*	*11/02/22 14:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/02/22 14:26	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/02/22 08:53	11/02/22 14:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/02/22 08:53	11/02/22 14:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/02/22 08:53	11/02/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*11/02/22 08:53*	*11/02/22 14:21*	*1*
o-Terphenyl	*104*		*70 - 130*	*11/02/22 08:53*	*11/02/22 14:21*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.7**		4.97	mg/Kg			11/02/22 17:14	1

Client Sample ID: FS24B

Date Collected: 10/31/22 11:55
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 14:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 14:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 14:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 14:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 14:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*43*	*S1-*	*70 - 130*	*11/02/22 10:00*	*11/02/22 14:27*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*11/02/22 10:00*	*11/02/22 14:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/02/22 15:02	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/03/22 10:18	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS24B

Date Collected: 10/31/22 11:55
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 14:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 14:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*11/02/22 08:53*	*11/02/22 14:43*	*1*
o-Terphenyl	*107*		*70 - 130*	*11/02/22 08:53*	*11/02/22 14:43*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.6**		4.96		mg/Kg			11/02/22 17:19	1

Client Sample ID: FS27B

Date Collected: 10/31/22 12:00
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-4
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 15:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 15:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 15:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/02/22 10:00	11/02/22 15:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 15:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/02/22 10:00	11/02/22 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*11/02/22 10:00*	*11/02/22 15:51*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*11/02/22 10:00*	*11/02/22 15:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/02/22 16:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*11/02/22 08:53*	*11/02/22 15:04*	*1*
o-Terphenyl	*90*		*70 - 130*	*11/02/22 08:53*	*11/02/22 15:04*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS27B

Lab Sample ID: 890-3341-4
Matrix: Solid
Date Collected: 10/31/22 12:00
Date Received: 10/31/22 15:55
Sample Depth: 5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			11/02/22 15:00	1

Client Sample ID: FS33B

Lab Sample ID: 890-3341-5
Matrix: Solid
Date Collected: 10/31/22 12:05
Date Received: 10/31/22 15:55
Sample Depth: 5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 16:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 16:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 16:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/02/22 10:00	11/02/22 16:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 16:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/02/22 10:00	11/02/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*11/02/22 10:00*	*11/02/22 16:12*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*11/02/22 10:00*	*11/02/22 16:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/02/22 16:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*11/02/22 08:53*	*11/02/22 15:26*	*1*
o-Terphenyl	*120*		*70 - 130*	*11/02/22 08:53*	*11/02/22 15:26*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/02/22 15:23	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS35B

Date Collected: 10/31/22 12:10
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 17:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 17:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 17:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/02/22 10:00	11/02/22 17:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/02/22 10:00	11/02/22 17:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/02/22 10:00	11/02/22 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*11/02/22 10:00*	*11/02/22 17:07*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*11/02/22 10:00*	*11/02/22 17:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/03/22 13:36	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*11/02/22 08:53*	*11/02/22 15:48*	*1*
o-Terphenyl	*109*		*70 - 130*	*11/02/22 08:53*	*11/02/22 15:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			11/02/22 15:31	1

Client Sample ID: FS36B

Date Collected: 10/31/22 12:15
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-7
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 17:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 17:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 17:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/02/22 10:00	11/02/22 17:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/02/22 10:00	11/02/22 17:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/02/22 10:00	11/02/22 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/02/22 10:00*	*11/02/22 17:28*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS36B

Lab Sample ID: 890-3341-7
Matrix: Solid
Date Collected: 10/31/22 12:15
Date Received: 10/31/22 15:55
Sample Depth: 5

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/02/22 10:00*	*11/02/22 17:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/03/22 13:36	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/02/22 08:53	11/02/22 16:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/02/22 08:53	11/02/22 16:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/02/22 08:53	11/02/22 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*11/02/22 08:53*	*11/02/22 16:10*	*1*
o-Terphenyl	*103*		*70 - 130*	*11/02/22 08:53*	*11/02/22 16:10*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95	mg/Kg			11/02/22 15:39	1

Client Sample ID: FS40B

Lab Sample ID: 890-3341-8
Matrix: Solid
Date Collected: 10/31/22 12:20
Date Received: 10/31/22 15:55
Sample Depth: 5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 17:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 17:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 17:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 17:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 17:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*11/02/22 10:00*	*11/02/22 17:49*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/02/22 10:00*	*11/02/22 17:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/03/22 16:10	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/03/22 10:18	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS40B

Date Collected: 10/31/22 12:20
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-8
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 16:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 16:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*11/02/22 08:53*	*11/02/22 16:32*	*1*
o-Terphenyl	*119*		*70 - 130*	*11/02/22 08:53*	*11/02/22 16:32*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.8**		4.96		mg/Kg			11/02/22 15:46	1

Client Sample ID: FS41B

Date Collected: 10/31/22 12:25
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-9
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/02/22 10:00	11/02/22 18:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/02/22 10:00	11/02/22 18:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/02/22 10:00	11/02/22 18:09	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/02/22 10:00	11/02/22 18:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/02/22 10:00	11/02/22 18:09	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/02/22 10:00	11/02/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/02/22 10:00*	*11/02/22 18:09*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/02/22 10:00*	*11/02/22 18:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/03/22 13:36	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/22 08:53	11/02/22 16:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/22 08:53	11/02/22 16:54	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/22 08:53	11/02/22 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*11/02/22 08:53*	*11/02/22 16:54*	*1*
o-Terphenyl	*115*		*70 - 130*	*11/02/22 08:53*	*11/02/22 16:54*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS41B

Lab Sample ID: 890-3341-9
Matrix: Solid
Date Collected: 10/31/22 12:25
Date Received: 10/31/22 15:55
Sample Depth: 5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.70		4.98		mg/Kg			11/02/22 16:09	1

Client Sample ID: FS44B

Lab Sample ID: 890-3341-10
Matrix: Solid
Date Collected: 10/31/22 12:30
Date Received: 10/31/22 15:55
Sample Depth: 5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 18:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 18:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 18:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/02/22 10:00	11/02/22 18:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/02/22 10:00	11/02/22 18:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/02/22 10:00	11/02/22 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*11/02/22 10:00*	*11/02/22 18:30*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/02/22 10:00*	*11/02/22 18:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/03/22 13:36	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/22 08:53	11/02/22 18:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/22 08:53	11/02/22 18:04	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/22 08:53	11/02/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*11/02/22 08:53*	*11/02/22 18:04*	*1*
o-Terphenyl	*101*		*70 - 130*	*11/02/22 08:53*	*11/02/22 18:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.83		5.00		mg/Kg			11/02/22 16:17	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS46B

Date Collected: 10/31/22 12:35
Date Received: 10/31/22 15:55
Sample Depth: 5

Lab Sample ID: 890-3341-11

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/02/22 10:00	11/02/22 18:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/02/22 10:00	11/02/22 18:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/02/22 10:00	11/02/22 18:51	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/02/22 10:00	11/02/22 18:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/02/22 10:00	11/02/22 18:51	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/02/22 10:00	11/02/22 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*11/02/22 10:00*	*11/02/22 18:51*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/02/22 10:00*	*11/02/22 18:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/03/22 13:36	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/03/22 10:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 18:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/22 08:53	11/02/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*11/02/22 08:53*	*11/02/22 18:25*	*1*
o-Terphenyl	*117*		*70 - 130*	*11/02/22 08:53*	*11/02/22 18:25*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.2**		4.97		mg/Kg			11/02/22 16:25	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3319-A-2-D MS	Matrix Spike	92	97
890-3319-A-2-E MSD	Matrix Spike Duplicate	87	101
890-3341-1	FS20B	110	105
890-3341-2	FS23B	115	105
890-3341-3	FS24B	43 S1-	90
890-3341-4	FS27B	108	91
890-3341-5	FS33B	111	106
890-3341-6	FS35B	116	99
890-3341-7	FS36B	110	109
890-3341-8	FS40B	113	110
890-3341-9	FS41B	110	103
890-3341-10	FS44B	102	105
890-3341-11	FS46B	111	104
LCS 880-38419/1-A	Lab Control Sample	83	95
LCSD 880-38419/2-A	Lab Control Sample Dup	78	101
MB 880-38419/5-A	Method Blank	103	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-21004-A-2-C MS	Matrix Spike	73	77
880-21004-A-2-D MSD	Matrix Spike Duplicate	86	89
890-3341-1	FS20B	80	93
890-3341-2	FS23B	89	104
890-3341-3	FS24B	91	107
890-3341-4	FS27B	79	90
890-3341-5	FS33B	104	120
890-3341-6	FS35B	91	109
890-3341-7	FS36B	88	103
890-3341-8	FS40B	103	119
890-3341-9	FS41B	104	115
890-3341-10	FS44B	87	101
890-3341-11	FS46B	99	117
LCS 880-38448/2-A	Lab Control Sample	106	131 S1+
LCSD 880-38448/3-A	Lab Control Sample Dup	103	127
MB 880-38448/1-A	Method Blank	0 S1-	0 S1-

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38419/5-A
Matrix: Solid
Analysis Batch: 38443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38419

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/22 15:13	11/02/22 10:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/22 15:13	11/02/22 10:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/22 15:13	11/02/22 10:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/22 15:13	11/02/22 10:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/22 15:13	11/02/22 10:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/22 15:13	11/02/22 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*11/01/22 15:13*	*11/02/22 10:59*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/01/22 15:13*	*11/02/22 10:59*	*1*

Lab Sample ID: LCS 880-38419/1-A
Matrix: Solid
Analysis Batch: 38443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38419

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08829		mg/Kg		88	70 - 130		
Toluene			0.100	0.09041		mg/Kg		90	70 - 130		
Ethylbenzene			0.100	0.08814		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1644		mg/Kg		82	70 - 130		
o-Xylene			0.100	0.09396		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-38419/2-A
Matrix: Solid
Analysis Batch: 38443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38419

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08867		mg/Kg		89	70 - 130	0	35
Toluene			0.100	0.08886		mg/Kg		89	70 - 130	2	35
Ethylbenzene			0.100	0.08311		mg/Kg		83	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1522		mg/Kg		76	70 - 130	8	35
o-Xylene			0.100	0.08579		mg/Kg		86	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-3319-A-2-D MS
Matrix: Solid
Analysis Batch: 38443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38419

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.0998	0.08073		mg/Kg		80	70 - 130		
Toluene	<0.00201	U	0.0998	0.08353		mg/Kg		84	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3319-A-2-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38443 — **Prep Batch: 38419**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.0998	0.07974		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1521		mg/Kg		76	70 - 130
o-Xylene	<0.00201	U	0.0998	0.08611		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3319-A-2-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38443 — **Prep Batch: 38419**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.07868		mg/Kg		78	70 - 130	3	35
Toluene	<0.00201	U	0.0990	0.07973		mg/Kg		81	70 - 130	5	35
Ethylbenzene	<0.00201	U	0.0990	0.07266		mg/Kg		73	70 - 130	9	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1342	F1	mg/Kg		68	70 - 130	12	35
o-Xylene	<0.00201	U	0.0990	0.07432		mg/Kg		75	70 - 130	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-38448/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38457 — **Prep Batch: 38448**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/02/22 08:53	11/02/22 09:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/02/22 08:53	11/02/22 09:58	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/02/22 08:53	11/02/22 09:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0*	*S1-*	*70 - 130*	*11/02/22 08:53*	*11/02/22 09:58*	*1*
o-Terphenyl	*0*	*S1-*	*70 - 130*	*11/02/22 08:53*	*11/02/22 09:58*	*1*

Lab Sample ID: LCS 880-38448/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38457 — **Prep Batch: 38448**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1185		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1125		mg/Kg		113	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-38448/2-A
Matrix: Solid
Analysis Batch: 38457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 38448

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-38448/3-A
Matrix: Solid
Analysis Batch: 38457

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38448

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1109		mg/Kg		111	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-21004-A-2-C MS
Matrix: Solid
Analysis Batch: 38457

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38448

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	804.7		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	893.9		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	73		70 - 130
o-Terphenyl	77		70 - 130

Lab Sample ID: 880-21004-A-2-D MSD
Matrix: Solid
Analysis Batch: 38457

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 38448

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	980.9		mg/Kg		96	70 - 130	20	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1051		mg/Kg		105	70 - 130	16	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	89		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38445/1-A
Matrix: Solid
Analysis Batch: 38533

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/02/22 14:50	1

Lab Sample ID: LCS 880-38445/2-A
Matrix: Solid
Analysis Batch: 38533

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.8		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-38445/3-A
Matrix: Solid
Analysis Batch: 38533

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.2		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-3340-A-2-C MS
Matrix: Solid
Analysis Batch: 38533

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	853	F1	250	1060	F1	mg/Kg		83	90 - 110		

Lab Sample ID: 890-3340-A-2-D MSD
Matrix: Solid
Analysis Batch: 38533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	853	F1	250	1061	F1	mg/Kg		83	90 - 110	0	20

Lab Sample ID: MB 880-38446/1-A
Matrix: Solid
Analysis Batch: 38534

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/02/22 14:38	1

Lab Sample ID: LCS 880-38446/2-A
Matrix: Solid
Analysis Batch: 38534

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	266.4		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-38446/3-A
Matrix: Solid
Analysis Batch: 38534

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	262.4		mg/Kg		105	90 - 110	2	20

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-3341-4 MS
Matrix: Solid
Analysis Batch: 38534

Client Sample ID: FS27B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<4.96	U	248	251.9		mg/Kg		101	90 - 110		

Lab Sample ID: 890-3341-4 MSD
Matrix: Solid
Analysis Batch: 38534

Client Sample ID: FS27B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<4.96	U	248	259.6		mg/Kg		104	90 - 110	3	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

GC VOA

Prep Batch: 38419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Total/NA	Solid	5035	
890-3341-2	FS23B	Total/NA	Solid	5035	
890-3341-3	FS24B	Total/NA	Solid	5035	
890-3341-4	FS27B	Total/NA	Solid	5035	
890-3341-5	FS33B	Total/NA	Solid	5035	
890-3341-6	FS35B	Total/NA	Solid	5035	
890-3341-7	FS36B	Total/NA	Solid	5035	
890-3341-8	FS40B	Total/NA	Solid	5035	
890-3341-9	FS41B	Total/NA	Solid	5035	
890-3341-10	FS44B	Total/NA	Solid	5035	
890-3341-11	FS46B	Total/NA	Solid	5035	
MB 880-38419/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38419/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38419/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3319-A-2-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3319-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Total/NA	Solid	8021B	38419
890-3341-2	FS23B	Total/NA	Solid	8021B	38419
890-3341-3	FS24B	Total/NA	Solid	8021B	38419
890-3341-4	FS27B	Total/NA	Solid	8021B	38419
890-3341-5	FS33B	Total/NA	Solid	8021B	38419
890-3341-6	FS35B	Total/NA	Solid	8021B	38419
890-3341-7	FS36B	Total/NA	Solid	8021B	38419
890-3341-8	FS40B	Total/NA	Solid	8021B	38419
890-3341-9	FS41B	Total/NA	Solid	8021B	38419
890-3341-10	FS44B	Total/NA	Solid	8021B	38419
890-3341-11	FS46B	Total/NA	Solid	8021B	38419
MB 880-38419/5-A	Method Blank	Total/NA	Solid	8021B	38419
LCS 880-38419/1-A	Lab Control Sample	Total/NA	Solid	8021B	38419
LCSD 880-38419/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38419
890-3319-A-2-D MS	Matrix Spike	Total/NA	Solid	8021B	38419
890-3319-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38419

Analysis Batch: 38517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Total/NA	Solid	Total BTEX	
890-3341-2	FS23B	Total/NA	Solid	Total BTEX	
890-3341-3	FS24B	Total/NA	Solid	Total BTEX	
890-3341-4	FS27B	Total/NA	Solid	Total BTEX	
890-3341-5	FS33B	Total/NA	Solid	Total BTEX	
890-3341-6	FS35B	Total/NA	Solid	Total BTEX	
890-3341-7	FS36B	Total/NA	Solid	Total BTEX	
890-3341-8	FS40B	Total/NA	Solid	Total BTEX	
890-3341-9	FS41B	Total/NA	Solid	Total BTEX	
890-3341-10	FS44B	Total/NA	Solid	Total BTEX	
890-3341-11	FS46B	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

GC Semi VOA

Prep Batch: 38448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Total/NA	Solid	8015NM Prep	
890-3341-2	FS23B	Total/NA	Solid	8015NM Prep	
890-3341-3	FS24B	Total/NA	Solid	8015NM Prep	
890-3341-4	FS27B	Total/NA	Solid	8015NM Prep	
890-3341-5	FS33B	Total/NA	Solid	8015NM Prep	
890-3341-6	FS35B	Total/NA	Solid	8015NM Prep	
890-3341-7	FS36B	Total/NA	Solid	8015NM Prep	
890-3341-8	FS40B	Total/NA	Solid	8015NM Prep	
890-3341-9	FS41B	Total/NA	Solid	8015NM Prep	
890-3341-10	FS44B	Total/NA	Solid	8015NM Prep	
890-3341-11	FS46B	Total/NA	Solid	8015NM Prep	
MB 880-38448/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38448/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38448/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21004-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21004-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Total/NA	Solid	8015B NM	38448
890-3341-2	FS23B	Total/NA	Solid	8015B NM	38448
890-3341-3	FS24B	Total/NA	Solid	8015B NM	38448
890-3341-4	FS27B	Total/NA	Solid	8015B NM	38448
890-3341-5	FS33B	Total/NA	Solid	8015B NM	38448
890-3341-6	FS35B	Total/NA	Solid	8015B NM	38448
890-3341-7	FS36B	Total/NA	Solid	8015B NM	38448
890-3341-8	FS40B	Total/NA	Solid	8015B NM	38448
890-3341-9	FS41B	Total/NA	Solid	8015B NM	38448
890-3341-10	FS44B	Total/NA	Solid	8015B NM	38448
890-3341-11	FS46B	Total/NA	Solid	8015B NM	38448
MB 880-38448/1-A	Method Blank	Total/NA	Solid	8015B NM	38448
LCS 880-38448/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38448
LCSD 880-38448/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38448
880-21004-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38448
880-21004-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38448

Analysis Batch: 38600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Total/NA	Solid	8015 NM	
890-3341-2	FS23B	Total/NA	Solid	8015 NM	
890-3341-3	FS24B	Total/NA	Solid	8015 NM	
890-3341-4	FS27B	Total/NA	Solid	8015 NM	
890-3341-5	FS33B	Total/NA	Solid	8015 NM	
890-3341-6	FS35B	Total/NA	Solid	8015 NM	
890-3341-7	FS36B	Total/NA	Solid	8015 NM	
890-3341-8	FS40B	Total/NA	Solid	8015 NM	
890-3341-9	FS41B	Total/NA	Solid	8015 NM	
890-3341-10	FS44B	Total/NA	Solid	8015 NM	
890-3341-11	FS46B	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

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Leach Batch: 38445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Soluble	Solid	DI Leach	
890-3341-2	FS23B	Soluble	Solid	DI Leach	
890-3341-3	FS24B	Soluble	Solid	DI Leach	
MB 880-38445/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38445/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38445/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3340-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3340-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 38446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-4	FS27B	Soluble	Solid	DI Leach	
890-3341-5	FS33B	Soluble	Solid	DI Leach	
890-3341-6	FS35B	Soluble	Solid	DI Leach	
890-3341-7	FS36B	Soluble	Solid	DI Leach	
890-3341-8	FS40B	Soluble	Solid	DI Leach	
890-3341-9	FS41B	Soluble	Solid	DI Leach	
890-3341-10	FS44B	Soluble	Solid	DI Leach	
890-3341-11	FS46B	Soluble	Solid	DI Leach	
MB 880-38446/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38446/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38446/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3341-4 MS	FS27B	Soluble	Solid	DI Leach	
890-3341-4 MSD	FS27B	Soluble	Solid	DI Leach	

Analysis Batch: 38533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-1	FS20B	Soluble	Solid	300.0	38445
890-3341-2	FS23B	Soluble	Solid	300.0	38445
890-3341-3	FS24B	Soluble	Solid	300.0	38445
MB 880-38445/1-A	Method Blank	Soluble	Solid	300.0	38445
LCS 880-38445/2-A	Lab Control Sample	Soluble	Solid	300.0	38445
LCSD 880-38445/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38445
890-3340-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	38445
890-3340-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38445

Analysis Batch: 38534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3341-4	FS27B	Soluble	Solid	300.0	38446
890-3341-5	FS33B	Soluble	Solid	300.0	38446
890-3341-6	FS35B	Soluble	Solid	300.0	38446
890-3341-7	FS36B	Soluble	Solid	300.0	38446
890-3341-8	FS40B	Soluble	Solid	300.0	38446
890-3341-9	FS41B	Soluble	Solid	300.0	38446
890-3341-10	FS44B	Soluble	Solid	300.0	38446
890-3341-11	FS46B	Soluble	Solid	300.0	38446
MB 880-38446/1-A	Method Blank	Soluble	Solid	300.0	38446
LCS 880-38446/2-A	Lab Control Sample	Soluble	Solid	300.0	38446
LCSD 880-38446/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38446
890-3341-4 MS	FS27B	Soluble	Solid	300.0	38446
890-3341-4 MSD	FS27B	Soluble	Solid	300.0	38446

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS20B
Date Collected: 10/31/22 11:45
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 13:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/02/22 14:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 13:59	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38445	11/02/22 08:07	CH	EET MID
Soluble	Analysis	300.0		1			38533	11/02/22 17:09	CH	EET MID

Client Sample ID: FS23B
Date Collected: 10/31/22 11:50
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 14:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/02/22 14:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 14:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38445	11/02/22 08:07	CH	EET MID
Soluble	Analysis	300.0		1			38533	11/02/22 17:14	CH	EET MID

Client Sample ID: FS24B
Date Collected: 10/31/22 11:55
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 14:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/02/22 15:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 14:43	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38445	11/02/22 08:07	CH	EET MID
Soluble	Analysis	300.0		1			38533	11/02/22 17:19	CH	EET MID

Client Sample ID: FS27B
Date Collected: 10/31/22 12:00
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 15:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/02/22 16:44	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS27B
Date Collected: 10/31/22 12:00
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-4
Matrix: Solid

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			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 15:04	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 15:00	CH	EET MID

Client Sample ID: FS33B
Date Collected: 10/31/22 12:05
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 16:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/02/22 16:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 15:26	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 15:23	CH	EET MID

Client Sample ID: FS35B
Date Collected: 10/31/22 12:10
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 17:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/03/22 13:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 15:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 15:31	CH	EET MID

Client Sample ID: FS36B
Date Collected: 10/31/22 12:15
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 17:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/03/22 13:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 16:10	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS36B
Date Collected: 10/31/22 12:15
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 15:39	CH	EET MID

Client Sample ID: FS40B
Date Collected: 10/31/22 12:20
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 17:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/03/22 16:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 16:32	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 15:46	CH	EET MID

Client Sample ID: FS41B
Date Collected: 10/31/22 12:25
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 18:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/03/22 13:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 16:54	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 16:09	CH	EET MID

Client Sample ID: FS44B
Date Collected: 10/31/22 12:30
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 18:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/03/22 13:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 18:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 16:17	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Client Sample ID: FS46B

Date Collected: 10/31/22 12:35
Date Received: 10/31/22 15:55

Lab Sample ID: 890-3341-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	38419	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38443	11/02/22 18:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38517	11/03/22 13:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			38600	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38448	11/02/22 08:53	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/02/22 18:25	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38446	11/02/22 08:10	CH	EET MID
Soluble	Analysis	300.0		1			38534	11/02/22 16:25	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3341-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3341-1	FS20B	Solid	10/31/22 11:45	10/31/22 15:55	5
890-3341-2	FS23B	Solid	10/31/22 11:50	10/31/22 15:55	5
890-3341-3	FS24B	Solid	10/31/22 11:55	10/31/22 15:55	5
890-3341-4	FS27B	Solid	10/31/22 12:00	10/31/22 15:55	5
890-3341-5	FS33B	Solid	10/31/22 12:05	10/31/22 15:55	5
890-3341-6	FS35B	Solid	10/31/22 12:10	10/31/22 15:55	5
890-3341-7	FS36B	Solid	10/31/22 12:15	10/31/22 15:55	5
890-3341-8	FS40B	Solid	10/31/22 12:20	10/31/22 15:55	5
890-3341-9	FS41B	Solid	10/31/22 12:25	10/31/22 15:55	5
890-3341-10	FS44B	Solid	10/31/22 12:30	10/31/22 15:55	5
890-3341-11	FS46B	Solid	10/31/22 12:35	10/31/22 15:55	5

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Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946 Email: tmorrissey@ensolum.com		

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	**Turn Around**	
Project Number:	03E2077002	☐ Routine ☑ Rush	
Project Location:	32.5649393 -103.3183064	Due Date:	24hr TAT
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TW-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.4	
Total Containers:		Corrected Temperature:	3.2	

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021	Sample Comments
FS20B	S	10/31/2022	11:45	5'	Comp	1		X	X	X	Incident ID:
FS23B	S	10/31/2022	11:50	5'	Comp	1		X	X	X	NAPP2206638414
FS24B	S	10/31/2022	11:55	5'	Comp	1		X	X	X	Cost Center:
FS27B	S	10/31/2022	12:00	5'	Comp	1		X	X	X	
FS33B	S	10/31/2022	12:05	5'	Comp	1		X	X	X	AFE:
FS35B	S	10/31/2022	12:10	5'	Comp	1		X	X	X	
FS36B	S	10/31/2022	12:15	5'	Comp	1		X	X	X	
~~FS40B~~	~~S~~	~~10/31/2022~~	~~12:20~~	~~5'~~	~~Comp~~	~~1~~		~~X~~	~~X~~	~~X~~	
FS41B	S	10/31/2022	12:25	5'	Comp	1		X	X	X	
FS44B	S	10/31/2022	12:30	5'	Comp	1		X	X	X	

ANALYSIS REQUEST

Parameters

890-3341 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1		10.31.22 1555	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

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Chain of Custody

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Environment Testing
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Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03E2077002	☐ Routine ☑ Rush	
Project Location:	32.5649393 -103.3183064	Due Date:	24hr TAT
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021	Sample Comments
FS46B	S	10/31/2022	12:35	5'	Comp	1		X	X	X	Incident ID: NAPP2206638414
											Cost Center:
											AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM
Released to Imaging: 10/13/2023 10:56:27 AM
11/3/2022
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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3341-1
SDG Number: 03E2077002

Login Number: 3341
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3341-1
SDG Number: 03E2077002

Login Number: 3341
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/02/22 11:49 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Generated 11/29/2022 9:00:02 AM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03E2077002

JOB NUMBER

890-3533-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

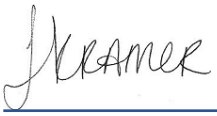
my EOL

Eurofins Carlsbad

Job Notes

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
11/29/2022 9:00:02 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3533-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Job ID: 890-3533-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3533-1

Receipt
The samples were received on 11/18/2022 1:07 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 9.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS67A (890-3533-1), FS68A (890-3533-2), FS69A (890-3533-3), FS70A (890-3533-4) and FS71A (890-3533-5).

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40466 and analytical batch 880-40361 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21941-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21941-A-1-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS67A (890-3533-1), FS68A (890-3533-2), FS69A (890-3533-3) and FS70A (890-3533-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-40343 and analytical batch 880-40262 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40343/2-A) and (LCSD 880-40343/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3525-A-1-B), (890-3525-A-1-C MS) and (890-3525-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-40343 and analytical batch 880-40262 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-40343 and analytical batch 880-40262 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40343 and analytical batch 880-40262 were outside control limits. Non-homogeneity 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.

Case Narrative

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Job ID: 890-3533-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Client Sample ID: FS67A

Date Collected: 11/18/22 09:10
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Lab Sample ID: 890-3533-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 05:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 05:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 05:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 12:53	11/29/22 05:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 05:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 12:53	11/29/22 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/28/22 12:53*	*11/29/22 05:27*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*11/28/22 12:53*	*11/29/22 05:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 09:34	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/28/22 11:40	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/23/22 15:04	11/24/22 01:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/23/22 15:04	11/24/22 01:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/23/22 15:04	11/24/22 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*11/23/22 15:04*	*11/24/22 01:27*	*1*
o-Terphenyl	*116*		*70 - 130*	*11/23/22 15:04*	*11/24/22 01:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.5**		4.98		mg/Kg			11/23/22 23:46	1

Client Sample ID: FS68A

Date Collected: 11/18/22 09:15
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Lab Sample ID: 890-3533-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/28/22 12:53	11/29/22 05:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/28/22 12:53	11/29/22 05:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/28/22 12:53	11/29/22 05:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/28/22 12:53	11/29/22 05:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/28/22 12:53	11/29/22 05:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/28/22 12:53	11/29/22 05:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*11/28/22 12:53*	*11/29/22 05:48*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Client Sample ID: FS68A

Date Collected: 11/18/22 09:15
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Lab Sample ID: 890-3533-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*11/28/22 12:53*	*11/29/22 05:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/29/22 09:34	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/28/22 11:40	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		11/23/22 15:04	11/24/22 01:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/23/22 15:04	11/24/22 01:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/23/22 15:04	11/24/22 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*11/23/22 15:04*	*11/24/22 01:48*	*1*
o-Terphenyl	*116*		*70 - 130*	*11/23/22 15:04*	*11/24/22 01:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.1**		4.97	mg/Kg			11/23/22 23:53	1

Client Sample ID: FS69A

Date Collected: 11/18/22 09:20
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Lab Sample ID: 890-3533-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 06:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 06:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 06:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/28/22 12:53	11/29/22 06:08	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 06:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/28/22 12:53	11/29/22 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*11/28/22 12:53*	*11/29/22 06:08*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/28/22 12:53*	*11/29/22 06:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/29/22 09:34	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/28/22 11:40	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Client Sample ID: FS69A

Lab Sample ID: 890-3533-3
Matrix: Solid
Date Collected: 11/18/22 09:20
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/23/22 15:04	11/24/22 02:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/23/22 15:04	11/24/22 02:31	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/23/22 15:04	11/24/22 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*11/23/22 15:04*	*11/24/22 02:31*	*1*
o-Terphenyl	*127*		*70 - 130*	*11/23/22 15:04*	*11/24/22 02:31*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.6**		5.01		mg/Kg			11/24/22 00:00	1

Client Sample ID: FS70A

Lab Sample ID: 890-3533-4
Matrix: Solid
Date Collected: 11/18/22 09:25
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 06:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 06:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 06:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 12:53	11/29/22 06:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:53	11/29/22 06:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 12:53	11/29/22 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/28/22 12:53*	*11/29/22 06:29*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/28/22 12:53*	*11/29/22 06:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 09:34	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/22 11:40	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/23/22 15:04	11/24/22 02:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/24/22 02:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/24/22 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*11/23/22 15:04*	*11/24/22 02:53*	*1*
o-Terphenyl	*126*		*70 - 130*	*11/23/22 15:04*	*11/24/22 02:53*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Client Sample ID: FS70A

Lab Sample ID: 890-3533-4
Matrix: Solid
Date Collected: 11/18/22 09:25
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.6		4.98		mg/Kg			11/24/22 00:07	1

Client Sample ID: FS71A

Lab Sample ID: 890-3533-5
Matrix: Solid
Date Collected: 11/18/22 09:30
Date Received: 11/18/22 13:07
Sample Depth: 1.5'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 06:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 06:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 06:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/28/22 12:53	11/29/22 06:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 06:49	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/28/22 12:53	11/29/22 06:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*11/28/22 12:53*	*11/29/22 06:49*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/28/22 12:53*	*11/29/22 06:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/29/22 09:34	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/22 11:40	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/23/22 15:04	11/24/22 03:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/24/22 03:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/24/22 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*11/23/22 15:04*	*11/24/22 03:14*	*1*
o-Terphenyl	*130*		*70 - 130*	*11/23/22 15:04*	*11/24/22 03:14*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.7		5.03		mg/Kg			11/24/22 00:13	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-21941-A-1-D MS	Matrix Spike	76	105
880-21941-A-1-E MSD	Matrix Spike Duplicate	69 S1-	102
890-3533-1	FS67A	63 S1-	91
890-3533-2	FS68A	68 S1-	112
890-3533-3	FS69A	64 S1-	104
890-3533-4	FS70A	63 S1-	101
890-3533-5	FS71A	79	105
LCS 880-40466/1-A	Lab Control Sample	84	111
LCSD 880-40466/2-A	Lab Control Sample Dup	82	94
MB 880-40412/5-A	Method Blank	74	110
MB 880-40466/5-A	Method Blank	73	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3525-A-1-C MS	Matrix Spike	145 S1+	159 S1+
890-3525-A-1-D MSD	Matrix Spike Duplicate	147 S1+	164 S1+
890-3533-1	FS67A	100	116
890-3533-2	FS68A	100	116
890-3533-3	FS69A	116	127
890-3533-4	FS70A	117	126
890-3533-5	FS71A	119	130
LCS 880-40343/2-A	Lab Control Sample	175 S1+	217 S1+
LCSD 880-40343/3-A	Lab Control Sample Dup	200 S1+	240 S1+
MB 880-40343/1-A	Method Blank	155 S1+	184 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40412/5-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40412

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 10:23	11/28/22 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*11/28/22 10:23*	*11/28/22 12:29*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/28/22 10:23*	*11/28/22 12:29*	*1*

Lab Sample ID: MB 880-40466/5-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40466

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 00:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 00:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 00:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 12:53	11/29/22 00:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:53	11/29/22 00:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 12:53	11/29/22 00:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*11/28/22 12:53*	*11/29/22 00:05*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/28/22 12:53*	*11/29/22 00:05*	*1*

Lab Sample ID: LCS 880-40466/1-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40466

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1040		mg/Kg		104	70 - 130		
Toluene			0.100	0.1006		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.09217		mg/Kg		92	70 - 130		
m-Xylene & p-Xylene			0.200	0.1598		mg/Kg		80	70 - 130		
o-Xylene			0.100	0.07997		mg/Kg		80	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-40466/2-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40466

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08207		mg/Kg		82	70 - 130	24	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-40466/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 40361 — **Prep Batch: 40466**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1103		mg/Kg		110	70 - 130	9	35
Ethylbenzene			0.100	0.1123		mg/Kg		112	70 - 130	20	35
m-Xylene & p-Xylene			0.200	0.2024		mg/Kg		101	70 - 130	24	35
o-Xylene			0.100	0.09966		mg/Kg		100	70 - 130	22	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-21941-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 40361 — **Prep Batch: 40466**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0996	0.03139	F1	mg/Kg		32	70 - 130
Toluene	<0.00200	U F1	0.0996	0.02826	F1	mg/Kg		28	70 - 130
Ethylbenzene	<0.00200	U F1	0.0996	0.02733	F1	mg/Kg		27	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.04741	F1	mg/Kg		24	70 - 130
o-Xylene	<0.00200	U F1	0.0996	0.02598	F1	mg/Kg		26	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-21941-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 40361 — **Prep Batch: 40466**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0996	0.03831	F1	mg/Kg		38	70 - 130	20	35
Toluene	<0.00200	U F1	0.0996	0.02919	F1	mg/Kg		29	70 - 130	3	35
Ethylbenzene	<0.00200	U F1	0.0996	0.02670	F1	mg/Kg		27	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.04101	F1	mg/Kg		21	70 - 130	14	35
o-Xylene	<0.00200	U F1	0.0996	0.02211	F1	mg/Kg		22	70 - 130	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-40343/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 40262 — **Prep Batch: 40343**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/23/22 20:46	1

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-40343/1-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40343

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/23/22 20:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 15:04	11/23/22 20:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*11/23/22 15:04*	*11/23/22 20:46*	*1*
o-Terphenyl	*184*	*S1+*	*70 - 130*	*11/23/22 15:04*	*11/23/22 20:46*	*1*

Lab Sample ID: LCS 880-40343/2-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40343

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	949.0		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1030		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*175*	*S1+*	*70 - 130*
o-Terphenyl	*217*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-40343/3-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40343

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1193	*1	mg/Kg		119	70 - 130	23	20
Diesel Range Organics (Over C10-C28)			1000	1169		mg/Kg		117	70 - 130	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*200*	*S1+*	*70 - 130*
o-Terphenyl	*240*	*S1+*	*70 - 130*

Lab Sample ID: 890-3525-A-1-C MS
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40343

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	1143		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	1303		mg/Kg		130	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*145*	*S1+*	*70 - 130*
o-Terphenyl	*159*	*S1+*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3525-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 40262 — **Prep Batch: 40343**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	998	1103		mg/Kg		111	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	1360	F1	mg/Kg		136	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*147*	*S1+*	*70 - 130*
o-Terphenyl	*164*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40011/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 40326

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/23/22 22:20	1

Lab Sample ID: LCS 880-40011/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 40326

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.4		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-40011/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 40326

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.7		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-3533-5 MS — **Client Sample ID: FS71A**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 40326

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	58.7		252	316.2		mg/Kg		102	90 - 110		

Lab Sample ID: 890-3533-5 MSD — **Client Sample ID: FS71A**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 40326

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	58.7		252	316.9		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

GC VOA

Analysis Batch: 40361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Total/NA	Solid	8021B	40466
890-3533-2	FS68A	Total/NA	Solid	8021B	40466
890-3533-3	FS69A	Total/NA	Solid	8021B	40466
890-3533-4	FS70A	Total/NA	Solid	8021B	40466
890-3533-5	FS71A	Total/NA	Solid	8021B	40466
MB 880-40412/5-A	Method Blank	Total/NA	Solid	8021B	40412
MB 880-40466/5-A	Method Blank	Total/NA	Solid	8021B	40466
LCS 880-40466/1-A	Lab Control Sample	Total/NA	Solid	8021B	40466
LCSD 880-40466/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40466
880-21941-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	40466
880-21941-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40466

Prep Batch: 40412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40412/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 40466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Total/NA	Solid	5035	
890-3533-2	FS68A	Total/NA	Solid	5035	
890-3533-3	FS69A	Total/NA	Solid	5035	
890-3533-4	FS70A	Total/NA	Solid	5035	
890-3533-5	FS71A	Total/NA	Solid	5035	
MB 880-40466/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40466/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40466/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21941-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-21941-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Total/NA	Solid	Total BTEX	
890-3533-2	FS68A	Total/NA	Solid	Total BTEX	
890-3533-3	FS69A	Total/NA	Solid	Total BTEX	
890-3533-4	FS70A	Total/NA	Solid	Total BTEX	
890-3533-5	FS71A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Total/NA	Solid	8015B NM	40343
890-3533-2	FS68A	Total/NA	Solid	8015B NM	40343
890-3533-3	FS69A	Total/NA	Solid	8015B NM	40343
890-3533-4	FS70A	Total/NA	Solid	8015B NM	40343
890-3533-5	FS71A	Total/NA	Solid	8015B NM	40343
MB 880-40343/1-A	Method Blank	Total/NA	Solid	8015B NM	40343
LCS 880-40343/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40343
LCSD 880-40343/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40343
890-3525-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40343
890-3525-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40343

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

GC Semi VOA

Prep Batch: 40343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Total/NA	Solid	8015NM Prep	
890-3533-2	FS68A	Total/NA	Solid	8015NM Prep	
890-3533-3	FS69A	Total/NA	Solid	8015NM Prep	
890-3533-4	FS70A	Total/NA	Solid	8015NM Prep	
890-3533-5	FS71A	Total/NA	Solid	8015NM Prep	
MB 880-40343/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40343/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40343/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3525-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3525-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Total/NA	Solid	8015 NM	
890-3533-2	FS68A	Total/NA	Solid	8015 NM	
890-3533-3	FS69A	Total/NA	Solid	8015 NM	
890-3533-4	FS70A	Total/NA	Solid	8015 NM	
890-3533-5	FS71A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Soluble	Solid	DI Leach	
890-3533-2	FS68A	Soluble	Solid	DI Leach	
890-3533-3	FS69A	Soluble	Solid	DI Leach	
890-3533-4	FS70A	Soluble	Solid	DI Leach	
890-3533-5	FS71A	Soluble	Solid	DI Leach	
MB 880-40011/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40011/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40011/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3533-5 MS	FS71A	Soluble	Solid	DI Leach	
890-3533-5 MSD	FS71A	Soluble	Solid	DI Leach	

Analysis Batch: 40326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3533-1	FS67A	Soluble	Solid	300.0	40011
890-3533-2	FS68A	Soluble	Solid	300.0	40011
890-3533-3	FS69A	Soluble	Solid	300.0	40011
890-3533-4	FS70A	Soluble	Solid	300.0	40011
890-3533-5	FS71A	Soluble	Solid	300.0	40011
MB 880-40011/1-A	Method Blank	Soluble	Solid	300.0	40011
LCS 880-40011/2-A	Lab Control Sample	Soluble	Solid	300.0	40011
LCSD 880-40011/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40011
890-3533-5 MS	FS71A	Soluble	Solid	300.0	40011
890-3533-5 MSD	FS71A	Soluble	Solid	300.0	40011

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Client Sample ID: FS67A
Date Collected: 11/18/22 09:10
Date Received: 11/18/22 13:07

Lab Sample ID: 890-3533-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 05:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40572	11/29/22 09:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			40450	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40343	11/23/22 15:04	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/24/22 01:27	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40011	11/20/22 12:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40326	11/23/22 23:46	CH	EET MID

Client Sample ID: FS68A
Date Collected: 11/18/22 09:15
Date Received: 11/18/22 13:07

Lab Sample ID: 890-3533-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 05:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40572	11/29/22 09:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			40450	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40343	11/23/22 15:04	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/24/22 01:48	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	40011	11/20/22 12:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40326	11/23/22 23:53	CH	EET MID

Client Sample ID: FS69A
Date Collected: 11/18/22 09:20
Date Received: 11/18/22 13:07

Lab Sample ID: 890-3533-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 06:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40572	11/29/22 09:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			40450	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40343	11/23/22 15:04	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/24/22 02:31	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	40011	11/20/22 12:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40326	11/24/22 00:00	CH	EET MID

Client Sample ID: FS70A
Date Collected: 11/18/22 09:25
Date Received: 11/18/22 13:07

Lab Sample ID: 890-3533-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 06:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40572	11/29/22 09:34	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Client Sample ID: FS70A

Date Collected: 11/18/22 09:25
Date Received: 11/18/22 13:07

Lab Sample ID: 890-3533-4

Matrix: Solid

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			40450	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40343	11/23/22 15:04	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/24/22 02:53	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40011	11/20/22 12:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40326	11/24/22 00:07	CH	EET MID

Client Sample ID: FS71A

Date Collected: 11/18/22 09:30
Date Received: 11/18/22 13:07

Lab Sample ID: 890-3533-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 06:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40572	11/29/22 09:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			40450	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40343	11/23/22 15:04	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/24/22 03:14	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	40011	11/20/22 12:23	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40326	11/24/22 00:13	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3533-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3533-1	FS67A	Solid	11/18/22 09:10	11/18/22 13:07	1.5'
890-3533-2	FS68A	Solid	11/18/22 09:15	11/18/22 13:07	1.5'
890-3533-3	FS69A	Solid	11/18/22 09:20	11/18/22 13:07	1.5'
890-3533-4	FS70A	Solid	11/18/22 09:25	11/18/22 13:07	1.5'
890-3533-5	FS71A	Solid	11/18/22 09:30	11/18/22 13:07	1.5'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facitlity	Turn Around	☑ Routine ☐ Rush
Project Number:	03E2077002	Due Date:	
Project Location:	32.5649393, -103.3183064	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TNM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	9.2	
Total Containers:		Corrected Temperature:	9.0	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS67A	S	11/18/2022	9:10	1.5'	Comp	1		x	x	x	Incident ID:
FS68A	S	11/18/2022	9:15	1.5'	Comp	1		x	x	x	
FS69A	S	11/18/2022	9:20	1.5'	Comp	1		x	x	x	Cost Center:
FS70A	S	11/18/2022	9:25	1.5'	Comp	1		x	x	x	
FS71A	S	11/18/2022	9:30	1.5'	Comp	1		x	x	x	AFE:

890-3533 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1	Amanda Stuff	11/18/22 1307	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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11/29/2022

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3533-1
SDG Number: 03E2077002

Login Number: 3533
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3533-1
SDG Number: 03E2077002

Login Number: 3533
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/21/22 08:46 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/30/2022 12:43:12 PM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 32.5649-103.3183

JOB NUMBER

890-3690-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

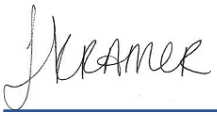
my EOL

Eurofins Carlsbad

Job Notes

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
12/30/2022 12:43:12 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3690-1
SDG: 32.5649-103.3183

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Job ID: 890-3690-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3690-1

Receipt
The sample was received on 12/20/2022 2:23 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 13.4°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: FS60A (890-3690-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-42467 and analytical batch 880-42459 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Client Sample ID: FS60A

Date Collected: 12/20/22 09:05
Date Received: 12/20/22 14:23
Sample Depth: 1'

Lab Sample ID: 890-3690-1

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/27/22 15:00	12/30/22 05:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/27/22 15:00	12/30/22 05:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/27/22 15:00	12/30/22 05:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/27/22 15:00	12/30/22 05:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/27/22 15:00	12/30/22 05:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/27/22 15:00	12/30/22 05:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*39*	*S1-*	*70 - 130*	*12/27/22 15:00*	*12/30/22 05:36*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/27/22 15:00*	*12/30/22 05:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			12/30/22 13:18	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/27/22 11:28	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/22/22 07:58	12/22/22 17:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/22/22 07:58	12/22/22 17:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/22/22 07:58	12/22/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/22/22 07:58*	*12/22/22 17:17*	*1*
o-Terphenyl	*84*		*70 - 130*	*12/22/22 07:58*	*12/22/22 17:17*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.0**		5.00		mg/Kg			12/29/22 13:52	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3690-1	FS60A	39 S1-	89
890-3696-A-1-E MS	Matrix Spike	109	98
890-3696-A-1-F MSD	Matrix Spike Duplicate	108	92
LCS 880-42737/1-A	Lab Control Sample	105	94
LCSD 880-42737/2-A	Lab Control Sample Dup	95	91
MB 880-42737/5-A	Method Blank	75	85
MB 880-42802/5-A	Method Blank	74	86

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-23018-A-1-D MS	Matrix Spike	118	94
880-23018-A-1-E MSD	Matrix Spike Duplicate	119	93
890-3690-1	FS60A	94	84
LCS 880-42467/2-A	Lab Control Sample	106	117
LCSD 880-42467/3-A	Lab Control Sample Dup	106	99
MB 880-42467/1-A	Method Blank	142 S1+	141 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42737/5-A
Matrix: Solid
Analysis Batch: 42840

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42737

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/27/22 15:00	12/29/22 23:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/27/22 15:00	12/29/22 23:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/27/22 15:00	12/29/22 23:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/27/22 15:00	12/29/22 23:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/27/22 15:00	12/29/22 23:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/27/22 15:00	12/29/22 23:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*12/27/22 15:00*	*12/29/22 23:27*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*12/27/22 15:00*	*12/29/22 23:27*	*1*

Lab Sample ID: LCS 880-42737/1-A
Matrix: Solid
Analysis Batch: 42840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42737

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.0996	0.1057		mg/Kg		106	70 - 130		
Toluene			0.0996	0.09401		mg/Kg		94	70 - 130		
Ethylbenzene			0.0996	0.09041		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.199	0.1926		mg/Kg		97	70 - 130		
o-Xylene			0.0996	0.09735		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-42737/2-A
Matrix: Solid
Analysis Batch: 42840

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42737

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.0998	0.08878		mg/Kg		89	70 - 130	17	35
Toluene			0.0998	0.08441		mg/Kg		85	70 - 130	11	35
Ethylbenzene			0.0998	0.07686		mg/Kg		77	70 - 130	16	35
m-Xylene & p-Xylene			0.200	0.1644		mg/Kg		82	70 - 130	16	35
o-Xylene			0.0998	0.08365		mg/Kg		84	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-3696-A-1-E MS
Matrix: Solid
Analysis Batch: 42840

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.100	0.08650		mg/Kg		86	70 - 130		
Toluene	<0.00199	U	0.100	0.08622		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3696-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 42840 — **Prep Batch: 42737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.08343		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1798		mg/Kg		89	70 - 130
o-Xylene	<0.00199	U	0.100	0.09084		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-3696-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 42840 — **Prep Batch: 42737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08977		mg/Kg		90	70 - 130	4	35
Toluene	<0.00199	U	0.0994	0.08424		mg/Kg		84	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.0994	0.07982		mg/Kg		80	70 - 130	4	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1690		mg/Kg		84	70 - 130	6	35
o-Xylene	<0.00199	U	0.0994	0.08420		mg/Kg		84	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 880-42802/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 42840 — **Prep Batch: 42802**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/28/22 13:43	12/29/22 12:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/28/22 13:43	12/29/22 12:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/28/22 13:43	12/29/22 12:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/28/22 13:43	12/29/22 12:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/28/22 13:43	12/29/22 12:54	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/28/22 13:43	12/29/22 12:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*12/28/22 13:43*	*12/29/22 12:54*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/28/22 13:43*	*12/29/22 12:54*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-42467/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 42459 — **Prep Batch: 42467**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/22/22 07:58	12/22/22 08:06	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-42467/1-A
Matrix: Solid
Analysis Batch: 42459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42467

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/22/22 07:58	12/22/22 08:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/22/22 07:58	12/22/22 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*12/22/22 07:58*	*12/22/22 08:06*	*1*
o-Terphenyl	*141*	*S1+*	*70 - 130*	*12/22/22 07:58*	*12/22/22 08:06*	*1*

Lab Sample ID: LCS 880-42467/2-A
Matrix: Solid
Analysis Batch: 42459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1044		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1016		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: LCSD 880-42467/3-A
Matrix: Solid
Analysis Batch: 42459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	899.3		mg/Kg		90	70 - 130	15	20
Diesel Range Organics (Over C10-C28)			1000	881.2		mg/Kg		88	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 880-23018-A-1-D MS
Matrix: Solid
Analysis Batch: 42459

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1193		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	981.3		mg/Kg		98	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-23018-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 42459 — **Prep Batch: 42467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1200		mg/Kg		117	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	976.0		mg/Kg		98	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-42637/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 42734

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/29/22 11:59	1

Lab Sample ID: LCS 880-42637/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 42734

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.9		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-42637/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 42734

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	258.4		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-3686-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 42734

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	7320	F1	5030	12660		mg/Kg		106	90 - 110		

Lab Sample ID: 890-3686-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 42734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7320	F1	5030	11900		mg/Kg		91	90 - 110	6	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

GC VOA

Prep Batch: 42737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Total/NA	Solid	5035	
MB 880-42737/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42737/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42737/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3696-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3696-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 42802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-42802/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 42840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Total/NA	Solid	8021B	42737
MB 880-42737/5-A	Method Blank	Total/NA	Solid	8021B	42737
MB 880-42802/5-A	Method Blank	Total/NA	Solid	8021B	42802
LCS 880-42737/1-A	Lab Control Sample	Total/NA	Solid	8021B	42737
LCSD 880-42737/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42737
890-3696-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	42737
890-3696-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	42737

Analysis Batch: 42978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 42459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Total/NA	Solid	8015B NM	42467
MB 880-42467/1-A	Method Blank	Total/NA	Solid	8015B NM	42467
LCS 880-42467/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	42467
LCSD 880-42467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	42467
880-23018-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	42467
880-23018-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	42467

Prep Batch: 42467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Total/NA	Solid	8015NM Prep	
MB 880-42467/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-42467/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-42467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23018-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23018-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 42694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

HPLC/IC

Leach Batch: 42637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Soluble	Solid	DI Leach	
MB 880-42637/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-42637/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-42637/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3686-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3686-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 42734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3690-1	FS60A	Soluble	Solid	300.0	42637
MB 880-42637/1-A	Method Blank	Soluble	Solid	300.0	42637
LCS 880-42637/2-A	Lab Control Sample	Soluble	Solid	300.0	42637
LCSD 880-42637/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	42637
890-3686-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	42637
890-3686-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	42637

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Client Sample ID: FS60A

Date Collected: 12/20/22 09:05
Date Received: 12/20/22 14:23

Lab Sample ID: 890-3690-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	42737	12/27/22 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42840	12/30/22 05:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42978	12/30/22 13:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42694	12/27/22 11:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	42467	12/22/22 07:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42459	12/22/22 17:17	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42637	12/27/22 09:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42734	12/29/22 13:52	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3690-1
SDG: 32.5649-103.3183

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3690-1	FS60A	Solid	12/20/22 09:05	12/20/22 14:23	1'

Released to Imaging: 10/13/2023 10:56:27 AM

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12/30/2022

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Ensolum
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	337-257-5307	Email:	

Work Order Comments

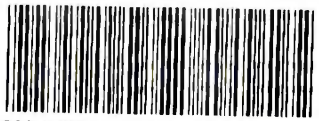
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03E2077002	☑ Routine ☐ Rush	
Project Location:	32.5649, -103.3183	Due Date:	
Sampler's Name:	Kyle Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	Thermo 9
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	13.6
Total Containers:		Corrected Temperature:	13.4

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH	Chlorides	Sample Comments
FS60A	S	12/20/22	0805	1'	G	1		X	X	X	



Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			12.20.22 1423			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3690-1
SDG Number: 32.5649-103.3183

Login Number: 3690
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3690-1
SDG Number: 32.5649-103.3183

Login Number: 3690
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/22/22 12:50 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/4/2023 8:58:06 AM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03E2077002

JOB NUMBER

890-3710-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

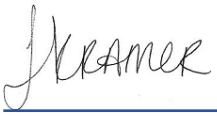
Released to Imaging: 10/13/2023 10:36:27 AM

Eurofins Carlsbad

Job Notes

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
1/4/2023 8:58:06 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
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Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3710-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Job ID: 890-3710-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3710-1

Receipt
The sample was received on 12/27/2022 1:39 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: FS57A (890-3710-1).

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-42935/32), (CCV 880-42935/48) and (LCSD 880-42995/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-42995 and analytical batch 880-42935 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-23052-A-81-E) and (880-23052-A-81-G MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Released to Imaging: 10/13/2023 10:56:27 AM

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Client Sample ID: FS57A

Date Collected: 12/27/22 08:30
Date Received: 12/27/22 13:39
Sample Depth: 1

Lab Sample ID: 890-3710-1

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 19:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 19:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 19:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/30/22 11:33	01/03/23 19:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 19:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/30/22 11:33	01/03/23 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/30/22 11:33*	*01/03/23 19:47*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*12/30/22 11:33*	*01/03/23 19:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/04/23 09:17	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/03/23 11:01	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/30/22 15:02	12/31/22 10:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/30/22 15:02	12/31/22 10:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/30/22 15:02	12/31/22 10:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/30/22 15:02*	*12/31/22 10:11*	*1*
o-Terphenyl	*74*		*70 - 130*	*12/30/22 15:02*	*12/31/22 10:11*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.7**		5.01		mg/Kg			12/31/22 02:18	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23059-A-1-B MS	Matrix Spike	101	110
880-23059-A-1-C MSD	Matrix Spike Duplicate	97	104
890-3710-1	FS57A	106	112
LCS 880-42941/1-A	Lab Control Sample	93	107
LCSD 880-42941/2-A	Lab Control Sample Dup	97	109
MB 880-42941/5-A	Method Blank	97	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23052-A-81-F MS	Matrix Spike	100	71
880-23052-A-81-G MSD	Matrix Spike Duplicate	94	68 S1-
890-3710-1	FS57A	87	74
LCS 880-42995/2-A	Lab Control Sample	120	124
LCSD 880-42995/3-A	Lab Control Sample Dup	142 S1+	145 S1+
MB 880-42995/1-A	Method Blank	151 S1+	142 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42941/5-A
Matrix: Solid
Analysis Batch: 43042

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42941

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 12:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 12:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/30/22 11:33	01/03/23 12:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/30/22 11:33	01/03/23 12:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/30/22 11:33	01/03/23 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/30/22 11:33*	*01/03/23 12:23*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/30/22 11:33*	*01/03/23 12:23*	*1*

Lab Sample ID: LCS 880-42941/1-A
Matrix: Solid
Analysis Batch: 43042

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42941

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09341		mg/Kg		93	70 - 130		
Toluene			0.100	0.08875		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.08816		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1815		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.08693		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-42941/2-A
Matrix: Solid
Analysis Batch: 43042

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42941

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09507		mg/Kg		95	70 - 130	2	35
Toluene			0.100	0.09079		mg/Kg		91	70 - 130	2	35
Ethylbenzene			0.100	0.08995		mg/Kg		90	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1856		mg/Kg		93	70 - 130	2	35
o-Xylene			0.100	0.08867		mg/Kg		89	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-23059-A-1-B MS
Matrix: Solid
Analysis Batch: 43042

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.09240		mg/Kg		92	70 - 130		
Toluene	<0.00200	U	0.100	0.08833		mg/Kg		88	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-23059-A-1-B MS
Matrix: Solid
Analysis Batch: 43042

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.08642		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00400	U	0.200	0.1791		mg/Kg		89	70 - 130
o-Xylene	<0.00200	U	0.100	0.08531		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-23059-A-1-C MSD
Matrix: Solid
Analysis Batch: 43042

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 42941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.08424		mg/Kg		85	70 - 130	9	35
Toluene	<0.00200	U	0.0994	0.08064		mg/Kg		81	70 - 130	9	35
Ethylbenzene	<0.00200	U	0.0994	0.07961		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	<0.00400	U	0.199	0.1651		mg/Kg		83	70 - 130	8	35
o-Xylene	<0.00200	U	0.0994	0.07936		mg/Kg		80	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-42995/1-A
Matrix: Solid
Analysis Batch: 42935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42995

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/30/22 15:02	12/31/22 00:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/30/22 15:02	12/31/22 00:12	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/30/22 15:02	12/31/22 00:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*12/30/22 15:02*	*12/31/22 00:12*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*12/30/22 15:02*	*12/31/22 00:12*	*1*

Lab Sample ID: LCS 880-42995/2-A
Matrix: Solid
Analysis Batch: 42935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42995

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1095		mg/Kg		109	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-42995/2-A
Matrix: Solid
Analysis Batch: 42935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42995

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-42995/3-A
Matrix: Solid
Analysis Batch: 42935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42995

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	974.3		mg/Kg		97	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1304		mg/Kg		130	70 - 130	17	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	142	S1+	70 - 130
o-Terphenyl	145	S1+	70 - 130

Lab Sample ID: 880-23052-A-81-F MS
Matrix: Solid
Analysis Batch: 42935

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42995

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1068		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	809.8		mg/Kg		81	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	71		70 - 130

Lab Sample ID: 880-23052-A-81-G MSD
Matrix: Solid
Analysis Batch: 42935

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 42995

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	885.0		mg/Kg		86	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	772.5		mg/Kg		77	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	68	S1-	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-42865/1-A
Matrix: Solid
Analysis Batch: 42947

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/31/22 00:07	1

Lab Sample ID: LCS 880-42865/2-A
Matrix: Solid
Analysis Batch: 42947

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	261.6		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-42865/3-A
Matrix: Solid
Analysis Batch: 42947

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.8		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 880-23059-A-6-B MS
Matrix: Solid
Analysis Batch: 42947

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	63.3		250	328.6		mg/Kg		106	90 - 110		

Lab Sample ID: 880-23059-A-6-C MSD
Matrix: Solid
Analysis Batch: 42947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	63.3		250	316.8		mg/Kg		101	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

GC VOA

Prep Batch: 42941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Total/NA	Solid	5035	
MB 880-42941/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42941/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42941/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23059-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-23059-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Total/NA	Solid	8021B	42941
MB 880-42941/5-A	Method Blank	Total/NA	Solid	8021B	42941
LCS 880-42941/1-A	Lab Control Sample	Total/NA	Solid	8021B	42941
LCSD 880-42941/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42941
880-23059-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	42941
880-23059-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	42941

Analysis Batch: 43123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 42935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Total/NA	Solid	8015B NM	42995
MB 880-42995/1-A	Method Blank	Total/NA	Solid	8015B NM	42995
LCS 880-42995/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	42995
LCSD 880-42995/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	42995
880-23052-A-81-F MS	Matrix Spike	Total/NA	Solid	8015B NM	42995
880-23052-A-81-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	42995

Prep Batch: 42995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Total/NA	Solid	8015NM Prep	
MB 880-42995/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-42995/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-42995/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23052-A-81-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23052-A-81-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 42865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Soluble	Solid	DI Leach	
MB 880-42865/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-42865/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-42865/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

HPLC/IC (Continued)

Leach Batch: 42865 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23059-A-6-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-23059-A-6-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 42947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3710-1	FS57A	Soluble	Solid	300.0	42865
MB 880-42865/1-A	Method Blank	Soluble	Solid	300.0	42865
LCS 880-42865/2-A	Lab Control Sample	Soluble	Solid	300.0	42865
LCSD 880-42865/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	42865
880-23059-A-6-B MS	Matrix Spike	Soluble	Solid	300.0	42865
880-23059-A-6-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	42865

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Client Sample ID: FS57A

Date Collected: 12/27/22 08:30
Date Received: 12/27/22 13:39

Lab Sample ID: 890-3710-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	42941	12/30/22 11:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43042	01/03/23 19:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43123	01/04/23 09:17	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43072	01/03/23 11:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42995	12/30/22 15:02	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42935	12/31/22 10:11	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	42865	12/29/22 10:48	KS	EET MID
Soluble	Analysis	300.0		1			42947	12/31/22 02:18	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3710-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3710-1	FS57A	Solid	12/27/22 08:30	12/27/22 13:39	1

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1/4/2023

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88202	City, State ZIP:	
Phone:	337-257-8307 Email:	tmorrissey@ensolum.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03E2077002	☑ Routine ☐ Rush	
Project Location:	32.5649, -103.3183	Due Date:	
Sampler's Name:	Kasse Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.2	
Total Containers:		Corrected Temperature:	3.0	

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
NaHSO $_4$: NABIS
$Na_2S_2O_3$: NaSO $_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

890-3710 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH	Chlorides	Sample Comments
FS57A	S	12/27/22	0830	1'	G	1		X	X	X	
							KP				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1			12.27.22 1339			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3710-1
SDG Number: 03E2077002

Login Number: 3710
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3710-1
SDG Number: 03E2077002

Login Number: 3710
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 12/29/22 11:42 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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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/17/2023 2:03:21 PM

JOB DESCRIPTION

EMSU B FACILITY
SDG NUMBER 03C2077002

JOB NUMBER

890-3808-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

my EOL

Eurofins Carlsbad

Job Notes

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
1/17/2023 2:03:21 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B FACILITY

Laboratory Job ID: 890-3808-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Job ID: 890-3808-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3808-1

Receipt
The samples were received on 1/10/2023 9:05 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 2.6°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS54A (890-3808-1), FS55A (890-3808-2) and FS56A (890-3808-3).

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-43869/1-A). Evidence of matrix interferences is not obvious.

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 and precision for preparation batch 880-43792 and analytical batch 880-43924 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Client Sample ID: FS54A

Date Collected: 01/09/23 08:45
Date Received: 01/10/23 09:05
Sample Depth: 1

Lab Sample ID: 890-3808-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:03	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/13/23 13:36	01/16/23 20:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:03	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/13/23 13:36	01/16/23 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*01/13/23 13:36*	*01/16/23 20:03*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/13/23 13:36*	*01/16/23 20:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/17/23 14:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/16/23 16:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/16/23 00:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/16/23 00:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/16/23 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*01/13/23 08:39*	*01/16/23 00:24*	*1*
o-Terphenyl	*99*		*70 - 130*	*01/13/23 08:39*	*01/16/23 00:24*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**121**		5.00		mg/Kg			01/14/23 01:01	1

Client Sample ID: FS55A

Date Collected: 01/09/23 08:50
Date Received: 01/10/23 09:05
Sample Depth: 1

Lab Sample ID: 890-3808-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/13/23 13:36	01/16/23 20:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 20:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/13/23 13:36	01/16/23 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/13/23 13:36*	*01/16/23 20:24*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Client Sample ID: FS55A

Lab Sample ID: 890-3808-2
Matrix: Solid
Date Collected: 01/09/23 08:50
Date Received: 01/10/23 09:05
Sample Depth: 1

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/13/23 13:36*	*01/16/23 20:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/23 14:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/16/23 16:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/13/23 08:39	01/16/23 00:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/23 08:39	01/16/23 00:45	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/23 08:39	01/16/23 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*01/13/23 08:39*	*01/16/23 00:45*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/13/23 08:39*	*01/16/23 00:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**135**		5.02	mg/Kg			01/14/23 01:06	1

Client Sample ID: FS56A

Lab Sample ID: 890-3808-3
Matrix: Solid
Date Collected: 01/09/23 08:55
Date Received: 01/10/23 09:05
Sample Depth: 1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/13/23 13:36	01/16/23 20:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/13/23 13:36	01/16/23 20:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/13/23 13:36	01/16/23 20:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/13/23 13:36	01/16/23 20:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/13/23 13:36	01/16/23 20:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/13/23 13:36	01/16/23 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/13/23 13:36*	*01/16/23 20:44*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/13/23 13:36*	*01/16/23 20:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/17/23 14:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:39	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Client Sample ID: FS56A

Date Collected: 01/09/23 08:55
Date Received: 01/10/23 09:05
Sample Depth: 1

Lab Sample ID: 890-3808-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/16/23 01:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/16/23 01:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/16/23 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*01/13/23 08:39*	*01/16/23 01:29*	*1*
o-Terphenyl	*85*		*70 - 130*	*01/13/23 08:39*	*01/16/23 01:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**142**		5.01		mg/Kg			01/14/23 01:12	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-3808-1	FS54A	114	106										
890-3808-1 MS	FS54A	111	102										
890-3808-1 MSD	FS54A	112	103										
890-3808-2	FS55A	120	102										
890-3808-3	FS56A	116	102										
LCS 880-43748/1-A	Lab Control Sample	111	100										
LCSD 880-43748/2-A	Lab Control Sample Dup	112	105										
MB 880-43748/5-A	Method Blank	112	100										
MB 880-43960/8	Method Blank	110	99										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-3792-A-1-E MS	Matrix Spike	81	81										
890-3792-A-1-F MSD	Matrix Spike Duplicate	97	82										
890-3808-1	FS54A	99	99										
890-3808-2	FS55A	115	111										
890-3808-3	FS56A	86	85										
LCS 880-43869/2-A	Lab Control Sample	113	105										
LCSD 880-43869/3-A	Lab Control Sample Dup	116	108										
MB 880-43869/1-A	Method Blank	158 S1+	167 S1+										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43748/5-A
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43748

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 19:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 19:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 19:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/13/23 13:36	01/16/23 19:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/13/23 13:36	01/16/23 19:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/13/23 13:36	01/16/23 19:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/13/23 13:36*	*01/16/23 19:34*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/13/23 13:36*	*01/16/23 19:34*	*1*

Lab Sample ID: LCS 880-43748/1-A
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43748

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1121		mg/Kg		112	70 - 130		
Toluene			0.100	0.1077		mg/Kg		108	70 - 130		
Ethylbenzene			0.100	0.1052		mg/Kg		105	70 - 130		
m-Xylene & p-Xylene			0.200	0.2165		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1024		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-43748/2-A
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43748

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1159		mg/Kg		116	70 - 130	3	35
Toluene			0.100	0.1086		mg/Kg		109	70 - 130	1	35
Ethylbenzene			0.100	0.1066		mg/Kg		107	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2192		mg/Kg		110	70 - 130	1	35
o-Xylene			0.100	0.1045		mg/Kg		105	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-3808-1 MS
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: FS54A
Prep Type: Total/NA
Prep Batch: 43748

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.101	0.09870		mg/Kg		98	70 - 130		
Toluene	<0.00200	U	0.101	0.09623		mg/Kg		95	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3808-1 MS
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: FS54A
Prep Type: Total/NA
Prep Batch: 43748

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.101	0.09472		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.202	0.1946		mg/Kg		96	70 - 130
o-Xylene	<0.00200	U	0.101	0.09494		mg/Kg		94	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3808-1 MSD
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: FS54A
Prep Type: Total/NA
Prep Batch: 43748

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.1006		mg/Kg		101	70 - 130	2	35
Toluene	<0.00200	U	0.0996	0.09733		mg/Kg		98	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.0996	0.09546		mg/Kg		96	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1956		mg/Kg		98	70 - 130	1	35
o-Xylene	<0.00200	U	0.0996	0.09472		mg/Kg		95	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-43960/8
Matrix: Solid
Analysis Batch: 43960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			01/16/23 12:24	1
Toluene	<0.00200	U	0.00200	mg/Kg			01/16/23 12:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			01/16/23 12:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			01/16/23 12:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			01/16/23 12:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			01/16/23 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*01/16/23 12:24*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*		*01/16/23 12:24*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-43869/1-A
Matrix: Solid
Analysis Batch: 43945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43869

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/13/23 08:39	01/15/23 19:47	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-43869/1-A
Matrix: Solid
Analysis Batch: 43945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43869

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/15/23 19:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/13/23 08:39	01/15/23 19:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*158*	*S1+*	*70 - 130*	*01/13/23 08:39*	*01/15/23 19:47*	*1*
o-Terphenyl	*167*	*S1+*	*70 - 130*	*01/13/23 08:39*	*01/15/23 19:47*	*1*

Lab Sample ID: LCS 880-43869/2-A
Matrix: Solid
Analysis Batch: 43945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43869

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	850.0		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	958.3		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-43869/3-A
Matrix: Solid
Analysis Batch: 43945

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43869

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	969.8		mg/Kg		97	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	903.3		mg/Kg		90	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*116*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 890-3792-A-1-E MS
Matrix: Solid
Analysis Batch: 43945

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43869

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	895.8		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	895.5		mg/Kg		87	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3792-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 43945 — **Prep Batch: 43869**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	959.7		mg/Kg		93	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	917.4		mg/Kg		89	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43792/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 43924

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/13/23 23:50	1

Lab Sample ID: LCS 880-43792/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 43924

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.0		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-43792/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 43924

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	251.6		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-3804-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 43924

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	53.1	F1	252	347.0	F1	mg/Kg		117	90 - 110		

Lab Sample ID: 890-3804-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 43924

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	53.1	F1	252	344.0	F1	mg/Kg		116	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

GC VOA

Prep Batch: 43748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Total/NA	Solid	5035	
890-3808-2	FS55A	Total/NA	Solid	5035	
890-3808-3	FS56A	Total/NA	Solid	5035	
MB 880-43748/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43748/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43748/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3808-1 MS	FS54A	Total/NA	Solid	5035	
890-3808-1 MSD	FS54A	Total/NA	Solid	5035	

Analysis Batch: 43960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Total/NA	Solid	8021B	43748
890-3808-2	FS55A	Total/NA	Solid	8021B	43748
890-3808-3	FS56A	Total/NA	Solid	8021B	43748
MB 880-43748/5-A	Method Blank	Total/NA	Solid	8021B	43748
MB 880-43960/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-43748/1-A	Lab Control Sample	Total/NA	Solid	8021B	43748
LCSD 880-43748/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43748
890-3808-1 MS	FS54A	Total/NA	Solid	8021B	43748
890-3808-1 MSD	FS54A	Total/NA	Solid	8021B	43748

Analysis Batch: 44180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Total/NA	Solid	Total BTEX	
890-3808-2	FS55A	Total/NA	Solid	Total BTEX	
890-3808-3	FS56A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Total/NA	Solid	8015NM Prep	
890-3808-2	FS55A	Total/NA	Solid	8015NM Prep	
890-3808-3	FS56A	Total/NA	Solid	8015NM Prep	
MB 880-43869/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43869/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43869/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3792-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3792-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Total/NA	Solid	8015B NM	43869
890-3808-2	FS55A	Total/NA	Solid	8015B NM	43869
890-3808-3	FS56A	Total/NA	Solid	8015B NM	43869
MB 880-43869/1-A	Method Blank	Total/NA	Solid	8015B NM	43869
LCS 880-43869/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43869
LCSD 880-43869/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43869
890-3792-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	43869
890-3792-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43869

QC Association Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

GC Semi VOA

Analysis Batch: 44045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Total/NA	Solid	8015 NM	
890-3808-2	FS55A	Total/NA	Solid	8015 NM	
890-3808-3	FS56A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Soluble	Solid	DI Leach	
890-3808-2	FS55A	Soluble	Solid	DI Leach	
890-3808-3	FS56A	Soluble	Solid	DI Leach	
MB 880-43792/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43792/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43792/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3804-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3804-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3808-1	FS54A	Soluble	Solid	300.0	43792
890-3808-2	FS55A	Soluble	Solid	300.0	43792
890-3808-3	FS56A	Soluble	Solid	300.0	43792
MB 880-43792/1-A	Method Blank	Soluble	Solid	300.0	43792
LCS 880-43792/2-A	Lab Control Sample	Soluble	Solid	300.0	43792
LCSD 880-43792/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43792
890-3804-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	43792
890-3804-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43792

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Client Sample ID: FS54A
Date Collected: 01/09/23 08:45
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3808-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	43748	01/13/23 13:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43960	01/16/23 20:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44180	01/17/23 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			44045	01/16/23 16:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43869	01/13/23 08:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43945	01/16/23 00:24	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		1			43924	01/14/23 01:01	CH	EET MID

Client Sample ID: FS55A
Date Collected: 01/09/23 08:50
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3808-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	43748	01/13/23 13:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43960	01/16/23 20:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44180	01/17/23 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			44045	01/16/23 16:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43869	01/13/23 08:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43945	01/16/23 00:45	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		1			43924	01/14/23 01:06	CH	EET MID

Client Sample ID: FS56A
Date Collected: 01/09/23 08:55
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3808-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	43748	01/13/23 13:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43960	01/16/23 20:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44180	01/17/23 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			44045	01/16/23 16:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43869	01/13/23 08:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43945	01/16/23 01:29	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		1			43924	01/14/23 01:12	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B FACILITY

Job ID: 890-3808-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3808-1	FS54A	Solid	01/09/23 08:45	01/10/23 09:05	1
890-3808-2	FS55A	Solid	01/09/23 08:50	01/10/23 09:05	1
890-3808-3	FS56A	Solid	01/09/23 08:55	01/10/23 09:05	1

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1/17/2023

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03C2077002	☑ Routine ☐ Rush	
Project Location:	32.5649393, -103.3183064	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.8
Total Containers:		Corrected Temperature:	2.6

ANALYSIS REQUEST

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS54A	S	1/9/2022	8:45	1'	Grab/	1		x	x	x	Incident Number:
FS55A	S	1/9/2022	8:50	1'	Grab/	1		x	x	x	nAPP2206638414
FS56A	S	1/9/2022	8:55	1'	Grab/	1		x	x	x	

890-3808 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1	Kase Clifton	1.10.23 905	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3808-1
SDG Number: 03C2077002

Login Number: 3808
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3808-1
SDG Number: 03C2077002

Login Number: 3808
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 01/11/23 11:43 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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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/20/2023 1:28:03 PM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03C2077002

JOB NUMBER

890-3846-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

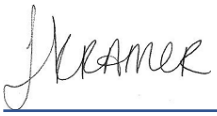
my EOL

Eurofins Carlsbad

Job Notes

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
1/20/2023 1:28:03 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3846-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Qualifiers

GC 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
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/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Job ID: 890-3846-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3846-1

Receipt
The sample was received on 1/13/2023 2:13 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: FS50A (890-3846-1).

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Client Sample ID: FS50A

Date Collected: 01/12/23 11:20
Date Received: 01/13/23 14:13
Sample Depth: 1'

Lab Sample ID: 890-3846-1

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/18/23 16:20	01/19/23 17:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/18/23 16:20	01/19/23 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/18/23 16:20*	*01/19/23 17:16*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/18/23 16:20*	*01/19/23 17:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/20/23 13:52	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/19/23 13:57	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/18/23 13:55	01/19/23 00:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/18/23 13:55	01/19/23 00:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/18/23 13:55	01/19/23 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*01/18/23 13:55*	*01/19/23 00:56*	*1*
o-Terphenyl	*103*		*70 - 130*	*01/18/23 13:55*	*01/19/23 00:56*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**126**		4.99		mg/Kg			01/19/23 05:05	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23861-A-1-A MS	Matrix Spike	113	87
880-23861-A-1-B MSD	Matrix Spike Duplicate	93	103
890-3846-1	FS50A	107	110
LCS 880-44290/1-A	Lab Control Sample	89	98
LCSD 880-44290/2-A	Lab Control Sample Dup	93	102
MB 880-44290/5-A	Method Blank	88	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3821-A-1-E MS	Matrix Spike	90	86
890-3821-A-1-F MSD	Matrix Spike Duplicate	88	83
890-3846-1	FS50A	98	103
LCS 880-44254/2-A	Lab Control Sample	103	108
LCSD 880-44254/3-A	Lab Control Sample Dup	101	111
MB 880-44254/1-A	Method Blank	92	102

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-44290/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44311 — **Prep Batch: 44290**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/18/23 16:20	01/19/23 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*01/18/23 16:20*	*01/19/23 11:20*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/18/23 16:20*	*01/19/23 11:20*	*1*

Lab Sample ID: LCS 880-44290/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44311 — **Prep Batch: 44290**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1090		mg/Kg		109	70 - 130		
Toluene			0.100	0.1012		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.1080		mg/Kg		108	70 - 130		
m-Xylene & p-Xylene			0.200	0.1965		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09984		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-44290/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44311 — **Prep Batch: 44290**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1103		mg/Kg		110	70 - 130	1	35
Toluene			0.100	0.1026		mg/Kg		103	70 - 130	1	35
Ethylbenzene			0.100	0.1118		mg/Kg		112	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2046		mg/Kg		102	70 - 130	4	35
o-Xylene			0.100	0.1041		mg/Kg		104	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-23861-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44311 — **Prep Batch: 44290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.07154		mg/Kg		71	70 - 130		
Toluene	<0.00201	U	0.100	0.08808		mg/Kg		88	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-23861-A-1-A MS
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.1254		mg/Kg		125	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2249		mg/Kg		111	70 - 130
o-Xylene	<0.00201	U	0.100	0.1122		mg/Kg		110	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-23861-A-1-B MSD
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 44290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.09766		mg/Kg		99	70 - 130	31	35
Toluene	<0.00201	U	0.0990	0.08982		mg/Kg		91	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.09844		mg/Kg		99	70 - 130	24	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1823		mg/Kg		91	70 - 130	21	35
o-Xylene	<0.00201	U	0.0990	0.09234		mg/Kg		92	70 - 130	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-44254/1-A
Matrix: Solid
Analysis Batch: 44220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44254

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/18/23 13:55	01/18/23 21:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/18/23 13:55	01/18/23 21:17	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/18/23 13:55	01/18/23 21:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*01/18/23 13:55*	*01/18/23 21:17*	*1*
o-Terphenyl	*102*		*70 - 130*	*01/18/23 13:55*	*01/18/23 21:17*	*1*

Lab Sample ID: LCS 880-44254/2-A
Matrix: Solid
Analysis Batch: 44220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44254

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	829.4		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)			1000	800.6		mg/Kg		80	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-44254/2-A
Matrix: Solid
Analysis Batch: 44220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44254

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: LCSD 880-44254/3-A
Matrix: Solid
Analysis Batch: 44220

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44254

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	808.0		mg/Kg		81	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	803.9		mg/Kg		80	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: 890-3821-A-1-E MS
Matrix: Solid
Analysis Batch: 44220

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	967.5		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	822.5		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 890-3821-A-1-F MSD
Matrix: Solid
Analysis Batch: 44220

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 44254

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	960.8		mg/Kg		95	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	791.1		mg/Kg		75	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	83		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44195/1-A
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/19/23 04:09	1

Lab Sample ID: LCS 880-44195/2-A
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.7		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-44195/3-A
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3844-A-1-B MS
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	8.36		252	268.2		mg/Kg		103	90 - 110		

Lab Sample ID: 890-3844-A-1-C MSD
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.36		252	267.2		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

GC VOA

Prep Batch: 44290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Total/NA	Solid	5035	
MB 880-44290/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 44311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Total/NA	Solid	8021B	44290
MB 880-44290/5-A	Method Blank	Total/NA	Solid	8021B	44290
LCS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	8021B	44290
LCSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44290
880-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	44290
880-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	44290

Analysis Batch: 44468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 44220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Total/NA	Solid	8015B NM	44254
MB 880-44254/1-A	Method Blank	Total/NA	Solid	8015B NM	44254
LCS 880-44254/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44254
LCSD 880-44254/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44254
890-3821-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	44254
890-3821-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44254

Prep Batch: 44254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Total/NA	Solid	8015NM Prep	
MB 880-44254/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44254/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44254/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3821-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3821-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 44348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Soluble	Solid	DI Leach	
MB 880-44195/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

HPLC/IC (Continued)

Leach Batch: 44195 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3844-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3844-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 44277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3846-1	FS50A	Soluble	Solid	300.0	44195
MB 880-44195/1-A	Method Blank	Soluble	Solid	300.0	44195
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	300.0	44195
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44195
890-3844-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	44195
890-3844-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44195

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Client Sample ID: FS50A

Date Collected: 01/12/23 11:20
Date Received: 01/13/23 14:13

Lab Sample ID: 890-3846-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44311	01/19/23 17:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44468	01/20/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			44348	01/19/23 13:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44254	01/18/23 13:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44220	01/19/23 00:56	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 05:05	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3846-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3846-1	FS50A	Solid	01/12/23 11:20	01/13/23 14:13	1'

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eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03C2077002	☑ Routine ☐ Rush	
Project Location:	32.5649393, -103.3183064	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021
FS50A	S	1/12/2023	11:20	1'	Grab/	1		x	x	x

Parameters

890-3846 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number:
nAPP2206638414

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1	Amanda Stuf	1-13-23 1413	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-1102 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-3846-1
Address: 1211 W Florida Ave,	Due Date Requested: 1/19/2023			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: EMSU B Facility	Project #: 89000094			
Site	SSOW#:			

Analysis Requested

Preservation Codes:
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 Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:		X	X						X	
FS50A (890-3846-1)	1/12/23	11 20 Mountain		Solid			X	X	X	X	X	1	

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/tests/matrix 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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank 2

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

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Received by OCD: 7/19/2023 1:46:39 PM
1/20/2023
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Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3846-1
SDG Number: 03C2077002

Login Number: 3846
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3846-1
SDG Number: 03C2077002

Login Number: 3846
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 01/17/23 11:09 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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/30/2023 9:49:16 AM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03C2077002

JOB NUMBER

890-3853-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

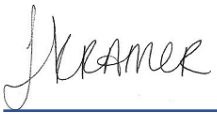
my EOL

Eurofins Carlsbad

Job Notes

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
1/30/2023 9:49:16 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3853-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Job ID: 890-3853-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3853-1

Receipt
The samples were received on 1/13/2023 2:57 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 1.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS51A (890-3853-1), FS52A (890-3853-2) and FS53A (890-3853-3).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: FS52A (890-3853-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-44232 and analytical batch 880-44899 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 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS51A (890-3853-1), (LCS 880-44232/2-A), (MB 880-44232/1-A), (890-3851-A-1-C MS) and (890-3851-A-1-D MSD). Evidence of matrix interferences is not obvious.

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 and precision for preparation batch 880-44195 and analytical batch 880-44277 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Client Sample ID: FS51A

Lab Sample ID: 890-3853-1
Matrix: Solid
Date Collected: 01/11/23 12:40
Date Received: 01/13/23 14:57
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/18/23 16:20	01/19/23 17:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/18/23 16:20	01/19/23 17:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/18/23 16:20	01/19/23 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*01/18/23 16:20*	*01/19/23 17:37*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/18/23 16:20*	*01/19/23 17:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/20/23 13:52	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			01/30/23 09:56	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		01/18/23 10:17	01/27/23 21:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/18/23 10:17	01/27/23 21:48	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/18/23 10:17	01/27/23 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*54*	*S1-*	*70 - 130*	*01/18/23 10:17*	*01/27/23 21:48*	*1*
o-Terphenyl	*53*	*S1-*	*70 - 130*	*01/18/23 10:17*	*01/27/23 21:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**59.0**		5.01		mg/Kg			01/19/23 07:02	1

Client Sample ID: FS52A

Lab Sample ID: 890-3853-2
Matrix: Solid
Date Collected: 01/11/23 12:45
Date Received: 01/13/23 14:57
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 17:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 17:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 17:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/18/23 16:20	01/19/23 17:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 17:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/18/23 16:20	01/19/23 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*01/18/23 16:20*	*01/19/23 17:58*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Client Sample ID: FS52A

Lab Sample ID: 890-3853-2
Matrix: Solid
Date Collected: 01/11/23 12:45
Date Received: 01/13/23 14:57
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*01/18/23 16:20*	*01/19/23 17:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/20/23 13:52	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/30/23 09:56	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/18/23 10:17	01/27/23 22:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/18/23 10:17	01/27/23 22:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/18/23 10:17	01/27/23 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*79*		*70 - 130*	*01/18/23 10:17*	*01/27/23 22:09*	*1*
o-Terphenyl	*84*		*70 - 130*	*01/18/23 10:17*	*01/27/23 22:09*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**59.5**		4.97	mg/Kg			01/19/23 07:08	1

Client Sample ID: FS53A

Lab Sample ID: 890-3853-3
Matrix: Solid
Date Collected: 01/11/23 12:50
Date Received: 01/13/23 14:57
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/18/23 16:20	01/19/23 18:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/18/23 16:20	01/19/23 18:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/18/23 16:20	01/19/23 18:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/18/23 16:20	01/19/23 18:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/18/23 16:20	01/19/23 18:19	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/18/23 16:20	01/19/23 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*01/18/23 16:20*	*01/19/23 18:19*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/18/23 16:20*	*01/19/23 18:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/20/23 13:52	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/30/23 09:56	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Client Sample ID: FS53A

Date Collected: 01/11/23 12:50
Date Received: 01/13/23 14:57
Sample Depth: 1'

Lab Sample ID: 890-3853-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/18/23 10:17	01/27/23 22:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/18/23 10:17	01/27/23 22:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/18/23 10:17	01/27/23 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*01/18/23 10:17*	*01/27/23 22:31*	*1*
o-Terphenyl	*79*		*70 - 130*	*01/18/23 10:17*	*01/27/23 22:31*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**62.3**		4.98		mg/Kg			01/19/23 07:14	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23861-A-1-A MS	Matrix Spike	113	87
880-23861-A-1-B MSD	Matrix Spike Duplicate	93	103
890-3853-1	FS51A	113	110
890-3853-2	FS52A	68 S1-	73
890-3853-3	FS53A	105	106
LCS 880-44290/1-A	Lab Control Sample	89	98
LCSD 880-44290/2-A	Lab Control Sample Dup	93	102
MB 880-44290/5-A	Method Blank	88	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3851-A-1-C MS	Matrix Spike	33 S1-	29 S1-
890-3851-A-1-D MSD	Matrix Spike Duplicate	63 S1-	60 S1-
890-3853-1	FS51A	54 S1-	53 S1-
890-3853-2	FS52A	79	84
890-3853-3	FS53A	75	79
LCS 880-44232/2-A	Lab Control Sample	112	131 S1+
LCSD 880-44232/3-A	Lab Control Sample Dup	99	114
MB 880-44232/1-A	Method Blank	138 S1+	171 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-44290/5-A
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44290

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/18/23 16:20	01/19/23 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*01/18/23 16:20*	*01/19/23 11:20*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/18/23 16:20*	*01/19/23 11:20*	*1*

Lab Sample ID: LCS 880-44290/1-A
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44290

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1090		mg/Kg		109	70 - 130		
Toluene			0.100	0.1012		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.1080		mg/Kg		108	70 - 130		
m-Xylene & p-Xylene			0.200	0.1965		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09984		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-44290/2-A
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44290

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1103		mg/Kg		110	70 - 130	1	35
Toluene			0.100	0.1026		mg/Kg		103	70 - 130	1	35
Ethylbenzene			0.100	0.1118		mg/Kg		112	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2046		mg/Kg		102	70 - 130	4	35
o-Xylene			0.100	0.1041		mg/Kg		104	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-23861-A-1-A MS
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.07154		mg/Kg		71	70 - 130		
Toluene	<0.00201	U	0.100	0.08808		mg/Kg		88	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-23861-A-1-A MS
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.1254		mg/Kg		125	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2249		mg/Kg		111	70 - 130
o-Xylene	<0.00201	U	0.100	0.1122		mg/Kg		110	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-23861-A-1-B MSD
Matrix: Solid
Analysis Batch: 44311

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 44290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.09766		mg/Kg		99	70 - 130	31	35
Toluene	<0.00201	U	0.0990	0.08982		mg/Kg		91	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.09844		mg/Kg		99	70 - 130	24	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1823		mg/Kg		91	70 - 130	21	35
o-Xylene	<0.00201	U	0.0990	0.09234		mg/Kg		92	70 - 130	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-44232/1-A
Matrix: Solid
Analysis Batch: 44899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44232

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/18/23 10:17	01/27/23 11:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/18/23 10:17	01/27/23 11:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/18/23 10:17	01/27/23 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*01/18/23 10:17*	*01/27/23 11:09*	*1*
o-Terphenyl	*171*	*S1+*	*70 - 130*	*01/18/23 10:17*	*01/27/23 11:09*	*1*

Lab Sample ID: LCS 880-44232/2-A
Matrix: Solid
Analysis Batch: 44899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44232

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1100		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1256		mg/Kg		126	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-44232/2-A
Matrix: Solid
Analysis Batch: 44899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44232

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-44232/3-A
Matrix: Solid
Analysis Batch: 44899

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44232

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1108		mg/Kg		111	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1205		mg/Kg		121	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 890-3851-A-1-C MS
Matrix: Solid
Analysis Batch: 44899

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44232

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	786.3		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	998	436.4	F1	mg/Kg		40	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	33	S1-	70 - 130
o-Terphenyl	29	S1-	70 - 130

Lab Sample ID: 890-3851-A-1-D MSD
Matrix: Solid
Analysis Batch: 44899

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 44232

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	817.0		mg/Kg		79	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	997	872.1	F2	mg/Kg		83	70 - 130	67	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	63	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44195/1-A
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/19/23 04:09	1

Lab Sample ID: LCS 880-44195/2-A
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.7		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-44195/3-A
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-3850-A-3-B MS
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	52.4	F1	250	268.9	F1	mg/Kg		87	90 - 110		

Lab Sample ID: 890-3850-A-3-C MSD
Matrix: Solid
Analysis Batch: 44277

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	52.4	F1	250	266.6	F1	mg/Kg		86	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

GC VOA

Prep Batch: 44290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Total/NA	Solid	5035	
890-3853-2	FS52A	Total/NA	Solid	5035	
890-3853-3	FS53A	Total/NA	Solid	5035	
MB 880-44290/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 44311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Total/NA	Solid	8021B	44290
890-3853-2	FS52A	Total/NA	Solid	8021B	44290
890-3853-3	FS53A	Total/NA	Solid	8021B	44290
MB 880-44290/5-A	Method Blank	Total/NA	Solid	8021B	44290
LCS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	8021B	44290
LCSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44290
880-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	44290
880-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	44290

Analysis Batch: 44469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Total/NA	Solid	Total BTEX	
890-3853-2	FS52A	Total/NA	Solid	Total BTEX	
890-3853-3	FS53A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 44232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Total/NA	Solid	8015NM Prep	
890-3853-2	FS52A	Total/NA	Solid	8015NM Prep	
890-3853-3	FS53A	Total/NA	Solid	8015NM Prep	
MB 880-44232/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44232/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44232/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3851-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3851-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 44899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Total/NA	Solid	8015B NM	44232
890-3853-2	FS52A	Total/NA	Solid	8015B NM	44232
890-3853-3	FS53A	Total/NA	Solid	8015B NM	44232
MB 880-44232/1-A	Method Blank	Total/NA	Solid	8015B NM	44232
LCS 880-44232/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44232
LCSD 880-44232/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44232
890-3851-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	44232
890-3851-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44232

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

GC Semi VOA

Analysis Batch: 44996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Total/NA	Solid	8015 NM	
890-3853-2	FS52A	Total/NA	Solid	8015 NM	
890-3853-3	FS53A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Soluble	Solid	DI Leach	
890-3853-2	FS52A	Soluble	Solid	DI Leach	
890-3853-3	FS53A	Soluble	Solid	DI Leach	
MB 880-44195/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3850-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3850-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 44277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3853-1	FS51A	Soluble	Solid	300.0	44195
890-3853-2	FS52A	Soluble	Solid	300.0	44195
890-3853-3	FS53A	Soluble	Solid	300.0	44195
MB 880-44195/1-A	Method Blank	Soluble	Solid	300.0	44195
LCS 880-44195/2-A	Lab Control Sample	Soluble	Solid	300.0	44195
LCSD 880-44195/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44195
890-3850-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	44195
890-3850-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44195

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Client Sample ID: FS51A
Date Collected: 01/11/23 12:40
Date Received: 01/13/23 14:57

Lab Sample ID: 890-3853-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44311	01/19/23 17:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44469	01/20/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			44996	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 21:48	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 07:02	CH	EET MID

Client Sample ID: FS52A
Date Collected: 01/11/23 12:45
Date Received: 01/13/23 14:57

Lab Sample ID: 890-3853-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44311	01/19/23 17:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44469	01/20/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			44996	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 22:09	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 07:08	CH	EET MID

Client Sample ID: FS53A
Date Collected: 01/11/23 12:50
Date Received: 01/13/23 14:57

Lab Sample ID: 890-3853-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44311	01/19/23 18:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44469	01/20/23 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			44996	01/30/23 09:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44232	01/18/23 10:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44899	01/27/23 22:31	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	44195	01/17/23 16:41	KS	EET MID
Soluble	Analysis	300.0		1			44277	01/19/23 07:14	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3853-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3853-1	FS51A	Solid	01/11/23 12:40	01/13/23 14:57	1'
890-3853-2	FS52A	Solid	01/11/23 12:45	01/13/23 14:57	1'
890-3853-3	FS53A	Solid	01/11/23 12:50	01/13/23 14:57	1'

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1/30/2023

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03C2077002	☑ Routine ☐ Rush	
Project Location:	32.5649393, -103.3183064	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TAMU007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Parameters
FS51A	S	1/11/2023	12:40	1'	Grab/	1		x	x	x	
FS52A	S	1/11/2023	12:45	1'	Grab/	1		x	x	x	
FS53A	S	1/11/2023	12:50	1'	Grab/	1		x	x	x	

890-3853 Chain of Custody

Sample Comments

Incident Number:
nAPP2206638414

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1		1-13-23 1413	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-1102 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-3853-1
Address: 1211 W Florida Ave	Due Date Requested: 1/19/2023			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: EMSU B Facility	Project #: 89000094			
Site	SSOW#:			

Analysis Requested

Preservation Codes.

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 Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
FS51A (890-3853-1)	1/11/23	12 40 Mountain		Solid			X	X	X	X	X	1	
FS52A (890-3853-2)	1/11/23	12 45 Mountain		Solid			X	X	X	X	X	1	
FS53A (890-3853-3)	1/11/23	12 50 Mountain		Solid			X	X	X	X	X	1	

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/tests/matrix 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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

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Received by OCD: 7/19/2023 1:46:39 PM
1/30/2023
Page 21 of 23
Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3853-1
SDG Number: 03C2077002

Login Number: 3853
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3853-1
SDG Number: 03C2077002

Login Number: 3853
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 01/17/23 11:09 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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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/30/2023 9:50:12 AM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03C2077002

JOB NUMBER

890-3875-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

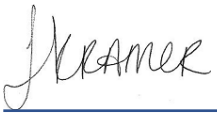
my EOL

Eurofins Carlsbad

Job Notes

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
1/30/2023 9:50:12 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-3875-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Job ID: 890-3875-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3875-1

Receipt
The samples were received on 1/18/2023 10:48 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 2.6°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS47A (890-3875-1), FS48A (890-3875-2) and FS49A (890-3875-3).

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-44619 and analytical batch 880-44613 were outside control limits. Non-homogeneity 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.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS47A (890-3875-1), (LCS 880-44347/2-A), (MB 880-44347/1-A), (880-23875-A-1-A) and (880-23875-A-1-B MS). Evidence of matrix interferences is not obvious.

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 and precision for preparation batch 880-44390 and analytical batch 880-44505 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Client Sample ID: FS47A

Lab Sample ID: 890-3875-1
Matrix: Solid
Date Collected: 01/17/23 12:30
Date Received: 01/18/23 10:48
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/25/23 04:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/25/23 04:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/25/23 04:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/24/23 11:27	01/25/23 04:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/25/23 04:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/24/23 11:27	01/25/23 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*01/24/23 11:27*	*01/25/23 04:25*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*01/24/23 11:27*	*01/25/23 04:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/25/23 15:14	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/30/23 10:02	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/19/23 13:43	01/28/23 20:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/19/23 13:43	01/28/23 20:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/19/23 13:43	01/28/23 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*01/19/23 13:43*	*01/28/23 20:02*	*1*
o-Terphenyl	*56*	*S1-*	*70 - 130*	*01/19/23 13:43*	*01/28/23 20:02*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.1**		4.97		mg/Kg			01/22/23 14:41	1

Client Sample ID: FS48A

Lab Sample ID: 890-3875-2
Matrix: Solid
Date Collected: 01/17/23 12:35
Date Received: 01/18/23 10:48
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/24/23 11:27	01/25/23 04:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/24/23 11:27	01/25/23 04:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/24/23 11:27	01/25/23 04:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/24/23 11:27	01/25/23 04:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/24/23 11:27	01/25/23 04:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/24/23 11:27	01/25/23 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*01/24/23 11:27*	*01/25/23 04:46*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Client Sample ID: FS48A

Lab Sample ID: 890-3875-2
Matrix: Solid
Date Collected: 01/17/23 12:35
Date Received: 01/18/23 10:48
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*01/24/23 11:27*	*01/25/23 04:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/25/23 15:14	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/30/23 10:02	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/19/23 13:43	01/28/23 20:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/23 13:43	01/28/23 20:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/23 13:43	01/28/23 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*01/19/23 13:43*	*01/28/23 20:27*	*1*
o-Terphenyl	*50*	*S1-*	*70 - 130*	*01/19/23 13:43*	*01/28/23 20:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.0**		5.02	mg/Kg			01/22/23 14:48	1

Client Sample ID: FS49A

Lab Sample ID: 890-3875-3
Matrix: Solid
Date Collected: 01/17/23 12:40
Date Received: 01/18/23 10:48
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/24/23 11:27	01/25/23 05:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/24/23 11:27	01/25/23 05:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/24/23 11:27	01/25/23 05:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/24/23 11:27	01/25/23 05:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/24/23 11:27	01/25/23 05:07	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/24/23 11:27	01/25/23 05:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*01/24/23 11:27*	*01/25/23 05:07*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*01/24/23 11:27*	*01/25/23 05:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/25/23 15:14	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/30/23 10:02	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Client Sample ID: FS49A

Date Collected: 01/17/23 12:40
Date Received: 01/18/23 10:48
Sample Depth: 1'

Lab Sample ID: 890-3875-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/19/23 13:43	01/28/23 21:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/19/23 13:43	01/28/23 21:15	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/19/23 13:43	01/28/23 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*01/19/23 13:43*	*01/28/23 21:15*	*1*
o-Terphenyl	*87*		*70 - 130*	*01/19/23 13:43*	*01/28/23 21:15*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**53.5**		5.01		mg/Kg			01/22/23 14:54	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-24039-A-1-A MS	Matrix Spike	102	101
880-24039-A-1-B MSD	Matrix Spike Duplicate	88	103
890-3875-1	FS47A	80	104
890-3875-2	FS48A	75	86
890-3875-3	FS49A	95	96
LCS 880-44619/1-A	Lab Control Sample	98	109
LCSD 880-44619/2-A	Lab Control Sample Dup	90	107
MB 880-44550/5-A	Method Blank	75	91
MB 880-44619/5-A	Method Blank	70	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23875-A-1-B MS	Matrix Spike	8 S1-	4 S1-
880-23875-A-1-C MSD	Matrix Spike Duplicate	93	83
890-3875-1	FS47A	65 S1-	56 S1-
890-3875-2	FS48A	60 S1-	50 S1-
890-3875-3	FS49A	94	87
LCS 880-44347/2-A	Lab Control Sample	143 S1+	152 S1+
LCSD 880-44347/3-A	Lab Control Sample Dup	101	105
MB 880-44347/1-A	Method Blank	177 S1+	171 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-44550/5-A
Matrix: Solid
Analysis Batch: 44613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44550

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/23/23 15:50	01/24/23 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/23/23 15:50	01/24/23 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/23/23 15:50	01/24/23 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/23/23 15:50	01/24/23 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/23/23 15:50	01/24/23 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/23/23 15:50	01/24/23 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*01/23/23 15:50*	*01/24/23 11:43*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*01/23/23 15:50*	*01/24/23 11:43*	*1*

Lab Sample ID: MB 880-44619/5-A
Matrix: Solid
Analysis Batch: 44613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44619

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/24/23 22:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/24/23 22:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/24/23 22:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/24/23 11:27	01/24/23 22:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/23 11:27	01/24/23 22:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/24/23 11:27	01/24/23 22:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*01/24/23 11:27*	*01/24/23 22:25*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/24/23 11:27*	*01/24/23 22:25*	*1*

Lab Sample ID: LCS 880-44619/1-A
Matrix: Solid
Analysis Batch: 44613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44619

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09605		mg/Kg		96	70 - 130		
Toluene			0.100	0.08702		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08377		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1763		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.08841		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 880-44619/2-A
Matrix: Solid
Analysis Batch: 44613

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44619

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1159		mg/Kg		116	70 - 130	19	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-44619/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44613 — **Prep Batch: 44619**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1003		mg/Kg		100	70 - 130	14	35
Ethylbenzene			0.100	0.09225		mg/Kg		92	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.1845		mg/Kg		92	70 - 130	5	35
o-Xylene			0.100	0.09078		mg/Kg		91	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 880-24039-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44613 — **Prep Batch: 44619**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1 F2	0.100	0.08688		mg/Kg		87	70 - 130
Toluene	<0.00201	U F1 F2	0.100	0.07578		mg/Kg		75	70 - 130
Ethylbenzene	<0.00201	U F1 F2	0.100	0.07485		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.1510		mg/Kg		75	70 - 130
o-Xylene	<0.00201	U F1 F2	0.100	0.07657		mg/Kg		76	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-24039-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44613 — **Prep Batch: 44619**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1 F2	0.0990	0.05391	F1 F2	mg/Kg		54	70 - 130	47	35
Toluene	<0.00201	U F1 F2	0.0990	0.04769	F1 F2	mg/Kg		47	70 - 130	45	35
Ethylbenzene	<0.00201	U F1 F2	0.0990	0.04696	F1 F2	mg/Kg		47	70 - 130	46	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.198	0.09156	F1 F2	mg/Kg		46	70 - 130	49	35
o-Xylene	<0.00201	U F1 F2	0.0990	0.04738	F1 F2	mg/Kg		47	70 - 130	47	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-44347/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44954 — **Prep Batch: 44347**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/19/23 13:43	01/28/23 13:09	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-44347/1-A
Matrix: Solid
Analysis Batch: 44954

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44347

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/19/23 13:43	01/28/23 13:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/19/23 13:43	01/28/23 13:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*177*	*S1+*	*70 - 130*	*01/19/23 13:43*	*01/28/23 13:09*	*1*
o-Terphenyl	*171*	*S1+*	*70 - 130*	*01/19/23 13:43*	*01/28/23 13:09*	*1*

Lab Sample ID: LCS 880-44347/2-A
Matrix: Solid
Analysis Batch: 44954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44347

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1103		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1159		mg/Kg		116	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*143*	*S1+*	*70 - 130*
o-Terphenyl	*152*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-44347/3-A
Matrix: Solid
Analysis Batch: 44954

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 44347

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1152		mg/Kg		115	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1145		mg/Kg		114	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: 880-23875-A-1-B MS
Matrix: Solid
Analysis Batch: 44954

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 44347

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	<49.9	U F1	mg/Kg		0.02	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	<49.9	U F1	mg/Kg		0	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*8*	*S1-*	*70 - 130*
o-Terphenyl	*4*	*S1-*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-23875-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 44954 — **Prep Batch: 44347**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	997	<49.9	U F1 F2	mg/Kg		2	70 - 130	81	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	997	<49.9	U F1	mg/Kg		0	70 - 130	NC	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44390/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 44505

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/22/23 11:55	1

Lab Sample ID: LCS 880-44390/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 44505

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.0		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-44390/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 44505

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.6		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-3874-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 44505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	958	F1	251	1173	F1	mg/Kg		86	90 - 110		

Lab Sample ID: 890-3874-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 44505

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	958	F1	251	1173	F1	mg/Kg		86	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

GC VOA

Prep Batch: 44550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-44550/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 44613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Total/NA	Solid	8021B	44619
890-3875-2	FS48A	Total/NA	Solid	8021B	44619
890-3875-3	FS49A	Total/NA	Solid	8021B	44619
MB 880-44550/5-A	Method Blank	Total/NA	Solid	8021B	44550
MB 880-44619/5-A	Method Blank	Total/NA	Solid	8021B	44619
LCS 880-44619/1-A	Lab Control Sample	Total/NA	Solid	8021B	44619
LCSD 880-44619/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44619
880-24039-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	44619
880-24039-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	44619

Prep Batch: 44619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Total/NA	Solid	5035	
890-3875-2	FS48A	Total/NA	Solid	5035	
890-3875-3	FS49A	Total/NA	Solid	5035	
MB 880-44619/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-44619/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-44619/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24039-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-24039-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 44744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Total/NA	Solid	Total BTEX	
890-3875-2	FS48A	Total/NA	Solid	Total BTEX	
890-3875-3	FS49A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 44347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Total/NA	Solid	8015NM Prep	
890-3875-2	FS48A	Total/NA	Solid	8015NM Prep	
890-3875-3	FS49A	Total/NA	Solid	8015NM Prep	
MB 880-44347/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44347/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44347/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23875-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23875-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 44954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Total/NA	Solid	8015B NM	44347
890-3875-2	FS48A	Total/NA	Solid	8015B NM	44347
890-3875-3	FS49A	Total/NA	Solid	8015B NM	44347
MB 880-44347/1-A	Method Blank	Total/NA	Solid	8015B NM	44347
LCS 880-44347/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44347

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

GC Semi VOA (Continued)

Analysis Batch: 44954 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-44347/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44347
880-23875-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	44347
880-23875-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44347

Analysis Batch: 45001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Total/NA	Solid	8015 NM	
890-3875-2	FS48A	Total/NA	Solid	8015 NM	
890-3875-3	FS49A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 44390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Soluble	Solid	DI Leach	
890-3875-2	FS48A	Soluble	Solid	DI Leach	
890-3875-3	FS49A	Soluble	Solid	DI Leach	
MB 880-44390/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44390/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44390/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3874-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3874-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 44505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3875-1	FS47A	Soluble	Solid	300.0	44390
890-3875-2	FS48A	Soluble	Solid	300.0	44390
890-3875-3	FS49A	Soluble	Solid	300.0	44390
MB 880-44390/1-A	Method Blank	Soluble	Solid	300.0	44390
LCS 880-44390/2-A	Lab Control Sample	Soluble	Solid	300.0	44390
LCSD 880-44390/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44390
890-3874-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	44390
890-3874-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	44390

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Client Sample ID: FS47A

Date Collected: 01/17/23 12:30
Date Received: 01/18/23 10:48

Lab Sample ID: 890-3875-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	44619	01/24/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44613	01/25/23 04:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44744	01/25/23 15:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			45001	01/30/23 10:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44347	01/19/23 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44954	01/28/23 20:02	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	44390	01/19/23 16:28	KS	EET MID
Soluble	Analysis	300.0		1			44505	01/22/23 14:41	CH	EET MID

Client Sample ID: FS48A

Date Collected: 01/17/23 12:35
Date Received: 01/18/23 10:48

Lab Sample ID: 890-3875-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	44619	01/24/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44613	01/25/23 04:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44744	01/25/23 15:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			45001	01/30/23 10:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	44347	01/19/23 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44954	01/28/23 20:27	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	44390	01/19/23 16:28	KS	EET MID
Soluble	Analysis	300.0		1			44505	01/22/23 14:48	CH	EET MID

Client Sample ID: FS49A

Date Collected: 01/17/23 12:40
Date Received: 01/18/23 10:48

Lab Sample ID: 890-3875-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	44619	01/24/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44613	01/25/23 05:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44744	01/25/23 15:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			45001	01/30/23 10:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44347	01/19/23 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44954	01/28/23 21:15	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	44390	01/19/23 16:28	KS	EET MID
Soluble	Analysis	300.0		1			44505	01/22/23 14:54	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-3875-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3875-1	FS47A	Solid	01/17/23 12:30	01/18/23 10:48	1'
890-3875-2	FS48A	Solid	01/17/23 12:35	01/18/23 10:48	1'
890-3875-3	FS49A	Solid	01/17/23 12:40	01/18/23 10:48	1'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	☑ Routine ☐ Rush
Project Number:	03C2077002	Due Date:	
Project Location:	32.5649393, -103.3183064	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TMM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.8
Total Containers:		Corrected Temperature:	2.6

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021
FS47A	S	1/17/2023	12:30	1'	Grab/	1		x	x	x
FS48A	S	1/17/2023	12:35	1'	Grab/	1		x	x	x
FS49A	S	1/17/2023	12:40	1'	Grab/	1		x	x	x

890-3875 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number:
nAPP2206638414

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1		1/18/23 1030	2		
3		1/18/23 1045			
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3875-1
SDG Number: 03C2077002

Login Number: 3875
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3875-1
SDG Number: 03C2077002

Login Number: 3875
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/19/23 12:02 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/28/2023 4:23:10 PM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03C2077002

JOB NUMBER

890-4164-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

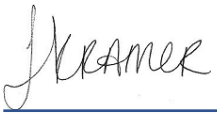
my EOL

Eurofins Carlsbad

Job Notes

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
2/28/2023 4:23:10 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 890-4164-1
SDG: 03C2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Job ID: 890-4164-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4164-1

Receipt
The samples were received on 2/21/2023 1:34 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 1.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS58A (890-4164-1), FS59A (890-4164-2), FS60A (890-4164-3), FS61A (890-4164-4), FS62A (890-4164-5), FS63A (890-4164-6), FS64A (890-4164-7), FS65A (890-4164-8) and FS66A (890-4164-9).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-47216/5-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-47310 and analytical batch 880-47287 was outside the control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-47205 and analytical batch 880-47221 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS58A

Lab Sample ID: 890-4164-1
Matrix: Solid
Date Collected: 02/21/23 10:05
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/24/23 16:54	02/28/23 14:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/24/23 16:54	02/28/23 14:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/24/23 16:54	02/28/23 14:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/24/23 16:54	02/28/23 14:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/24/23 16:54	02/28/23 14:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/24/23 16:54	02/28/23 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*02/24/23 16:54*	*02/28/23 14:14*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*02/24/23 16:54*	*02/28/23 14:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/28/23 17:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/27/23 12:20	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/25/23 01:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/25/23 01:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/25/23 01:48	1
Total TPH	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/25/23 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*02/24/23 15:20*	*02/25/23 01:48*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/24/23 15:20*	*02/25/23 01:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.75**		4.97		mg/Kg			02/27/23 04:07	1

Client Sample ID: FS59A

Lab Sample ID: 890-4164-2
Matrix: Solid
Date Collected: 02/21/23 10:10
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/24/23 16:54	02/28/23 09:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/24/23 16:54	02/28/23 09:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/24/23 16:54	02/28/23 09:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/24/23 16:54	02/28/23 09:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/24/23 16:54	02/28/23 09:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/24/23 16:54	02/28/23 09:00	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS59A

Date Collected: 02/21/23 10:10
Date Received: 02/21/23 13:34
Sample Depth: 1'

Lab Sample ID: 890-4164-2

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*02/24/23 16:54*	*02/28/23 09:00*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/24/23 16:54*	*02/28/23 09:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/28/23 12:13	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/27/23 12:20	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/24/23 15:20	02/25/23 02:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/24/23 15:20	02/25/23 02:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/24/23 15:20	02/25/23 02:10	1
Total TPH	<50.0	U	50.0	mg/Kg		02/24/23 15:20	02/25/23 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/24/23 15:20*	*02/25/23 02:10*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/24/23 15:20*	*02/25/23 02:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.3**		4.98	mg/Kg			02/27/23 04:13	1

Client Sample ID: FS60A

Date Collected: 02/21/23 10:15
Date Received: 02/21/23 13:34
Sample Depth: 1'

Lab Sample ID: 890-4164-3

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/24/23 16:54	02/28/23 10:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/24/23 16:54	02/28/23 10:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/24/23 16:54	02/28/23 10:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/24/23 16:54	02/28/23 10:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/24/23 16:54	02/28/23 10:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/24/23 16:54	02/28/23 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/24/23 16:54*	*02/28/23 10:46*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/24/23 16:54*	*02/28/23 10:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/28/23 17:00	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS60A

Date Collected: 02/21/23 10:15
Date Received: 02/21/23 13:34
Sample Depth: 1'

Lab Sample ID: 890-4164-3
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/27/23 12:20	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 02:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 02:54	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 02:54	1
Total TPH	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/24/23 15:20*	*02/25/23 02:54*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/24/23 15:20*	*02/25/23 02:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.2**		5.00		mg/Kg			02/27/23 04:18	1

Client Sample ID: FS61A

Date Collected: 02/21/23 10:20
Date Received: 02/21/23 13:34
Sample Depth: 1'

Lab Sample ID: 890-4164-4
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/24/23 16:54	02/28/23 11:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/24/23 16:54	02/28/23 11:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/24/23 16:54	02/28/23 11:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/24/23 16:54	02/28/23 11:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/24/23 16:54	02/28/23 11:12	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/24/23 16:54	02/28/23 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*02/24/23 16:54*	*02/28/23 11:12*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/24/23 16:54*	*02/28/23 11:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/28/23 17:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/27/23 12:20	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 03:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 03:16	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 03:16	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS61A

Lab Sample ID: 890-4164-4
Matrix: Solid
Date Collected: 02/21/23 10:20
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg		02/24/23 15:20	02/25/23 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*02/24/23 15:20*	*02/25/23 03:16*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/24/23 15:20*	*02/25/23 03:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.3**		5.05		mg/Kg			02/27/23 04:24	1

Client Sample ID: FS62A

Lab Sample ID: 890-4164-5
Matrix: Solid
Date Collected: 02/21/23 10:25
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 11:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 11:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 11:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/24/23 16:54	02/28/23 11:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 11:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/24/23 16:54	02/28/23 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*02/24/23 16:54*	*02/28/23 11:37*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/24/23 16:54*	*02/28/23 11:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/28/23 17:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/27/23 12:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:21	1
Total TPH	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/24/23 15:11*	*02/25/23 17:21*	*1*
o-Terphenyl	*94*		*70 - 130*	*02/24/23 15:11*	*02/25/23 17:21*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS62A

Lab Sample ID: 890-4164-5
Matrix: Solid
Date Collected: 02/21/23 10:25
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.3		4.98		mg/Kg			02/27/23 04:30	1

Client Sample ID: FS63A

Lab Sample ID: 890-4164-6
Matrix: Solid
Date Collected: 02/21/23 10:30
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/24/23 16:54	02/28/23 12:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/24/23 16:54	02/28/23 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*02/24/23 16:54*	*02/28/23 12:04*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/24/23 16:54*	*02/28/23 12:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/28/23 17:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/27/23 12:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:42	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:42	1
Total TPH	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/24/23 15:11*	*02/25/23 17:42*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/24/23 15:11*	*02/25/23 17:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.7		5.05		mg/Kg			02/27/23 04:47	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS64A

Lab Sample ID: 890-4164-7
Matrix: Solid
Date Collected: 02/21/23 10:35
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/24/23 16:54	02/28/23 12:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 12:30	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/24/23 16:54	02/28/23 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/24/23 16:54*	*02/28/23 12:30*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/24/23 16:54*	*02/28/23 12:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/28/23 17:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/27/23 12:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:03	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:03	1
Total TPH	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*02/24/23 15:11*	*02/25/23 18:03*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/24/23 15:11*	*02/25/23 18:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.0**		4.96		mg/Kg			02/27/23 04:52	1

Client Sample ID: FS65A

Lab Sample ID: 890-4164-8
Matrix: Solid
Date Collected: 02/21/23 10:40
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/24/23 16:54	02/28/23 12:56	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/24/23 16:54	02/28/23 12:56	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/24/23 16:54	02/28/23 12:56	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/24/23 16:54	02/28/23 12:56	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/24/23 16:54	02/28/23 12:56	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/24/23 16:54	02/28/23 12:56	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS65A

Lab Sample ID: 890-4164-8
Matrix: Solid
Date Collected: 02/21/23 10:40
Date Received: 02/21/23 13:34
Sample Depth: 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	02/24/23 16:54	02/28/23 12:56	1
1,4-Difluorobenzene (Surr)	94		70 - 130	02/24/23 16:54	02/28/23 12:56	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/28/23 17:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/27/23 12:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:25	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:25	1
Total TPH	<49.8	U	49.8		mg/Kg		02/24/23 15:11	02/25/23 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	02/24/23 15:11	02/25/23 18:25	1
o-Terphenyl	86		70 - 130	02/24/23 15:11	02/25/23 18:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.04**		5.00		mg/Kg			02/27/23 05:09	1

Client Sample ID: FS66A

Lab Sample ID: 890-4164-9
Matrix: Solid
Date Collected: 02/21/23 10:45
Date Received: 02/21/23 13:34
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 13:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 13:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 13:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/24/23 16:54	02/28/23 13:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 13:22	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/24/23 16:54	02/28/23 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	02/24/23 16:54	02/28/23 13:22	1
1,4-Difluorobenzene (Surr)	93		70 - 130	02/24/23 16:54	02/28/23 13:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/28/23 17:00	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS66A

Date Collected: 02/21/23 10:45
Date Received: 02/21/23 13:34
Sample Depth: 1'

Lab Sample ID: 890-4164-9

Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/27/23 12:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 18:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 18:47	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 18:47	1
Total TPH	<49.9	U	49.9		mg/Kg		02/24/23 15:11	02/25/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*02/24/23 15:11*	*02/25/23 18:47*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/24/23 15:11*	*02/25/23 18:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.0**		4.97		mg/Kg			02/27/23 05:15	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4160-A-1-F MS	Matrix Spike	110	119
890-4160-A-1-G MSD	Matrix Spike Duplicate	110	97
890-4164-1	FS58A	88	83
890-4164-2	FS59A	116	92
890-4164-3	FS60A	106	102
890-4164-4	FS61A	113	106
890-4164-5	FS62A	118	94
890-4164-6	FS63A	121	94
890-4164-7	FS64A	107	99
890-4164-8	FS65A	118	94
890-4164-9	FS66A	116	93
LCS 880-47216/1-A	Lab Control Sample	116	116
LCSD 880-47216/2-A	Lab Control Sample Dup	111	103
MB 880-47216/5-A	Method Blank	65 S1-	92
MB 880-47310/5-A	Method Blank	67 S1-	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-25053-A-41-E MS	Matrix Spike	111	111
880-25053-A-41-F MSD	Matrix Spike Duplicate	110	110
890-4164-1	FS58A	95	91
890-4164-2	FS59A	93	91
890-4164-3	FS60A	93	92
890-4164-4	FS61A	97	93
890-4164-5	FS62A	93	94
890-4164-6	FS63A	84	88
890-4164-7	FS64A	92	93
890-4164-8	FS65A	85	86
890-4164-9	FS66A	92	92
890-4180-A-21-H MS	Matrix Spike	105	86
890-4180-A-21-I MSD	Matrix Spike Duplicate	103	86
LCS 880-47205/2-A	Lab Control Sample	117	117
LCS 880-47206/2-A	Lab Control Sample	111	103
LCSD 880-47205/3-A	Lab Control Sample Dup	130	125
LCSD 880-47206/3-A	Lab Control Sample Dup	113	104
MB 880-47205/1-A	Method Blank	147 S1+	155 S1+
MB 880-47206/1-A	Method Blank	118	121

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-47216/5-A
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47216

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 03:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 03:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 03:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/24/23 16:54	02/28/23 03:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/23 16:54	02/28/23 03:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/24/23 16:54	02/28/23 03:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*02/24/23 16:54*	*02/28/23 03:44*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/24/23 16:54*	*02/28/23 03:44*	*1*

Lab Sample ID: LCS 880-47216/1-A
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47216

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1165		mg/Kg		117	70 - 130		
Toluene			0.100	0.1136		mg/Kg		114	70 - 130		
Ethylbenzene			0.100	0.1062		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2169		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1199		mg/Kg		120	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-47216/2-A
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47216

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1091		mg/Kg		109	70 - 130	7	35
Toluene			0.100	0.1066		mg/Kg		107	70 - 130	6	35
Ethylbenzene			0.100	0.1070		mg/Kg		107	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2171		mg/Kg		109	70 - 130	0	35
o-Xylene			0.100	0.1159		mg/Kg		116	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-4160-A-1-F MS
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.101	0.1158		mg/Kg		115	70 - 130		
Toluene	<0.00199	U	0.101	0.08584		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-4160-A-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47287 — **Prep Batch: 47216**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.101	0.08169		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1723		mg/Kg		86	70 - 130
o-Xylene	<0.00199	U	0.101	0.09895		mg/Kg		98	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*

Lab Sample ID: 890-4160-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47287 — **Prep Batch: 47216**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.09305		mg/Kg		94	70 - 130	22	35
Toluene	<0.00199	U	0.0990	0.08183		mg/Kg		83	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0990	0.07808		mg/Kg		79	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1650		mg/Kg		83	70 - 130	4	35
o-Xylene	<0.00199	U	0.0990	0.09597		mg/Kg		97	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 880-47310/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47287 — **Prep Batch: 47310**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/27/23 12:05	02/27/23 14:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/27/23 12:05	02/27/23 14:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/27/23 12:05	02/27/23 14:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/27/23 12:05	02/27/23 14:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/27/23 12:05	02/27/23 14:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/27/23 12:05	02/27/23 14:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*02/27/23 12:05*	*02/27/23 14:21*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/27/23 12:05*	*02/27/23 14:21*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-47205/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47221 — **Prep Batch: 47205**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/24/23 15:11	02/25/23 08:50	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-47205/1-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47205

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/23 15:11	02/25/23 08:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/23 15:11	02/25/23 08:50	1
Total TPH	<50.0	U	50.0		mg/Kg		02/24/23 15:11	02/25/23 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*02/24/23 15:11*	*02/25/23 08:50*	*1*
o-Terphenyl	*155*	*S1+*	*70 - 130*	*02/24/23 15:11*	*02/25/23 08:50*	*1*

Lab Sample ID: LCS 880-47205/2-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47205

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	985.6		mg/Kg		99	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1051		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: LCSD 880-47205/3-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47205

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	959.3		mg/Kg		96	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1125		mg/Kg		113	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*125*		*70 - 130*

Lab Sample ID: 880-25053-A-41-E MS
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1077		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1052		mg/Kg		106	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-25053-A-41-E MS
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47205

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	111		70 - 130

Lab Sample ID: 880-25053-A-41-F MSD
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 47205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1009		mg/Kg		98	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1045		mg/Kg		105	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: MB 880-47206/1-A
Matrix: Solid
Analysis Batch: 47130

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47206

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/24/23 21:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/24/23 21:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/24/23 21:07	1
Total TPH	<50.0	U	50.0		mg/Kg		02/24/23 15:20	02/24/23 21:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	02/24/23 15:20	02/24/23 21:07	1
o-Terphenyl	121		70 - 130	02/24/23 15:20	02/24/23 21:07	1

Lab Sample ID: LCS 880-47206/2-A
Matrix: Solid
Analysis Batch: 47130

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47206

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	885.5		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	947.5		mg/Kg		95	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	103		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-47206/3-A
Matrix: Solid
Analysis Batch: 47130

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47206

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	949.5		mg/Kg		95	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	955.5		mg/Kg		96	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: 890-4180-A-21-H MS
Matrix: Solid
Analysis Batch: 47130

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	987.3		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	873.5		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

Lab Sample ID: 890-4180-A-21-I MSD
Matrix: Solid
Analysis Batch: 47130

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 47206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1046		mg/Kg		101	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	877.4		mg/Kg		86	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-47148/1-A
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/27/23 02:54	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-47148/2-A
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	258.3		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-47148/3-A
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.7		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 890-4164-5 MS
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: FS62A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	16.3		249	273.0		mg/Kg		103	90 - 110		

Lab Sample ID: 890-4164-5 MSD
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: FS62A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	16.3		249	270.1		mg/Kg		102	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

GC VOA

Prep Batch: 47216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Total/NA	Solid	5035	
890-4164-2	FS59A	Total/NA	Solid	5035	
890-4164-3	FS60A	Total/NA	Solid	5035	
890-4164-4	FS61A	Total/NA	Solid	5035	
890-4164-5	FS62A	Total/NA	Solid	5035	
890-4164-6	FS63A	Total/NA	Solid	5035	
890-4164-7	FS64A	Total/NA	Solid	5035	
890-4164-8	FS65A	Total/NA	Solid	5035	
890-4164-9	FS66A	Total/NA	Solid	5035	
MB 880-47216/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-47216/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-47216/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4160-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-4160-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 47287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Total/NA	Solid	8021B	47216
890-4164-2	FS59A	Total/NA	Solid	8021B	47216
890-4164-3	FS60A	Total/NA	Solid	8021B	47216
890-4164-4	FS61A	Total/NA	Solid	8021B	47216
890-4164-5	FS62A	Total/NA	Solid	8021B	47216
890-4164-6	FS63A	Total/NA	Solid	8021B	47216
890-4164-7	FS64A	Total/NA	Solid	8021B	47216
890-4164-8	FS65A	Total/NA	Solid	8021B	47216
890-4164-9	FS66A	Total/NA	Solid	8021B	47216
MB 880-47216/5-A	Method Blank	Total/NA	Solid	8021B	47216
MB 880-47310/5-A	Method Blank	Total/NA	Solid	8021B	47310
LCS 880-47216/1-A	Lab Control Sample	Total/NA	Solid	8021B	47216
LCSD 880-47216/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	47216
890-4160-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	47216
890-4160-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	47216

Prep Batch: 47310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-47310/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 47458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Total/NA	Solid	Total BTEX	
890-4164-2	FS59A	Total/NA	Solid	Total BTEX	
890-4164-3	FS60A	Total/NA	Solid	Total BTEX	
890-4164-4	FS61A	Total/NA	Solid	Total BTEX	
890-4164-5	FS62A	Total/NA	Solid	Total BTEX	
890-4164-6	FS63A	Total/NA	Solid	Total BTEX	
890-4164-7	FS64A	Total/NA	Solid	Total BTEX	
890-4164-8	FS65A	Total/NA	Solid	Total BTEX	
890-4164-9	FS66A	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

GC Semi VOA

Analysis Batch: 47130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Total/NA	Solid	8015B NM	47206
890-4164-2	FS59A	Total/NA	Solid	8015B NM	47206
890-4164-3	FS60A	Total/NA	Solid	8015B NM	47206
890-4164-4	FS61A	Total/NA	Solid	8015B NM	47206
MB 880-47206/1-A	Method Blank	Total/NA	Solid	8015B NM	47206
LCS 880-47206/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	47206
LCSD 880-47206/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	47206
890-4180-A-21-H MS	Matrix Spike	Total/NA	Solid	8015B NM	47206
890-4180-A-21-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	47206

Prep Batch: 47205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-5	FS62A	Total/NA	Solid	8015NM Prep	
890-4164-6	FS63A	Total/NA	Solid	8015NM Prep	
890-4164-7	FS64A	Total/NA	Solid	8015NM Prep	
890-4164-8	FS65A	Total/NA	Solid	8015NM Prep	
890-4164-9	FS66A	Total/NA	Solid	8015NM Prep	
MB 880-47205/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-47205/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-47205/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25053-A-41-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25053-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 47206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Total/NA	Solid	8015NM Prep	
890-4164-2	FS59A	Total/NA	Solid	8015NM Prep	
890-4164-3	FS60A	Total/NA	Solid	8015NM Prep	
890-4164-4	FS61A	Total/NA	Solid	8015NM Prep	
MB 880-47206/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-47206/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-47206/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4180-A-21-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4180-A-21-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 47221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-5	FS62A	Total/NA	Solid	8015B NM	47205
890-4164-6	FS63A	Total/NA	Solid	8015B NM	47205
890-4164-7	FS64A	Total/NA	Solid	8015B NM	47205
890-4164-8	FS65A	Total/NA	Solid	8015B NM	47205
890-4164-9	FS66A	Total/NA	Solid	8015B NM	47205
MB 880-47205/1-A	Method Blank	Total/NA	Solid	8015B NM	47205
LCS 880-47205/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	47205
LCSD 880-47205/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	47205
880-25053-A-41-E MS	Matrix Spike	Total/NA	Solid	8015B NM	47205
880-25053-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	47205

Analysis Batch: 47321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

GC Semi VOA (Continued)

Analysis Batch: 47321 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-2	FS59A	Total/NA	Solid	8015 NM	
890-4164-3	FS60A	Total/NA	Solid	8015 NM	
890-4164-4	FS61A	Total/NA	Solid	8015 NM	
890-4164-5	FS62A	Total/NA	Solid	8015 NM	
890-4164-6	FS63A	Total/NA	Solid	8015 NM	
890-4164-7	FS64A	Total/NA	Solid	8015 NM	
890-4164-8	FS65A	Total/NA	Solid	8015 NM	
890-4164-9	FS66A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 47148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Soluble	Solid	DI Leach	
890-4164-2	FS59A	Soluble	Solid	DI Leach	
890-4164-3	FS60A	Soluble	Solid	DI Leach	
890-4164-4	FS61A	Soluble	Solid	DI Leach	
890-4164-5	FS62A	Soluble	Solid	DI Leach	
890-4164-6	FS63A	Soluble	Solid	DI Leach	
890-4164-7	FS64A	Soluble	Solid	DI Leach	
890-4164-8	FS65A	Soluble	Solid	DI Leach	
890-4164-9	FS66A	Soluble	Solid	DI Leach	
MB 880-47148/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-47148/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-47148/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4164-5 MS	FS62A	Soluble	Solid	DI Leach	
890-4164-5 MSD	FS62A	Soluble	Solid	DI Leach	

Analysis Batch: 47261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4164-1	FS58A	Soluble	Solid	300.0	47148
890-4164-2	FS59A	Soluble	Solid	300.0	47148
890-4164-3	FS60A	Soluble	Solid	300.0	47148
890-4164-4	FS61A	Soluble	Solid	300.0	47148
890-4164-5	FS62A	Soluble	Solid	300.0	47148
890-4164-6	FS63A	Soluble	Solid	300.0	47148
890-4164-7	FS64A	Soluble	Solid	300.0	47148
890-4164-8	FS65A	Soluble	Solid	300.0	47148
890-4164-9	FS66A	Soluble	Solid	300.0	47148
MB 880-47148/1-A	Method Blank	Soluble	Solid	300.0	47148
LCS 880-47148/2-A	Lab Control Sample	Soluble	Solid	300.0	47148
LCSD 880-47148/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	47148
890-4164-5 MS	FS62A	Soluble	Solid	300.0	47148
890-4164-5 MSD	FS62A	Soluble	Solid	300.0	47148

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS58A
Date Collected: 02/21/23 10:05
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 14:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47206	02/24/23 15:20	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47130	02/25/23 01:48	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:07	CH	EET MID

Client Sample ID: FS59A
Date Collected: 02/21/23 10:10
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 09:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 12:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47206	02/24/23 15:20	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47130	02/25/23 02:10	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:13	CH	EET MID

Client Sample ID: FS60A
Date Collected: 02/21/23 10:15
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 10:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47206	02/24/23 15:20	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47130	02/25/23 02:54	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:18	CH	EET MID

Client Sample ID: FS61A
Date Collected: 02/21/23 10:20
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 11:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS61A
Date Collected: 02/21/23 10:20
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-4
Matrix: Solid

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			47321	02/27/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	47206	02/24/23 15:20	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47130	02/25/23 03:16	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:24	CH	EET MID

Client Sample ID: FS62A
Date Collected: 02/21/23 10:25
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 11:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	47205	02/24/23 15:11	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47221	02/25/23 17:21	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:30	CH	EET MID

Client Sample ID: FS63A
Date Collected: 02/21/23 10:30
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 12:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	47205	02/24/23 15:11	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47221	02/25/23 17:42	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:47	CH	EET MID

Client Sample ID: FS64A
Date Collected: 02/21/23 10:35
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 12:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	47205	02/24/23 15:11	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47221	02/25/23 18:03	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Client Sample ID: FS64A

Date Collected: 02/21/23 10:35
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 04:52	CH	EET MID

Client Sample ID: FS65A

Date Collected: 02/21/23 10:40
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 12:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	47205	02/24/23 15:11	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47221	02/25/23 18:25	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 05:09	CH	EET MID

Client Sample ID: FS66A

Date Collected: 02/21/23 10:45
Date Received: 02/21/23 13:34

Lab Sample ID: 890-4164-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	47216	02/24/23 16:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/28/23 13:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47458	02/28/23 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			47321	02/27/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47205	02/24/23 15:11	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47221	02/25/23 18:47	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 05:15	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 890-4164-1
SDG: 03C2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4164-1	FS58A	Solid	02/21/23 10:05	02/21/23 13:34	1'
890-4164-2	FS59A	Solid	02/21/23 10:10	02/21/23 13:34	1'
890-4164-3	FS60A	Solid	02/21/23 10:15	02/21/23 13:34	1'
890-4164-4	FS61A	Solid	02/21/23 10:20	02/21/23 13:34	1'
890-4164-5	FS62A	Solid	02/21/23 10:25	02/21/23 13:34	1'
890-4164-6	FS63A	Solid	02/21/23 10:30	02/21/23 13:34	1'
890-4164-7	FS64A	Solid	02/21/23 10:35	02/21/23 13:34	1'
890-4164-8	FS65A	Solid	02/21/23 10:40	02/21/23 13:34	1'
890-4164-9	FS66A	Solid	02/21/23 10:45	02/21/23 13:34	1'

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2/28/2023

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	337-257-8307	Email:	tmorrissey@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	EMSU B Facility	Turn Around	
Project Number:	03C2077002	☑ Routine ☐ Rush	
Project Location:	32.5649393, -103.3183064	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	Tnm-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.1
Total Containers:		Corrected Temperature:	1.4

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS58A	S	2/21/2023	10:05	1'	Comp	1		x	x	x	Incident Number:
FS59A	S	2/21/2023	10:10	1'	Comp	1		x	x	x	nAPP2206638414
FS60A	S	2/21/2023	10:15	1'	Comp	1		x	x	x	
FS61A	S	2/21/2023	10:20	1'	Comp	1		x	x	x	
FS62A	S	2/21/2023	10:25	1'	Comp	1		x	x	x	
FS63A	S	2/21/2023	10:30	1'	Comp	1		x	x	x	
FS64A	S	2/21/2023	10:35	1'	Comp	1		x	x	x	
FS65A	S	2/21/2023	10:40	1'	Comp	1		x	x	x	
FS66A	S	2/21/2023	10:45	1'	Comp	1		x	x	x	

890-4164 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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
1		2-21-23 @ 1315	2		
3		2-21-23 13:34			
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4164-1
SDG Number: 03C2077002

Login Number: 4164
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4164-1
SDG Number: 03C2077002

Login Number: 4164
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/22/23 12:07 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/12/2022 4:19:18 PM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03E2077002

JOB NUMBER

880-22203-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

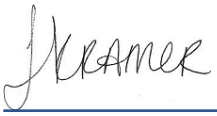
my EOL

Eurofins Midland

Job Notes

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
12/12/2022 4:19:18 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 880-22203-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum Job ID: 880-22203-1
Project/Site: EMSU B Facility SDG: 03E2077002

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Job ID: 880-22203-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-22203-1

Receipt
The sample was received on 12/1/2022 11:17 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 880-41155 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Released to Imaging: 10/13/2023 10:56:27 AM

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Client Sample ID: BG01

Date Collected: 11/30/22 13:10
Date Received: 12/01/22 11:17

Lab Sample ID: 880-22203-1

Matrix: Water

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	296		5.00		mg/L			12/06/22 23:17	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	813		50.0		mg/L			12/07/22 12:50	1

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41155/3
Matrix: Water
Analysis Batch: 41155

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			12/06/22 21:42	1

Lab Sample ID: LCS 880-41155/4
Matrix: Water
Analysis Batch: 41155

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	25.75		mg/L		103	90 - 110		

Lab Sample ID: LCSD 880-41155/5
Matrix: Water
Analysis Batch: 41155

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	25.85		mg/L		103	90 - 110	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 880-41268/1
Matrix: Water
Analysis Batch: 41268

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0		mg/L			12/07/22 12:50	1

Lab Sample ID: LCS 880-41268/2
Matrix: Water
Analysis Batch: 41268

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	986.0		mg/L		99	80 - 120		

Lab Sample ID: LCSD 880-41268/3
Matrix: Water
Analysis Batch: 41268

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
Total Dissolved Solids			1000	970.0		mg/L		97	80 - 120	2	10

Lab Sample ID: 880-22203-1 DU
Matrix: Water
Analysis Batch: 41268

Client Sample ID: BG01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	813			783.0		mg/L				4	10

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

HPLC/IC

Analysis Batch: 41155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22203-1	BG01	Total/NA	Water	300.0	
MB 880-41155/3	Method Blank	Total/NA	Water	300.0	
LCS 880-41155/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-41155/5	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 41268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22203-1	BG01	Total/NA	Water	SM 2540C	
MB 880-41268/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 880-41268/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 880-41268/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
880-22203-1 DU	BG01	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Client Sample ID: BG01

Date Collected: 11/30/22 13:10
Date Received: 12/01/22 11:17

Lab Sample ID: 880-22203-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		10	41155	CH	EET MID	12/06/22 23:17
Total/NA	Analysis	SM 2540C		1	41268	SMC	EET MID	12/07/22 12:50

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
300.0		Water	Chloride
SM 2540C		Water	Total Dissolved Solids

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	EET MID
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22203-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-22203-1	BG01	Water	11/30/22 13:10	12/01/22 11:17

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Environment Testing
Xenco

Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 22203

12/12/2022

www.xenco.com Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Tacoma Morrissey
Company Name.	Ensolum	Company Name:	Ensolum
Address	3122 National Parks Hwy	Address	
City, State ZIP.	Carlsbad, NM 88220	City, State ZIP	
Phone:	303-887-2946 Email	tmorrissey@ensolum.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name	EMSU B Facility	Turn Around	
Project Number:	03E2077002	☑ Routine ☐ Rush	
Project Location	32 5649393, -103 3183064	Due Date	
Sampler's Name	Kase Parker	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet Ice.	(Yes) No	
Samples Received Intact:	Yes No	Thermometer ID	T-NM-007	
Cooler Custody Seals.	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading.	3.2	
Total Containers.		Corrected Temperature:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA 300.0)	TDS
BG01	W	11/30/2022	13 10		Grab/	2		x	x

ANALYSIS REQUEST — Parameters

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2SO_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Comments

Incident ID
NAPP2206638414
Cost Center:
AFE

880-22203 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

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
1		12/1/22 11:17	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-22203-1
SDG Number: 03E2077002

Login Number: 22203
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/15/2022 11:27:43 AM

JOB DESCRIPTION

EMSU B Facility
SDG NUMBER 03E2077002

JOB NUMBER

880-22252-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 10/13/2023 10:36:27 AM

Eurofins Midland

Job Notes

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
12/15/2022 11:27:43 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMSU B Facility

Laboratory Job ID: 880-22252-1
SDG: 03E2077002

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Definitions/Glossary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Job ID: 880-22252-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-22252-1

Receipt
The samples were received on 12/2/2022 2:09 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-41768 and analytical batch 880-41782 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-41297/1-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Client Sample ID: PH01

Date Collected: 12/02/22 11:30
Date Received: 12/02/22 14:09
Sample Depth: 6'

Lab Sample ID: 880-22252-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/15/22 02:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/15/22 02:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/15/22 02:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/13/22 15:38	12/15/22 02:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/15/22 02:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/13/22 15:38	12/15/22 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*12/13/22 15:38*	*12/15/22 02:47*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/13/22 15:38*	*12/15/22 02:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/15/22 11:38	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/09/22 20:41	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/07/22 15:29	12/09/22 18:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/07/22 15:29	12/09/22 18:39	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/07/22 15:29	12/09/22 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*12/07/22 15:29*	*12/09/22 18:39*	*1*
o-Terphenyl	*112*		*70 - 130*	*12/07/22 15:29*	*12/09/22 18:39*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.8**		4.97		mg/Kg			12/09/22 15:27	1

Client Sample ID: PH01A

Date Collected: 12/02/22 11:35
Date Received: 12/02/22 14:09
Sample Depth: 7'

Lab Sample ID: 880-22252-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/13/22 15:38	12/15/22 03:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/13/22 15:38	12/15/22 03:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/13/22 15:38	12/15/22 03:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/13/22 15:38	12/15/22 03:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/13/22 15:38	12/15/22 03:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/13/22 15:38	12/15/22 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*12/13/22 15:38*	*12/15/22 03:08*	*1*

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Client Sample ID: PH01A

Date Collected: 12/02/22 11:35
Date Received: 12/02/22 14:09
Sample Depth: 7'

Lab Sample ID: 880-22252-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/13/22 15:38*	*12/15/22 03:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			12/15/22 11:38	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			12/09/22 20:41	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		12/07/22 15:29	12/09/22 18:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		12/07/22 15:29	12/09/22 18:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/07/22 15:29	12/09/22 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*86*		*70 - 130*	*12/07/22 15:29*	*12/09/22 18:59*	*1*
o-Terphenyl	*86*		*70 - 130*	*12/07/22 15:29*	*12/09/22 18:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.2**		4.96	mg/Kg			12/09/22 15:34	1

Client Sample ID: PH01B

Date Collected: 12/02/22 11:40
Date Received: 12/02/22 14:09
Sample Depth: 8'

Lab Sample ID: 880-22252-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/13/22 15:38	12/15/22 03:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/13/22 15:38	12/15/22 03:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/13/22 15:38	12/15/22 03:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/13/22 15:38	12/15/22 03:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/13/22 15:38	12/15/22 03:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/13/22 15:38	12/15/22 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/13/22 15:38*	*12/15/22 03:28*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/13/22 15:38*	*12/15/22 03:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/15/22 11:38	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			12/09/22 20:41	1

Client Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Client Sample ID: PH01B

Date Collected: 12/02/22 11:40
Date Received: 12/02/22 14:09
Sample Depth: 8'

Lab Sample ID: 880-22252-3

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/07/22 15:29	12/09/22 19:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/07/22 15:29	12/09/22 19:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/07/22 15:29	12/09/22 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*12/07/22 15:29*	*12/09/22 19:19*	*1*
o-Terphenyl	*123*		*70 - 130*	*12/07/22 15:29*	*12/09/22 19:19*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**195**		5.02		mg/Kg			12/09/22 15:40	1

Surrogate Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-22252-1	PH01	100	99
880-22252-2	PH01A	81	107
880-22252-3	PH01B	105	95
LCS 880-41768/1-A	Lab Control Sample	111	121
LCSD 880-41768/2-A	Lab Control Sample Dup	107	118
MB 880-41757/5-A	Method Blank	89	103
MB 880-41768/5-A	Method Blank	87	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-22252-1	PH01	108	112
880-22252-2	PH01A	86	86
880-22252-3	PH01B	121	123
LCS 880-41297/2-A	Lab Control Sample	92	95
LCSD 880-41297/3-A	Lab Control Sample Dup	88	91
MB 880-41297/1-A	Method Blank	102	140 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-41757/5-A
Matrix: Solid
Analysis Batch: 41782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41757

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/13/22 13:22	12/14/22 11:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/13/22 13:22	12/14/22 11:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/13/22 13:22	12/14/22 11:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/13/22 13:22	12/14/22 11:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/13/22 13:22	12/14/22 11:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/13/22 13:22	12/14/22 11:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*12/13/22 13:22*	*12/14/22 11:04*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/13/22 13:22*	*12/14/22 11:04*	*1*

Lab Sample ID: MB 880-41768/5-A
Matrix: Solid
Analysis Batch: 41782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41768

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/14/22 22:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/14/22 22:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/14/22 22:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/13/22 15:38	12/14/22 22:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/13/22 15:38	12/14/22 22:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/13/22 15:38	12/14/22 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*12/13/22 15:38*	*12/14/22 22:00*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*12/13/22 15:38*	*12/14/22 22:00*	*1*

Lab Sample ID: LCS 880-41768/1-A
Matrix: Solid
Analysis Batch: 41782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41768

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1223		mg/Kg		122	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.1083		mg/Kg		108	70 - 130		
m-Xylene & p-Xylene			0.200	0.2252		mg/Kg		113	70 - 130		
o-Xylene			0.100	0.1123		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

Lab Sample ID: LCSD 880-41768/2-A
Matrix: Solid
Analysis Batch: 41782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41768

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1193		mg/Kg		119	70 - 130	2	35

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-41768/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41782 — **Prep Batch: 41768**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1035		mg/Kg		103	70 - 130	1	35
Ethylbenzene			0.100	0.1066		mg/Kg		107	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2222		mg/Kg		111	70 - 130	1	35
o-Xylene			0.100	0.1107		mg/Kg		111	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-41297/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41416 — **Prep Batch: 41297**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/07/22 15:29	12/09/22 09:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/07/22 15:29	12/09/22 09:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/07/22 15:29	12/09/22 09:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/07/22 15:29*	*12/09/22 09:49*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*12/07/22 15:29*	*12/09/22 09:49*	*1*

Lab Sample ID: LCS 880-41297/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41416 — **Prep Batch: 41297**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	890.6		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	865.8		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-41297/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41416 — **Prep Batch: 41297**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	837.9		mg/Kg		84	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	863.4		mg/Kg		86	70 - 130	0	20

QC Sample Results

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-41297/3-A
Matrix: Solid
Analysis Batch: 41416

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41297

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40994/1-A
Matrix: Solid
Analysis Batch: 41276

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/09/22 11:10	1

Lab Sample ID: LCS 880-40994/2-A
Matrix: Solid
Analysis Batch: 41276

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	262.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-40994/3-A
Matrix: Solid
Analysis Batch: 41276

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.2		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

GC VOA

Prep Batch: 41757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-41757/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 41768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Total/NA	Solid	5035	
880-22252-2	PH01A	Total/NA	Solid	5035	
880-22252-3	PH01B	Total/NA	Solid	5035	
MB 880-41768/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-41768/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-41768/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 41782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Total/NA	Solid	8021B	41768
880-22252-2	PH01A	Total/NA	Solid	8021B	41768
880-22252-3	PH01B	Total/NA	Solid	8021B	41768
MB 880-41757/5-A	Method Blank	Total/NA	Solid	8021B	41757
MB 880-41768/5-A	Method Blank	Total/NA	Solid	8021B	41768
LCS 880-41768/1-A	Lab Control Sample	Total/NA	Solid	8021B	41768
LCSD 880-41768/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	41768

Analysis Batch: 41915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Total/NA	Solid	Total BTEX	
880-22252-2	PH01A	Total/NA	Solid	Total BTEX	
880-22252-3	PH01B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Total/NA	Solid	8015NM Prep	
880-22252-2	PH01A	Total/NA	Solid	8015NM Prep	
880-22252-3	PH01B	Total/NA	Solid	8015NM Prep	
MB 880-41297/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41297/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41297/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 41416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Total/NA	Solid	8015B NM	41297
880-22252-2	PH01A	Total/NA	Solid	8015B NM	41297
880-22252-3	PH01B	Total/NA	Solid	8015B NM	41297
MB 880-41297/1-A	Method Blank	Total/NA	Solid	8015B NM	41297
LCS 880-41297/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41297
LCSD 880-41297/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41297

Analysis Batch: 41508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Total/NA	Solid	8015 NM	
880-22252-2	PH01A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

GC Semi VOA (Continued)

Analysis Batch: 41508 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-3	PH01B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Soluble	Solid	DI Leach	
880-22252-2	PH01A	Soluble	Solid	DI Leach	
880-22252-3	PH01B	Soluble	Solid	DI Leach	
MB 880-40994/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40994/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40994/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 41276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-22252-1	PH01	Soluble	Solid	300.0	40994
880-22252-2	PH01A	Soluble	Solid	300.0	40994
880-22252-3	PH01B	Soluble	Solid	300.0	40994
MB 880-40994/1-A	Method Blank	Soluble	Solid	300.0	40994
LCS 880-40994/2-A	Lab Control Sample	Soluble	Solid	300.0	40994
LCSD 880-40994/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40994

Lab Chronicle

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Client Sample ID: PH01
Date Collected: 12/02/22 11:30
Date Received: 12/02/22 14:09

Lab Sample ID: 880-22252-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			41768	MNR	EET MID	12/13/22 15:38
Total/NA	Analysis	8021B		1	41782	MNR	EET MID	12/15/22 02:47
Total/NA	Analysis	Total BTEX		1	41915	SM	EET MID	12/15/22 11:38
Total/NA	Analysis	8015 NM		1	41508	AJ	EET MID	12/09/22 20:41
Total/NA	Prep	8015NM Prep			41297	DM	EET MID	12/07/22 15:29
Total/NA	Analysis	8015B NM		1	41416	AJ	EET MID	12/09/22 18:39
Soluble	Leach	DI Leach			40994	SMC	EET MID	12/05/22 09:48
Soluble	Analysis	300.0		1	41276	CH	EET MID	12/09/22 15:27

Client Sample ID: PH01A
Date Collected: 12/02/22 11:35
Date Received: 12/02/22 14:09

Lab Sample ID: 880-22252-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			41768	MNR	EET MID	12/13/22 15:38
Total/NA	Analysis	8021B		1	41782	MNR	EET MID	12/15/22 03:08
Total/NA	Analysis	Total BTEX		1	41915	SM	EET MID	12/15/22 11:38
Total/NA	Analysis	8015 NM		1	41508	AJ	EET MID	12/09/22 20:41
Total/NA	Prep	8015NM Prep			41297	DM	EET MID	12/07/22 15:29
Total/NA	Analysis	8015B NM		1	41416	AJ	EET MID	12/09/22 18:59
Soluble	Leach	DI Leach			40994	SMC	EET MID	12/05/22 09:48
Soluble	Analysis	300.0		1	41276	CH	EET MID	12/09/22 15:34

Client Sample ID: PH01B
Date Collected: 12/02/22 11:40
Date Received: 12/02/22 14:09

Lab Sample ID: 880-22252-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			41768	MNR	EET MID	12/13/22 15:38
Total/NA	Analysis	8021B		1	41782	MNR	EET MID	12/15/22 03:28
Total/NA	Analysis	Total BTEX		1	41915	SM	EET MID	12/15/22 11:38
Total/NA	Analysis	8015 NM		1	41508	AJ	EET MID	12/09/22 20:41
Total/NA	Prep	8015NM Prep			41297	DM	EET MID	12/07/22 15:29
Total/NA	Analysis	8015B NM		1	41416	AJ	EET MID	12/09/22 19:19
Soluble	Leach	DI Leach			40994	SMC	EET MID	12/05/22 09:48
Soluble	Analysis	300.0		1	41276	CH	EET MID	12/09/22 15:40

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: EMSU B Facility

Job ID: 880-22252-1
SDG: 03E2077002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-22252-1	PH01	Solid	12/02/22 11:30	12/02/22 14:09	6'
880-22252-2	PH01A	Solid	12/02/22 11:35	12/02/22 14:09	7'
880-22252-3	PH01B	Solid	12/02/22 11:40	12/02/22 14:09	8'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 22252

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Project Manager:	Tyson Morrissey	Bill to: (if different)	Tyson Morrissey
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone	337-257-8307 Email:	tmorrissey@ensolum.com	

Work Order Comments

Program: UST/PST [ ]
State of Project:
Reporting Level II [ ]
Deliverables. EDD [ ]

880-22252 Chain of Custody

Project Name	Emsu B Facility	Turn Around	
Project Number:	03E2077002	[x] Routine [ ] Rush	
Project Location	32.5649, -103.3183	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #			

SAMPLE RECEIPT				
Temp Blank.	Yes No	Wet Ice:	(Yes) No	
Samples Received Intact:	Yes No	Thermometer ID	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading	2.6	
Total Containers.		Corrected Temperature:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH	BTEX	Chlorides
PH01	S	12/2/22	1130	6'	G	1		X	X	X
PH01D	S	↓	1135	7'	↓	1		X	X	X
PH01B	S		1140	8'		1		X	X	X

None NO DI Water H_2O
Cool Cool MeOH Me
HCL. HC HNO_3 HN
H_2SO_4 H_2 NaOH Na
H_3PO_4. HP
$NaHSO_4$. NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245 1 / 7470 / 7471

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
1		12.2.22 14:09	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 7/19/2023 1:46:39 PM

Released to Imaging: 10/13/2023 10:56:27 AM

12/15/2022

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-22252-1
SDG Number: 03E2077002

Login Number: 22252
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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").	N/A	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 242193

CONDITIONS

Operator: Empire New Mexico LLC 2200 S. Utica Place Tulsa, OK 74114	OGRID: 330679
	Action Number: 242193
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	10/13/2023