



August 1, 2024

New Mexico Oil Conservation Division

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

**Re: Variance Deferral Request Addendum
Poker Lake Unit 25 Brushy Draw 901H
Incident Number NAPP2116546260
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Deferral Request Addendum* to document assessment, delineation, excavation, and soil sampling activities at the Poker Lake Unit 25 Brushy Draw 901H (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of crude oil and produced water at the Site, by safely excavating impacted soil to the extent possible based on the Site conditions and as allowed by XTO safety policy. Based on excavation activities and soil sample laboratory analytical results, XTO is submitting this *Deferral Request Addendum*, describing remediation that has occurred and requesting a variance for deferral of final remediation for Incident Number NAPP2116546260 until the Site is reconstructed, and/or the well pad is abandoned.

SITE DESCRIPTION AND RELEASE BACKGROUND

The Site is located in Unit E, Section 25, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.10202°, -103.84167°) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land.

On June 1, 2021, internal corrosion from a flowline resulted in the release of approximately 16 barrels (bbls) of crude oil and approximately 44 bbls of produced water onto the well pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 15 bbls of crude oil and 42 bbls of produced water were recovered. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on June 2, 2021. A Release Notification Form C-141 (Form C-141) was submitted on June 14, 2021. The release was assigned Incident Number NAPP2116546260.

On July 27, 2021, a Site inspection was completed to evaluate the release extent and conduct assessment activities. During September 2021, excavation activities were conducted based on field screening activities and laboratory analytical results. Between September 2021 and February 2022, delineation activities were completed at the Site. A *Deferral Request*, documenting the assessment, delineation, and excavation activities was submitted to the NMOCD on May 6, 2022. The *Deferral Request* documented that impacted soil was left in place within 2 feet of an expansive pipeline corridor containing multiple active production pipelines. Efforts to remove additional soil could not be completed safely. However, all impacted soil is vertically and laterally delineated. All details of the

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release regarding the incident, Site characterization, and remediation activities conducted can be referenced in the *Deferral Request* included in Appendix A.

NMOCD denied the submitted *Deferral Request* on August 24, 2022 for the following reasons:

“The deferral request is denied. A deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground later. Pothole locations PH15, PH17, and PH18 will need to be fully delineated before a deferral request is granted. Chain of Custody and Analysis Request form on 9/13/21 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 12.8 deg. Celsius. Please, make sure samples are relinquished at a proper temperature on future projects.”

XTO responded via email on October 25, 2022 requesting reconsideration of the denial based additional information provided. NMOCD promptly responded on October 27, 2022 and did not grant approval. All referenced NMOCD correspondence is included in Appendix B.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Details from the characterization desktop review are presented in the *Deferral Request* included in Appendix A. Based on the Site characterization, the following Table I Closure Criteria (Closure Criteria) apply:

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

REMEDIATION ACTIVITIES

The original assessment included sixteen soil samples (SS01 through SS16) collected within and around the release from a depth of 0.5 feet bgs to assess the lateral extent (Figure 2). During September 2021, excavation activities were conducted based on field screening activities and laboratory analytical results for the assessment soil samples. Excavation was completed to remove impacted soil in the areas around preliminary samples SS02 through SS04 (Figure 3). The western excavation around soil samples SS02 and SS03 was completed to an approximate depth of 1-foot bgs. The eastern excavation was completed to an approximate depth of 3 feet bgs. The combined excavation extents measured 9,200 square feet. Approximately 450 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico.

Laboratory analytical results for samples collected from the western excavation indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and no further excavation was required. Laboratory analytical results for excavation floor samples from

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the bottom of the eastern excavation indicated TPH and/or TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria, except in the southern portion (FS38 and FS39).

Impacted soil in this area was excavated to the maximum extent possible based on the presence of eleven active subsurface pipelines at 5 feet bgs:

- Six 4-inch, high-pressure gas lines,
- Three 2-inch, high-pressure gas lines, and
- Two 2-inch fiber optic lines.

XTO safety policy restricts soil disturbing activities to a 2-foot radius of any on-site production equipment or active pipelines. This XTO safety policy is established to protect workers and reduce the likelihood of compromising the foundation of the production equipment and pipelines. This policy was enforced where impacted soil was identified within 2 feet of active subsurface pipelines near floor soil samples FS40A through FS45A. To address the hydrocarbon impacts remaining in place, a 3 percent solution of Micro-Blaze[®] and freshwater was applied to the impacted area to promote degradation of the hydrocarbons. A photographic log is included in Appendix C.

After completion of the confirmation sampling, the excavations were backfilled to further protect the active subsurface lines, and allow for safe delineation of impacts left in the soil beneath the active production lines.

CONTINUED ASSESSMENT AND DELINEATION

Between September 15, 2021 and February 17, 2022, additional delineation activities were completed at the Site. Potholes PH01 and PH06 through PH08 were advanced to a depth of 2 feet bgs to confirm the absence of impacted soil the release footprint. Potholes PH02 through PH05 and PH11 through PH14 were advanced during excavation activities to guide the excavation based field screening results, no samples were submitted for laboratory analysis from these potholes. Potholes PH09, PH10, and PH15 though PH24 were advanced to depths ranging from 2 feet to 21 feet bgs to delineate the lateral and vertical extent of impacted soil left in place around the subsurface pipelines and represented by floor samples from the eastern excavation. The delineation soil sample locations are depicted on Figure 4.

Laboratory analytical results for the delineation soil samples from potholes PH15 through PH18 indicated that TPH and/or TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria at depths ranging from 4 feet to 16 feet bgs. Laboratory analytical results for all other delineation samples were compliant with the Closure Criteria at depths ranging from 1-foot to 21 feet bgs. Based on the laboratory analytical results, the lateral extent of the impacted soil was successfully defined in all directions around the eastern excavation.

Vertical delineation could only be achieved by deducing the extent of impacts using data from multiple borings. Pothole PH15 was located just east of the pipeline corridor and pothole PH17 just west. Pothole PH18 was completed above the pipelines. Pothole PH15 was taken as deep as possible, with a trackhoe, but to go deeper would require the excavation of a bench at depth for heavy equipment access, which is not feasible due to the subsurface lithology (indurated caliche and the underlying competent sandstones) and the nearby hazardous buried lines (i.e. a safe footprint could not be achieved for benching and sloping or shoring). Potholes PH17 and PH18 had to be completed utilizing a hydrovac, as the use of any mechanical equipment would have compromised the safety of personnel onsite and

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possibly resulted in an additional release. Advancement of PH18 past 4 feet was not possible with because the hydrovac would not make progress through caliche.

Hand augering could not be completed due to the subsurface lithology as described above, and depicted in the photographic log in Appendix C. Utilization of a core drill, Geoprobe®, or drilling rig would not allow the location of the delineation samples to be completed any closer to the pipeline corridor or in between the pipelines. As such, additional delineation was completed as near to the impacted soil as possible at potholes PH20, PH22, and PH24.

Samples from PH16, collected within the proposed deferred area, provides vertical delineation as near to the pipelines as possible. While the deepest samples from PH15, PH17, and PH18 do not provide complete vertical delineation, the soil sampling data taken together provide information to estimate vertical delineation and rule out significant vertical impact. Though delineation can not be completed in those locations, XTO requests a variance to utilize the delineation soil samples collected as close as possible to confirm delineation of the impacted soil.

VARIANCE FOR DEFERRAL REQUEST

An estimated 1,170 cubic yards of impacted soil remains in place around the active subsurface pipelines, assuming an 18-foot depth based data from samples collected in PH15, buffered by samples that were compliant with the Closure Criteria from PH16 and PH17. The deferral request area and associated delineation samples are shown on Figure 4. Every known method of safe subsurface investigation has been attempted. The clean samples from surrounding potholes described above and those collected at depth from PH16 provide sufficient evidence that vertical delineation is approximately 16 to 20 feet bgs in the proposed deferral area. Those same data confirm extensive vertical impacts are not pervasive within and immediately outside of the requested deferral area. Depth to groundwater is confirmed to be greater than 100 feet bgs. The deferral request is for residual impacts only (all gross impacts have been removed) on pad.

XTO requests to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. Ensolum and XTO do not believe deferral will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was confirmed to be greater than 100 feet bgs, the majority of the released fluids were recovered during initial response activities, the impacted soil remaining in place is limited to the area immediately beneath and adjacent to the subsurface pipelines, and no saturated soil remains in-place.

Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, XTO requests deferral of final remediation for Incident Number NAPP2116546260, until final reclamation of the well pad or major construction, whichever comes first.

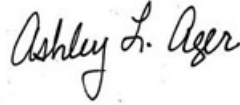
XTO Energy, Inc.
Deferral Request
Poker Lake Unit 25 Brushy Draw 901H

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

Sincerely,
Ensolum, LLC



Tacoma Morrissey, MS
Associate Principal



Ashley L. Ager, MS, PG
Principal

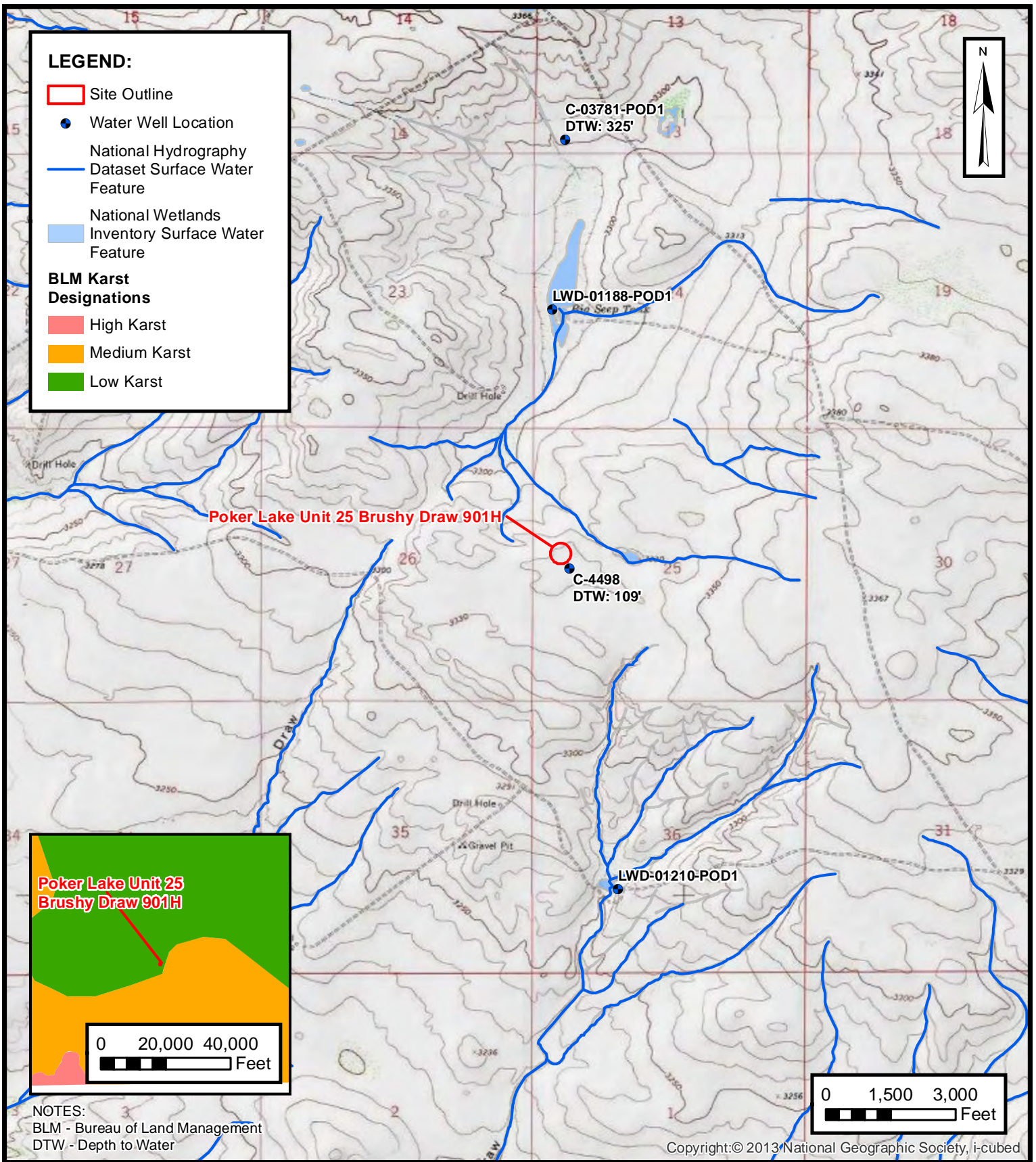
cc: Amy Ruth, XTO
Amanda Garcia, XTO
BLM

Appendices:

Figure 1 Site Receptor Map
Figure 2 Preliminary Soil Sample Locations
Figure 3 Excavation Soil Sample Locations
Figure 4 Delineation Soil Sample Locations
Figure 5 Deferral Area Map
Table 1 Soil Sample Analytical Results
Appendix A May 6, 2022 *Deferral Request*
Appendix B NMOCD Correspondence
Appendix C Photographic Log
Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation



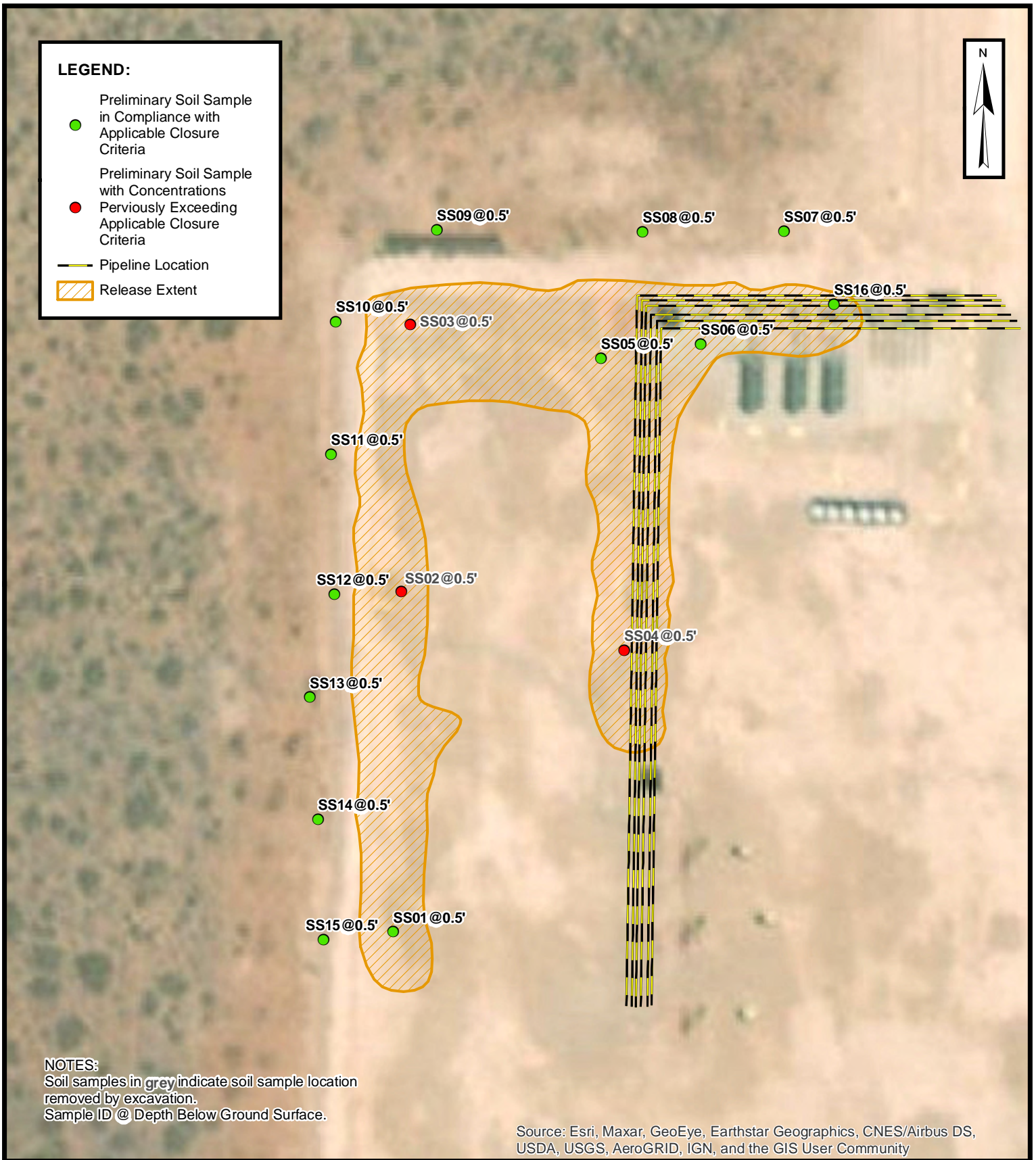
FIGURES



SITE RECEPTOR MAP

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
 NAPP2116546260
 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
1



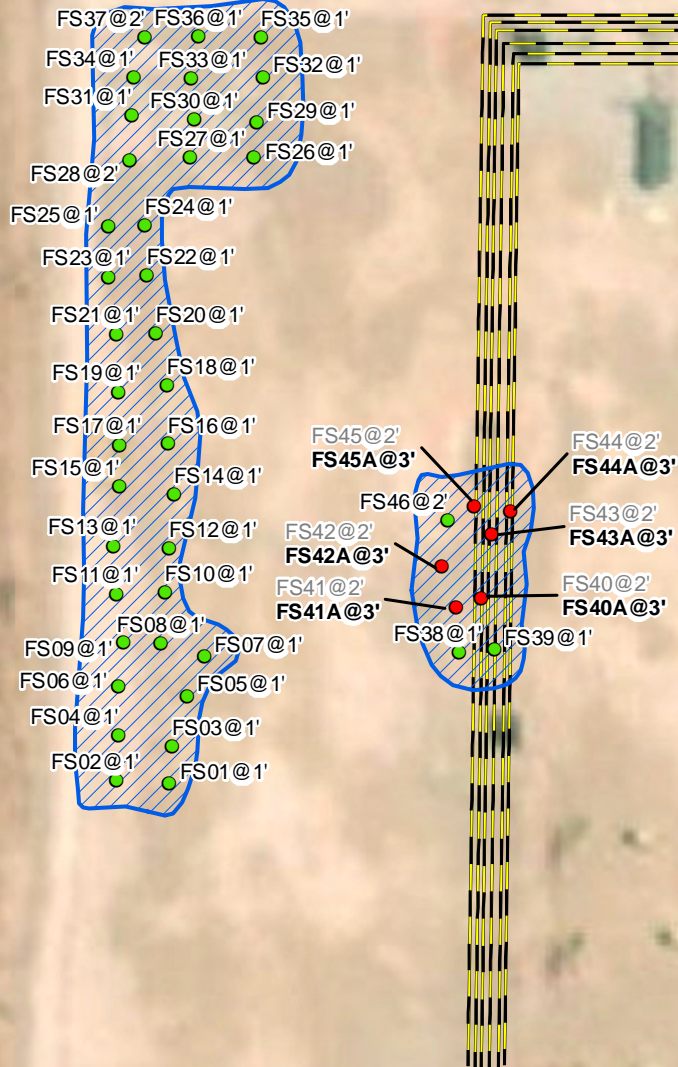
PRELIMINARY SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
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 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
2

LEGEND:

- Excavation Soil Sample in Compliance with Applicable Closure Criteria
- Excavation Soil Sample with Concentrations Pervasively Exceeding Applicable Closure Criteria
- ▨ Excavation Extent
- Pipeline Location



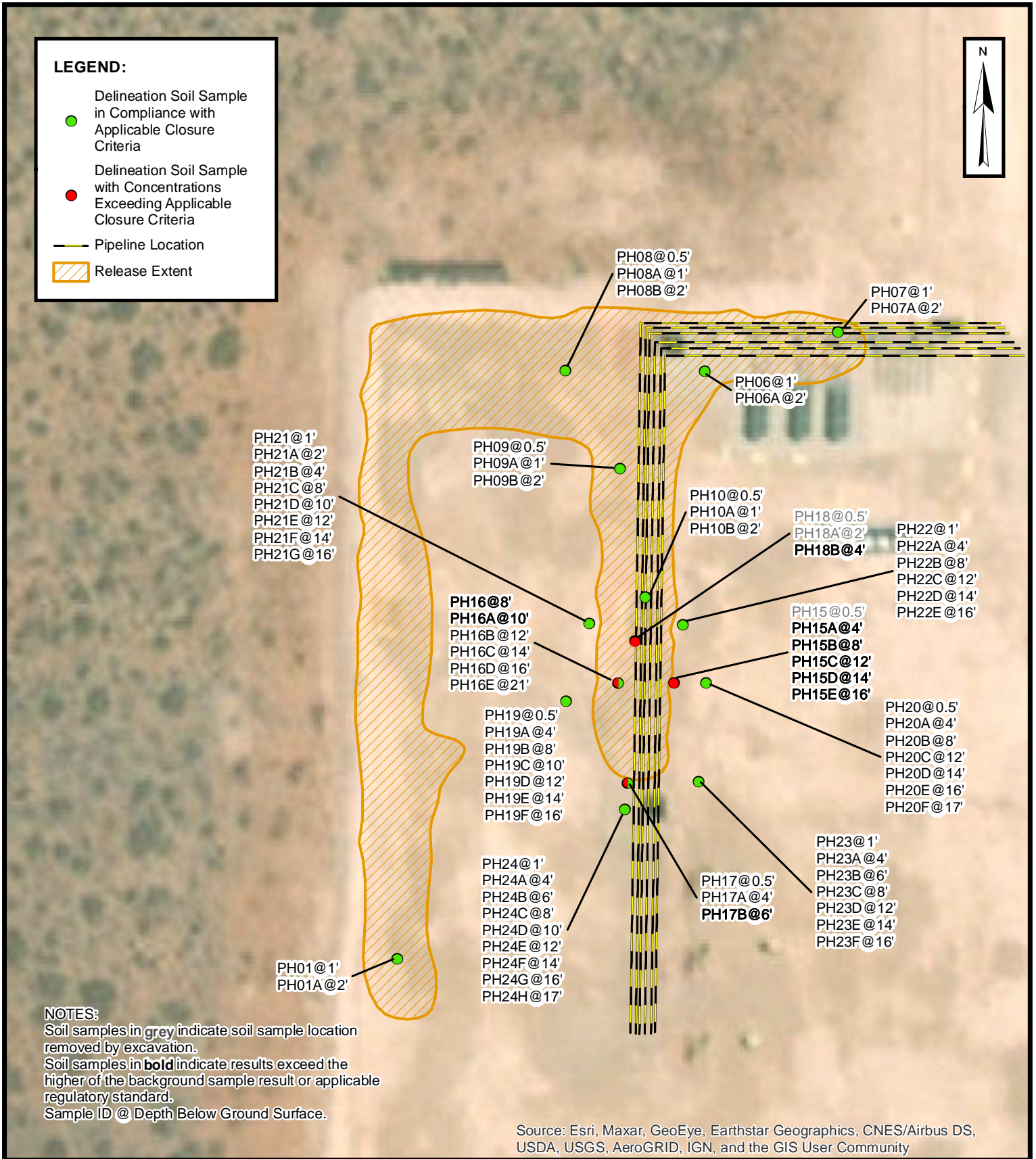
NOTES:
 Soil samples in **grey** indicate soil sample location removed by excavation.
 Soil samples in **bold** indicate results exceed the higher of the background sample result or applicable regulatory standard.
 Sample ID @ Depth Below Ground Surface.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXCAVATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
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 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
3



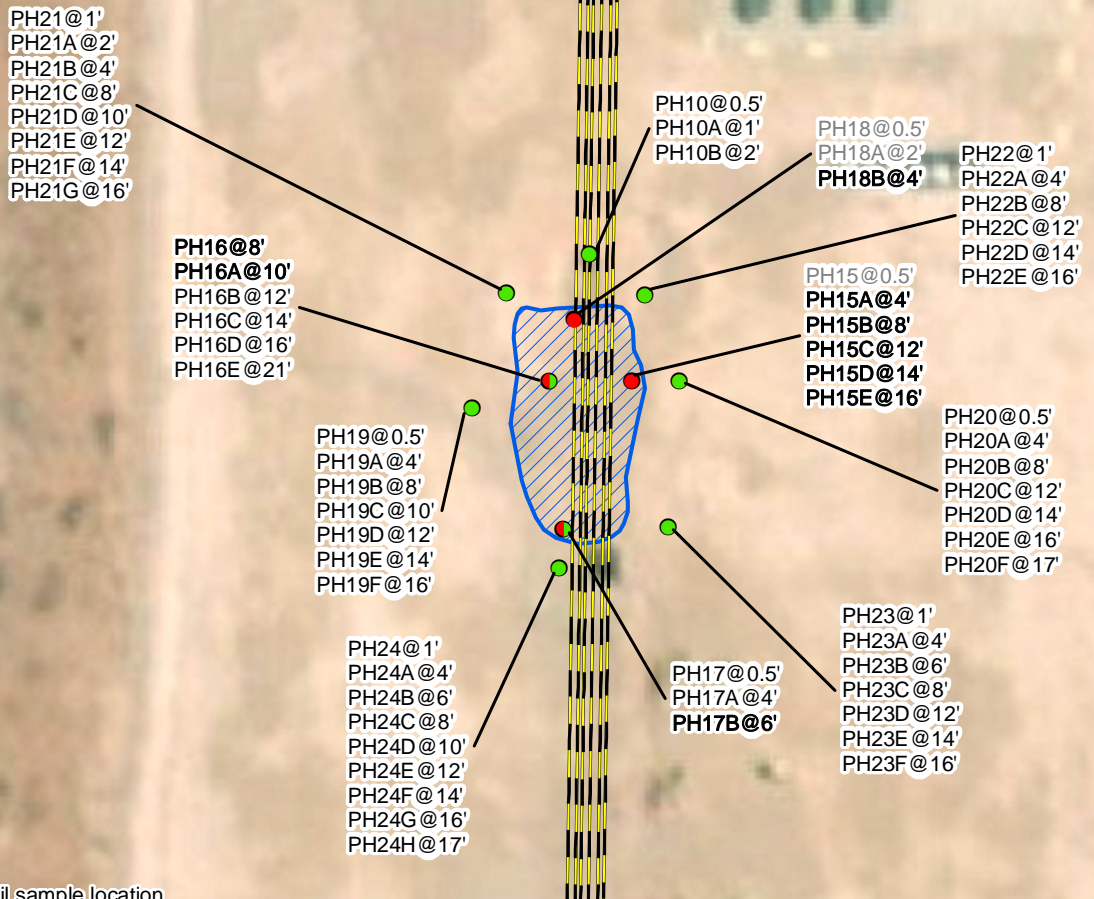
DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
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 Eddy County, New Mexico

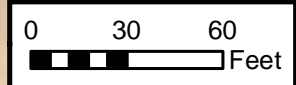
FIGURE
4

LEGEND:

- Delineation Soil Sample in Compliance with Applicable Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Applicable Closure Criteria
- Pipeline Location
- Deferral



NOTES:
 Soil samples in grey indicate soil sample location removed by excavation.
 Soil samples in **bold** indicate results exceed the higher of the background sample result or applicable regulatory standard.
 Sample ID @ Depth Below Ground Surface.



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

DEFERRAL AREA REQUEST

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
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 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
5



TABLES

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDC Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Assessment Soil Samples										
SS01	07/27/2021	0.5	<0.00199	<0.00398	402	<50.0	<50.0	402	402	326
SS02	07/27/2021	0.5	<0.00199	<0.00398	4,190	<49.9	<49.9	4,190	4,190	394
SS03	07/27/2021	0.5	<0.00201	<0.00402	6,620	<50.0	<50.0	6,620	6,620	30.1
SS04	07/27/2021	0.5	<0.00202	<0.00403	1,080	<50.0	<50.0	1,080	1,080	62.7
SS05	07/27/2021	0.5	<0.00200	<0.00401	50.6	<49.8	<49.8	50.6	50.6	320
SS06	07/27/2021	0.5	<0.00200	<0.00399	509	<49.7	<49.7	509	509	56.7
SS07	09/13/2021	0.5	<0.00198	<0.00397	<50.0	71.8	<50.0	71.8	71.8	159
SS08	09/13/2021	0.5	<0.00199	<0.00398	<49.9	60.5	<49.9	60.5	60.5	39.7
SS09	09/13/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	9.0
SS10	09/13/2021	0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	9.8
SS11	09/13/2021	0.5	0.00308	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	9.2
SS12	09/13/2021	0.5	<0.00199	0.00747	<49.9	<49.9	<49.9	<49.9	<49.9	9.5
SS13	09/13/2021	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	14.7
SS14	09/13/2021	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	9.5
SS15	09/13/2021	0.5	<0.00200	0.00466	<50.0	<50.0	<50.0	<50.0	<50.0	8.1
SS16	09/16/2021	0.5	<0.00199	<0.00398	<49.9	81.7	<49.9	81.7	81.7	614
Excavation Floor Soil Samples										
FS01	09/15/2021	1	<0.00199	0.0122	<50.0	<50.0	<50.0	<50.0	<50.0	466
FS02	09/15/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	230
FS03	09/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	627
FS04	09/15/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	135
FS05	09/15/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	735
FS06	09/15/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	87.9
FS07	09/15/2021	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	598
FS08	09/15/2021	1	0.00534	0.0332	<49.9	<49.9	<49.9	<49.9	<49.9	128
FS09	09/15/2021	1	0.00355	0.00745	<49.9	<49.9	<49.9	<49.9	<49.9	59.7
FS10	09/15/2021	1	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	84.3
FS11	09/15/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	87.1
FS12	09/15/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	166
FS13	09/15/2021	1	<0.00202	0.00691	<49.8	214	<49.8	214	214	168
FS14	09/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	228

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
FS15	09/15/2021	1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	139
FS16	09/15/2021	1	<0.00200	0.00856	<50.0	<50.0	<50.0	<50.0	<50.0	91.2
FS17	09/15/2021	1	<0.00202	<0.00403	<50.0	53.4	<50.0	53.4	53.4	121
FS18	09/16/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	403
FS19	09/16/2021	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	383
FS20	09/16/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	539
FS21	09/16/2021	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	336
FS22	09/16/2021	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	482
FS23	09/16/2021	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	612
FS24	09/16/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	306
FS25	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	695
FS26	09/16/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	84.0
FS27	09/16/2021	1	<0.00200	<0.00401	<49.9	76.5	<49.9	76.5	76.5	219
FS28	09/17/2021	2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	157
FS29	09/16/2021	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	15.8
FS30	09/16/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	111
FS31	09/16/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	15.8
FS32	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	500
FS33	09/16/2021	1	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	179
FS34	09/16/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	41.8
FS35	09/16/2021	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	123
FS36	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	157
FS37	09/17/2021	2	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	63.3
FS38	09/17/2021	1	0.286	25.1	263	289	<49.8	552	552	181
FS39	09/17/2021	1	0.00402	0.132	142	255	<50.0	397	397	2,030
FS40	09/23/2021	2	<0.00199	1.20	646	1,630	195	2,276	2,470	376
FS40A	11/23/2021	3	<0.00199	<0.00398	3,520	122	<50.0	3,642	3,640	254
FS41	09/23/2021	2	<0.00202	0.920	696	928	118	1,624	1,740	352
FS41A	11/23/2021	3	0.00242	0.891	2,110	350	<50.0	2,460	2,460	94.0
FS42	09/23/2021	2	0.0469	0.0709	968	1,060	137	2,028	2,170	274
FS42A	11/23/2021	3	<0.00202	0.737	3,170	1,020	<49.9	4,190	4,190	75.8
FS43	09/23/2021	2	0.238	0.262	394	829	99.4	1,223	1,320	256
FS43A	11/23/2021	3	<0.00200	0.00558	3,650	281	<49.8	3,931	3,930	131
FS44	09/23/2021	2	0.00514	0.225	923	1,440	177	2,363	2,540	331
FS44A	11/23/2021	3	<0.00200	0.0103	3,040	119	<49.9	3,159	3,160	236

TABLE 1
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 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCOD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
FS45	09/23/2021	2	<0.00198	<0.00200	374	1,010	130	1,384	1,510	349
FS45A	11/23/2021	3	<0.00200	<0.00399	4,000	352	<49.9	4,352	4,350	143
FS46	09/23/2021	2	<0.00198	<0.00200	164	634	68.6	798	867	528
Delineation Soil Samples										
PH01	09/15/2021	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	25.4
PH01A	09/15/2021	2	<0.00198	<0.00397	<49.8	121	<49.8	121	121	107
PH06	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	90.3
PH06A	09/16/2021	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,140
PH07	09/16/2021	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	552
PH07A	09/16/2021	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	227
PH08	09/17/2021	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	587
PH08A	09/17/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	802
PH08B	09/17/2021	2	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	600
PH09	09/20/2021	0.5	<0.00199	0.00576	<49.8	<49.8	<49.8	<49.8	<49.8	185
PH09A	09/20/2021	1	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	125
PH09B	09/20/2021	2	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	17.8
PH10	09/20/2021	0.5	<0.00200	<0.00200	<49.8	1,070	<49.8	170	170	1,160
PH10A	09/20/2021	1	<0.00202	0.0314	<50.0	234	<50.0	234	234	358
PH10B	09/20/2021	2	<0.00200	<0.00200	<49.8	557	<49.8	557	557	458
PH15	12/10/2021	0.5	<0.00200	0.497	111	382	<50.0	493	493	383
PH15A	12/10/2021	4	0.719	37.0	1,960	3,050	<50.0	5,010	5,010	1,010
PH15B	12/10/2021	8	0.662	46.5	3,780	6,430	<50.0	10,210	10,200	654
PH15C	12/10/2021	12	0.0891	12.2	1,220	2,180	<49.9	3,400	3,400	404
PH15D	12/10/2021	14	0.0751	8.29	1,080	2,610	<50.0	3,690	3,690	335
PH15E	12/10/2021	16	0.0722	18.4	1,210	2,520	<49.9	3,730	3,730	389
PH16	12/10/2021	8	1.48	51.3	5,020	6,230	<50.0	11,250	11,300	2,850
PH16A	12/10/2021	10	0.0800	10.7	348	990	<49.9	1,338	1,340	940
PH16B	12/10/2021	12	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,840
PH16C	12/10/2021	14	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	2,230
PH16D	12/10/2021	16	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	329
PH16E	12/10/2021	21	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	58.4
PH17	12/10/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,310
PH17A	12/10/2021	4	<0.00200	0.0412	<49.9	954	<49.9	954	954	127
PH17B	12/10/2021	6	<0.0404	10.8	457	1,420	<50.0	1,877	1,880	202
PH18	12/10/2021	0.5	<0.0398	20.6	901	3,390	<49.9	4,291	4,290	469
PH18A	12/10/2021	2	<0.0403	21.8	905	3,740	<50.0	4,645	4,650	506
PH18B	12/10/2021	4	<0.0402	4.04	526	4,080	<49.9	4,606	4,610	<5.00

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
PH19	12/10/2021	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	336
PH19A	12/10/2021	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	741
PH19B	12/10/2021	8	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	574
PH19C	12/10/2021	10	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2,220
PH19D	12/10/2021	12	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	355
PH19E	12/10/2021	14	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	307
PH19F	12/10/2021	16	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	352
PH20	12/10/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	418
PH20A	12/10/2021	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	836
PH20B	01/12/2022	8	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	306
PH20C	01/12/2022	12	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	195
PH20D	01/12/2022	14	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	226
PH20E	01/12/2022	16	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	248
PH20F	01/12/2022	17	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	255
PH21	01/13/2022	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	74.5
PH21A	01/13/2022	2	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	162
PH21B	01/13/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,820
PH21C	01/13/2022	8	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	1,650
PH21D	01/13/2022	10	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	388
PH21E	01/13/2022	12	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	300
PH21F	01/13/2022	14	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	234
PH21G	01/13/2022	16	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	192
PH22	01/13/2022	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	162
PH22A	01/13/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	61.5
PH22B	01/13/2022	8	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	185
PH22C	01/14/2022	12	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	272
PH22D	01/14/2022	14	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	240
PH22E	01/14/2022	16	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	238
PH23	01/14/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,140
PH23A	01/14/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	211
PH23B	01/14/2022	6	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	488
PH23C	01/14/2022	8	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	369
PH23D	01/14/2022	12	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	267
PH23E	01/14/2022	14	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	209
PH23F	01/14/2022	16	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	199

**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS**
Poker Lake Unit 25 Brushy Draw 901H
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
PH24	02/17/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	491
PH24A	02/17/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	337
PH24B	02/17/2022	6	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	74.4
PH24C	02/17/2022	8	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	131
PH24D	02/17/2022	10	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	197
PH24E	02/17/2022	12	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	42.4
PH24F	02/17/2022	14	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	81.8
PH24G	02/17/2022	16	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	33.4
PH24H	02/17/2022	17	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	21.1

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.

NE - Not Established

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard

Text impacted soil was excavated



APPENDIX A

May 6, 2022 *Deferral Request*



May 6, 2022

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

**Re: Deferral Request
Poker Lake Unit 25 Brushy Draw 901H
Incident Number NAPP2116546260
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this Deferral Request to document site assessment, excavation, and soil sampling activities at the Poker Lake Unit 25 Brushy Draw 901H (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following a release of crude oil and produced water at the Site, by safely excavating impacted soil to the extent possible based on the Site conditions and as allowed by XTO safety policy. Based on excavation activities and soil sample laboratory analytical results, XTO is submitting this Deferral Request, describing remediation that has occurred and requesting deferral of final remediation for Incident Number NAPP2116546260.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit E, Section 25, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.10202°N, 103.84167°W) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land.

On June 1, 2021, internal corrosion from a flowline resulted in the release of approximately 16.16 barrels (bbls) of crude oil and approximately 43.69 bbls of produced water onto the well pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 15.38 bbls of crude oil and 41.58 bbls of produced water were recovered. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on June 2, 2021. A Release Notification Form C-141 (Form C-141) was submitted on June 14, 2021. The release was assigned Incident Number NAPP2116546260.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. On February 24, 2021, a soil boring (C-4498) was drilled nearly 0.5 miles of the Site utilizing a track-mounted hollow-stem auger rig. Soil boring C-4498 was drilled to a depth of 109 feet bgs. The location of the borehole is approximately 627 feet southeast of the release area and is depicted on Figure 1. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 109 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a riverine, located approximately 630 feet northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On July 27, 2021, a Site inspection was completed to evaluate the release extent and conduct assessment activities. Sixteen preliminary assessment soil samples (SS01 through SS16) were collected within and around the release extent from a depth of 0.5 feet bgs, to assess the lateral extent of the release. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

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 at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS02 through SS04, collected within the release extent, indicated that TPH and/or TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria. Laboratory analytical results for preliminary soil sample SS01, SS05, SS06, and SS16 collected within the release extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for preliminary soil

samples SS07 through SS15, collected outside of the release extent at the pad boundary, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the most stringent Table 1 Closure Criteria and defined the lateral extent of the release. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, excavation and delineation activities were warranted.

EXCAVATION ACTIVITIES AND ANALYTICAL RESULTS

During September 2021, excavation activities were conducted based on field screening activities and laboratory analytical results for the preliminary soil samples. Excavation was completed to remove impacted soil in the areas around preliminary samples SS02 through SS04. To direct excavation activities, Ensolum personnel screened for soil for VOCs utilizing a PID and chloride using Hach® chloride QuanTab® test strips. The western excavation around preliminary soil samples SS02 and SS03 was completed to an approximate depth of 1-foot bgs. The eastern excavation around preliminary soil sample SS04 was completed to an approximate depth of 3 feet bgs.

Following removal of impacted soil, Ensolum collected 5-point composite soil samples every 200 square feet from the floor of the excavations. 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 FS46 and FS40A through FS45A were collected from the floor of the excavations from depths ranging from 1-foot to 3 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3. A photographic log is included in Appendix B.

Laboratory analytical results for excavation floor samples FS01 through FS39, and FS46 collected from the final excavation extents, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria, no further excavation was required in these areas. Laboratory analytical results for excavation floor samples FS40 through FS45, collected at 2 feet bgs indicated TPH and/or TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria. Additional soil was removed and subsequent excavation samples FS40A through FS45A, collected at 3 feet bgs, continued to exceed the Closure Criteria. Impacted soil in this area was excavated to the maximum extent possible based on the presence of multiple active subsurface pipelines at 5 feet bgs beneath the release area. XTO safety policy restricts soil disturbing activities to a 2-foot radius of any on-site production equipment or active pipelines. This XTO safety policy is established to protect workers and reduce the likelihood of compromising the foundation of the production equipment and pipelines. This policy was enforced where impacted soil was identified within 2 feet of active subsurface pipelines near floor soil samples FS40A through FS45A. To address the hydrocarbon impacts left in place, a 3 percent solution of Micro-Blaze® and freshwater was applied to the impacted area to promote degradation of the hydrocarbons.

The combined excavation extents measured 9,200 square feet. Approximately 450 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of the confirmation sampling, the excavations were backfilled.

DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

Between September 15, 2021 and February 17, 2022, delineation activities were completed at the Site. Potholes PH01 and PH06 through PH08 were advanced to a depth of 2 feet bgs at the SS01, SS05, SS06, and SS16 preliminary soil sample locations to confirm the absence of impacted soil in these areas. Potholes PH09, PH10, and PH15 though PH24 were advanced to depths ranging from 2 feet to

21 feet bgs to delineate the lateral and vertical extent of impacted soil left in place around the subsurface pipelines and represented by excavation floor samples FS40A through FS45A. Discrete delineation soil samples were collected from the potholes from depths ranging from 0.5 feet to 21 feet bgs. Soil from the potholes was field screened for soil for VOCs using a PID and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations for the potholes were logged on lithologic/ soil sampling logs, which are included in Appendix C. The delineation soil samples were collected, handled, and analyzed following the same procedures as described above. The delineation soil sample locations are depicted on Figure 4. Potholes PH02 through PH05 and PH11 through PH14 were advanced during excavation activities to guide the excavation based field screening results, no samples were submitted for laboratory analysis from these potholes.

Laboratory analytical results for the delineation soil samples from potholes PH15 through PH18 indicated that TPH and/or TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria at depths ranging from 4 feet to 16 feet bgs. Laboratory analytical results for delineation soil samples from potholes PH01, PH06 through PH10, and PH19 through PH24 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria at depths ranging from 1-foot to 21 feet bgs. Based on the laboratory analytical results, the lateral and vertical extent of the impacted soil was successfully defined.

DEFERRAL REQUEST

A total of 450 cubic yards of impacted soil were excavated from the Site; however residual impacted soil was left in place immediately surrounding and beneath multiple active subsurface pipelines where remediation would require a major facility deconstruction and for compliance with XTO safety policy. Laboratory analytical results for excavation floor samples FS40A through FS45A collected at 3 feet bgs, and delineation samples from potholes PH15 through PH18, collected at depths ranging from 4 feet to 18 feet bgs, indicated that soil with TPH and/or TPH-GRO/TPH-DRO concentrations exceeding the Closure Criteria was left in place adjacent to or beneath the active subsurface pipelines.

The impacted soil remaining in place is delineated laterally and vertically by delineation soil samples from potholes PH10, PH16, and PH19 through PH24. An estimated 1,170 cubic yards of impacted soil remains in place around the active subsurface pipelines, assuming a maximum 18-foot depth based on the delineation soil samples listed above, that were compliant with the Closure Criteria. The deferral request area and associated delineation samples are shown on Figure 5.

XTO requests to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. Ensolum and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was confirmed to be greater than 100 feet bgs, the majority of the released fluids were recovered during initial response activities, the impacted soil remaining in place is limited to the area immediately beneath and adjacent to the subsurface pipelines, and no saturated soil remains in-place.

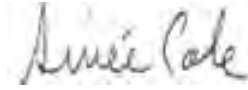
Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, XTO requests deferral of final remediation for Incident Number NAPP2116546260, until final reclamation of the well pad or major construction, whichever comes first.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,
Ensolum, LLC



Kalei Jennings
Senior Scientist



Aimee Cole
Senior Managing Scientist

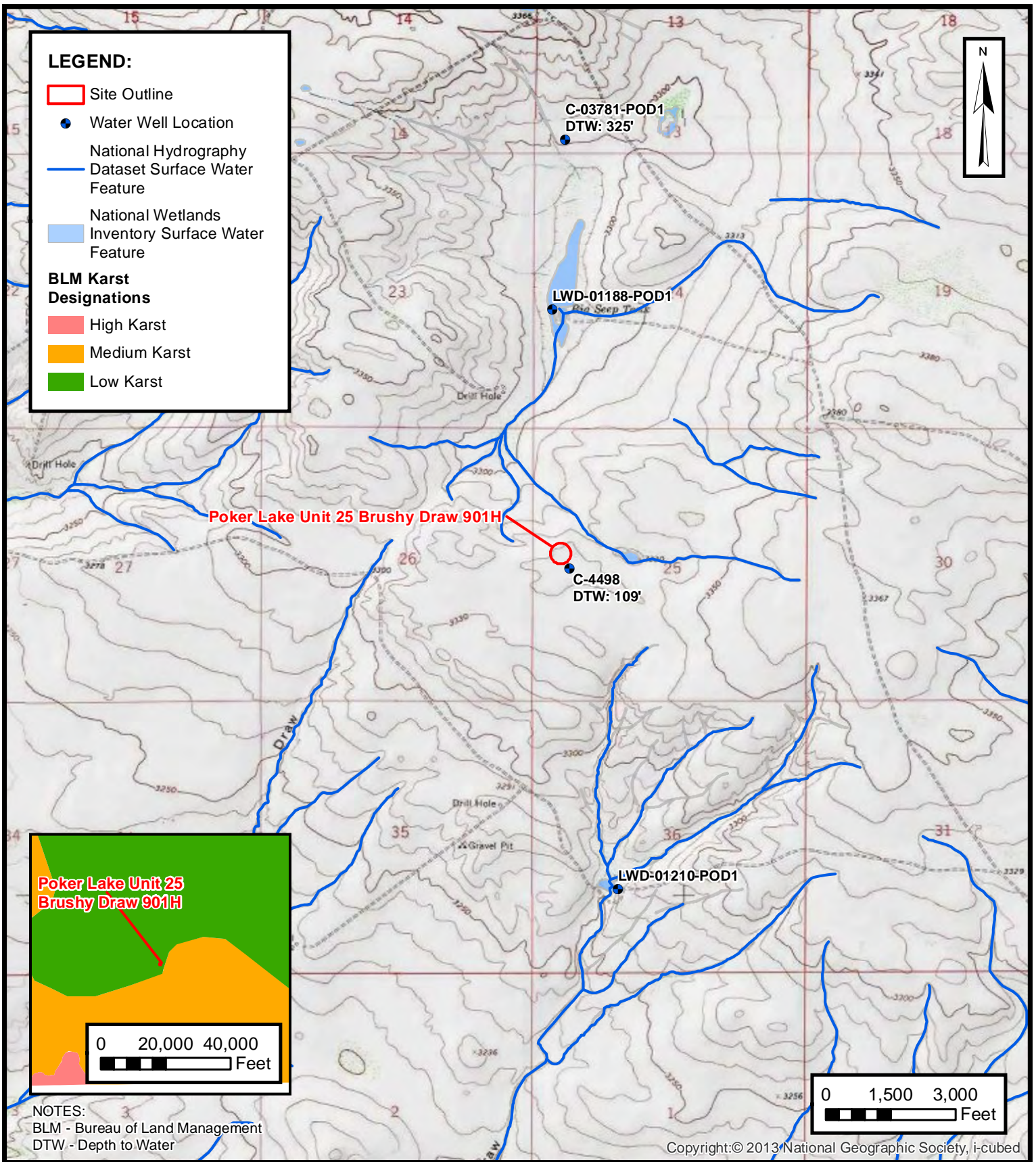
cc: Adrian Baker, XTO
Bureau of Land Management

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Preliminary Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Figure 4 Delineation Soil Sample Locations
- Figure 5 Deferral Request Area
- Table 1 Soil Sample Analytical Results
- Appendix A Well Record and Log
- Appendix B Photographic Log
- Appendix C Lithologic / Soil Sampling Logs
- Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix E NMOCD Sample Notification



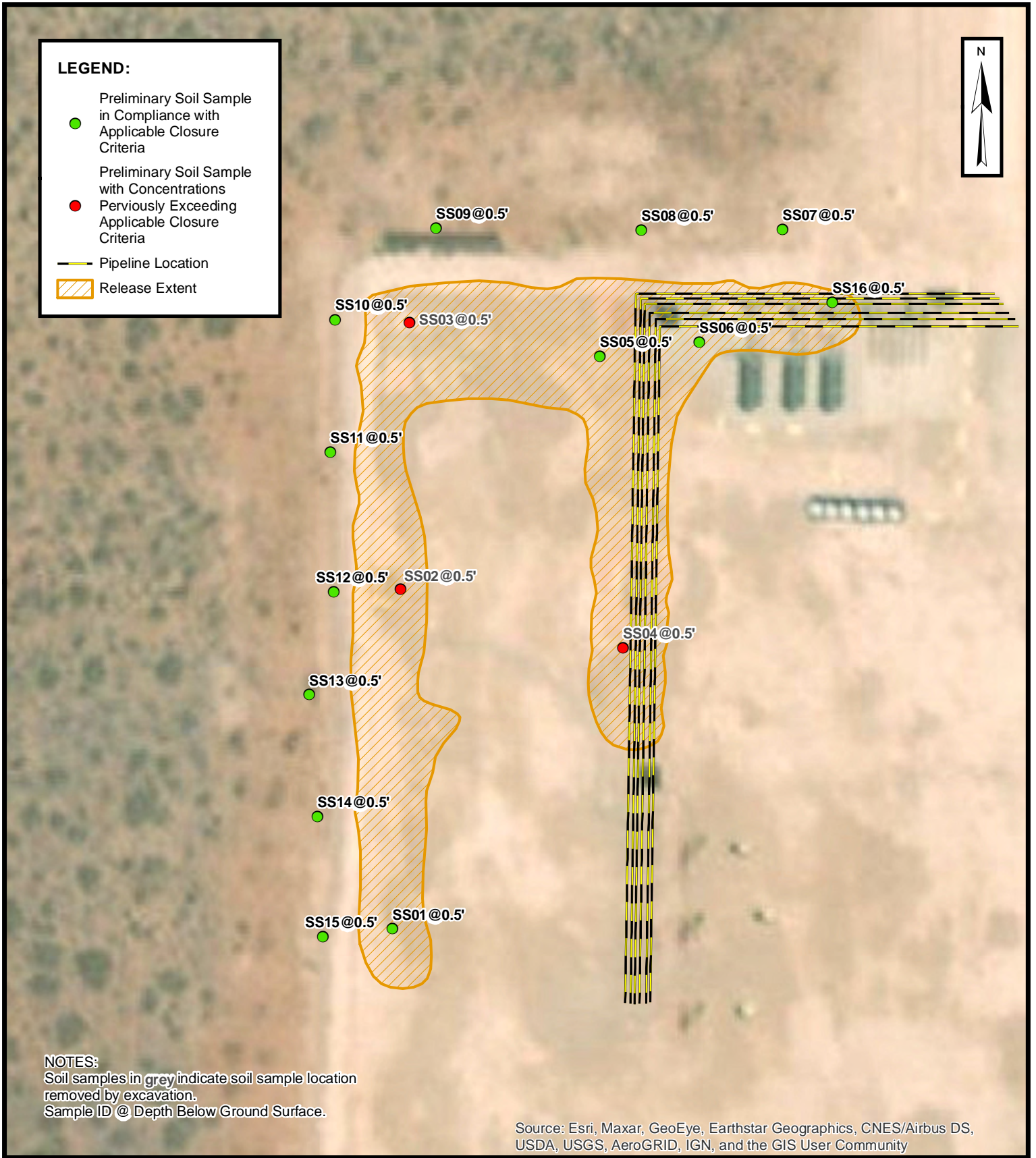
FIGURES



SITE RECEPTOR MAP

XTO ENERGY, INC
POKER LAKE UNIT 25 BRUSHY DRAW 901H
NAPP2116546260
Unit E, Sec 25, T25S, R30E
Eddy County, New Mexico

FIGURE
1



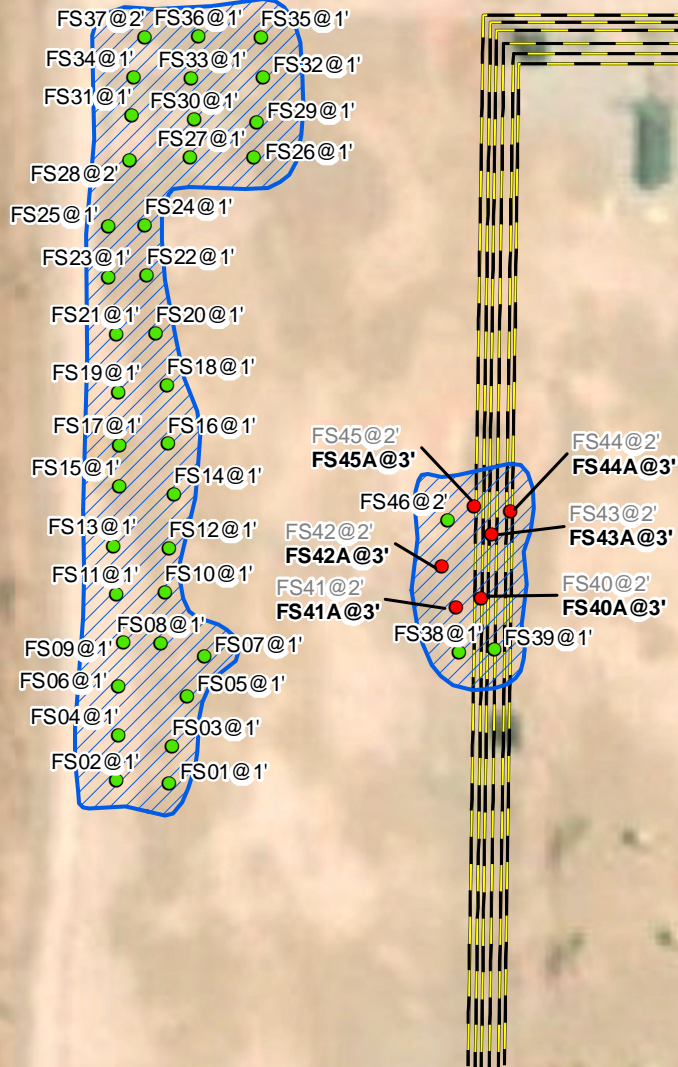
PRELIMINARY SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
 NAPP2116546260
 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
2

LEGEND:

- Excavation Soil Sample in Compliance with Applicable Closure Criteria
- Excavation Soil Sample with Concentrations Pervasively Exceeding Applicable Closure Criteria
- ▨ Excavation Extent
- Pipeline Location



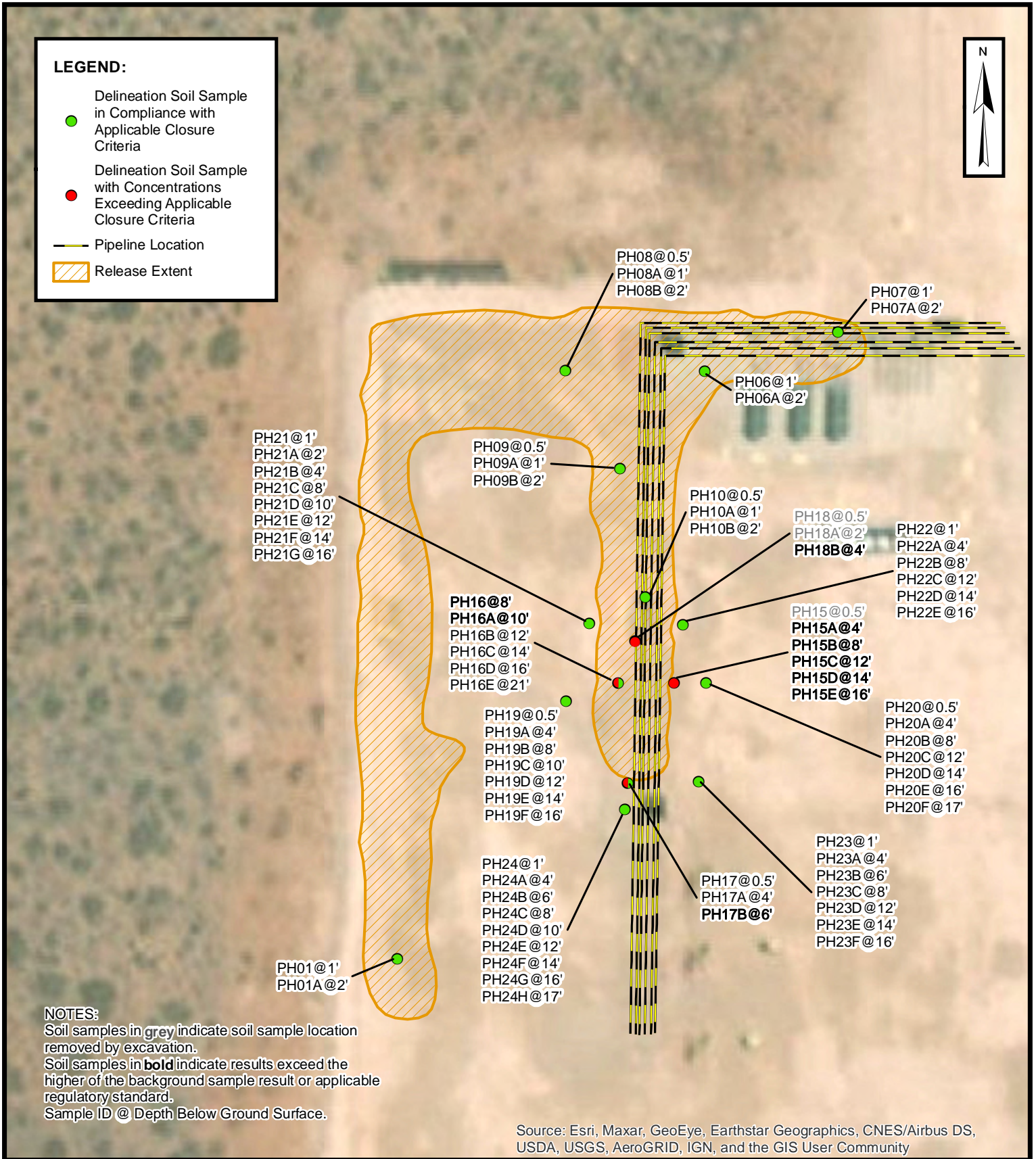
NOTES:
 Soil samples in grey indicate soil sample location removed by excavation.
 Soil samples in bold indicate results exceed the higher of the background sample result or applicable regulatory standard.
 Sample ID @ Depth Below Ground Surface.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

EXCAVATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
 NAPP2116546260
 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
3



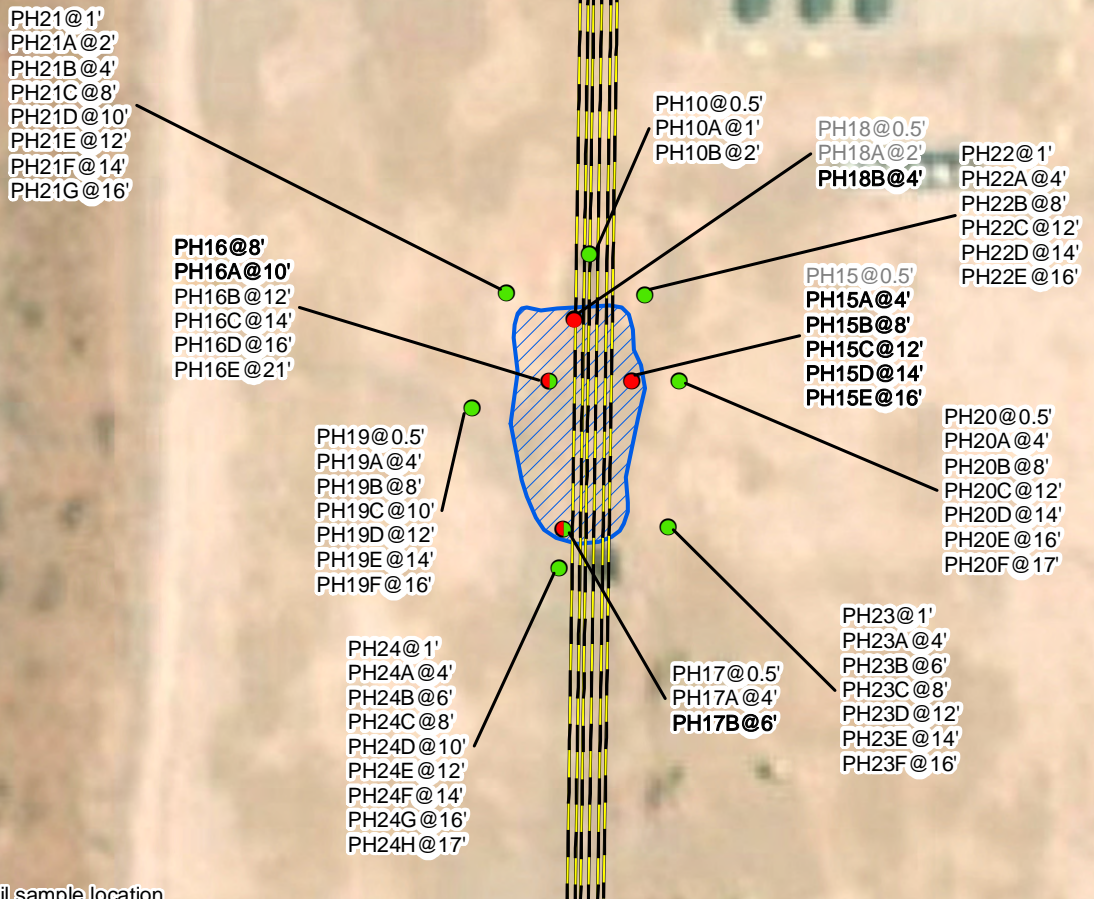
DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
 NAPP2116546260
 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
4

LEGEND:

- Delineation Soil Sample in Compliance with Applicable Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Applicable Closure Criteria
- Pipeline Location
- Deferral



NOTES:
 Soil samples in grey indicate soil sample location removed by excavation.
 Soil samples in **bold** indicate results exceed the higher of the background sample result or applicable regulatory standard.
 Sample ID @ Depth Below Ground Surface.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

DEFERRAL AREA REQUEST

XTO ENERGY, INC
 POKER LAKE UNIT 25 BRUSHY DRAW 901H
 NAPP2116546260
 Unit E, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE
5



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Assessment Soil Samples										
SS01	07/27/2021	0.5	<0.00199	<0.00398	402	<50.0	<50.0	402	402	326
SS02	07/27/2021	0.5	<0.00199	<0.00398	4,190	<49.9	<49.9	4,190	4,190	394
SS03	07/27/2021	0.5	<0.00201	<0.00402	6,620	<50.0	<50.0	6,620	6,620	30.1
SS04	07/27/2021	0.5	<0.00202	<0.00403	1,080	<50.0	<50.0	1,080	1,080	62.7
SS05	07/27/2021	0.5	<0.00200	<0.00401	50.6	<49.8	<49.8	50.6	50.6	320
SS06	07/27/2021	0.5	<0.00200	<0.00399	509	<49.7	<49.7	509	509	56.7
SS07	09/13/2021	0.5	<0.00198	<0.00397	<50.0	71.8	<50.0	71.8	71.8	159
SS08	09/13/2021	0.5	<0.00199	<0.00398	<49.9	60.5	<49.9	60.5	60.5	39.7
SS09	09/13/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	9.0
SS10	09/13/2021	0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	9.8
SS11	09/13/2021	0.5	0.00308	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	9.2
SS12	09/13/2021	0.5	<0.00199	0.00747	<49.9	<49.9	<49.9	<49.9	<49.9	9.5
SS13	09/13/2021	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	14.7
SS14	09/13/2021	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	9.5
SS15	09/13/2021	0.5	<0.00200	0.00466	<50.0	<50.0	<50.0	<50.0	<50.0	8.1
SS16	09/16/2021	0.5	<0.00199	<0.00398	<49.9	81.7	<49.9	81.7	81.7	614
Excavation Floor Soil Samples										
FS01	09/15/2021	1	<0.00199	0.0122	<50.0	<50.0	<50.0	<50.0	<50.0	466
FS02	09/15/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	230
FS03	09/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	627
FS04	09/15/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	135
FS05	09/15/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	735
FS06	09/15/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	87.9
FS07	09/15/2021	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	598
FS08	09/15/2021	1	0.00534	0.0332	<49.9	<49.9	<49.9	<49.9	<49.9	128
FS09	09/15/2021	1	0.00355	0.00745	<49.9	<49.9	<49.9	<49.9	<49.9	59.7
FS10	09/15/2021	1	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	84.3
FS11	09/15/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	87.1
FS12	09/15/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	166



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Excavation Floor Soil Samples										
FS13	09/15/2021	1	<0.00202	0.00691	<49.8	214	<49.8	214	214	168
FS14	09/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	228
FS15	09/15/2021	1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	139
FS16	09/15/2021	1	<0.00200	0.00856	<50.0	<50.0	<50.0	<50.0	<50.0	91.2
FS17	09/15/2021	1	<0.00202	<0.00403	<50.0	53.4	<50.0	53.4	53.4	121
FS18	09/16/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	403
FS19	09/16/2021	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	383
FS20	09/16/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	539
FS21	09/16/2021	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	336
FS22	09/16/2021	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	482
FS23	09/16/2021	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	612
FS24	09/16/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	306
FS25	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	695
FS26	09/16/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	84.0
FS27	09/16/2021	1	<0.00200	<0.00401	<49.9	76.5	<49.9	76.5	76.5	219
FS28	09/17/2021	2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	157
FS29	09/16/2021	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	15.8
FS30	09/16/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	111
FS31	09/16/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	15.8
FS32	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	500
FS33	09/16/2021	1	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	179
FS34	09/16/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	41.8
FS35	09/16/2021	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	123
FS36	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	157
FS37	09/17/2021	2	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	63.3
FS38	09/17/2021	1	0.286	25.1	263	289	<49.8	552	552	181
FS39	09/17/2021	1	0.00402	0.132	142	255	<50.0	397	397	2,030



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 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCDC Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Excavation Floor Soil Samples										
FS40	09/23/2021	2	<0.00199	1.20	646	1,630	195	2,276	2,470	376
FS40A	11/23/2021	3	<0.00199	<0.00398	3,520	122	<50.0	3,642	3,640	254
FS41	09/23/2021	2	<0.00202	0.920	696	928	118	1,624	1,740	352
FS41A	11/23/2021	3	0.00242	0.891	2,110	350	<50.0	2,460	2,460	94.0
FS42	09/23/2021	2	0.0469	0.0709	968	1,060	137	2,028	2,170	274
FS42A	11/23/2021	3	<0.00202	0.737	3,170	1,020	<49.9	4,190	4,190	75.8
FS43	09/23/2021	2	0.238	0.262	394	829	99.4	1,223	1,320	256
FS43A	11/23/2021	3	<0.00200	0.00558	3,650	281	<49.8	3,931	3,930	131
FS44	09/23/2021	2	0.00514	0.225	923	1,440	177	2,363	2,540	331
FS44A	11/23/2021	3	<0.00200	0.0103	3,040	119	<49.9	3,159	3,160	236
FS45	09/23/2021	2	<0.00198	<0.00200	374	1,010	130	1,384	1,510	349
FS45A	11/23/2021	3	<0.00200	<0.00399	4,000	352	<49.9	4,352	4,350	143
FS46	09/23/2021	2	<0.00198	<0.00200	164	634	68.6	798	867	528
Delineation Soil Samples										
PH01	09/15/2021	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	25.4
PH01A	09/15/2021	2	<0.00198	<0.00397	<49.8	121	<49.8	121	121	107
PH06	09/16/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	90.3
PH06A	09/16/2021	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,140
PH07	09/16/2021	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	552
PH07A	09/16/2021	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	227
PH08	09/17/2021	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	587
PH08A	09/17/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	802
PH08B	09/17/2021	2	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	600
PH09	09/20/2021	0.5	<0.00199	0.00576	<49.8	<49.8	<49.8	<49.8	<49.8	185
PH09A	09/20/2021	1	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	125
PH09B	09/20/2021	2	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	17.8



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 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
PH10	09/20/2021	0.5	<0.00200	<0.00200	<49.8	1,070	<49.8	170	170	1,160
PH10A	09/20/2021	1	<0.00202	0.0314	<50.0	234	<50.0	234	234	358
PH10B	09/20/2021	2	<0.00200	<0.00200	<49.8	557	<49.8	557	557	458
PH15	12/10/2021	0.5	<0.00200	0.497	111	382	<50.0	493	493	383
PH15A	12/10/2021	4	0.719	37.0	1,960	3,050	<50.0	5,010	5,010	1,010
PH15B	12/10/2021	8	0.662	46.5	3,780	6,430	<50.0	10,210	10,200	654
PH15C	12/10/2021	12	0.0891	12.2	1,220	2,180	<49.9	3,400	3,400	404
PH15D	12/10/2021	14	0.0751	8.29	1,080	2,610	<50.0	3,690	3,690	335
PH15E	12/10/2021	16	0.0722	18.4	1,210	2,520	<49.9	3,730	3,730	389
PH16	12/10/2021	8	1.48	51.3	5,020	6,230	<50.0	11,250	11,300	2,850
PH16A	12/10/2021	10	0.0800	10.7	348	990	<49.9	1,338	1,340	940
PH16B	12/10/2021	12	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,840
PH16C	12/10/2021	14	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	2,230
PH16D	12/10/2021	16	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	329
PH16E	12/10/2021	21	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	58.4
PH17	12/10/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,310
PH17A	12/10/2021	4	<0.00200	0.0412	<49.9	954	<49.9	954	954	127
PH17B	12/10/2021	6	<0.0404	10.8	457	1,420	<50.0	1,877	1,880	202
PH18	12/10/2021	0.5	<0.0398	20.6	901	3,390	<49.9	4,291	4,290	469
PH18A	12/10/2021	2	<0.0403	21.8	905	3,740	<50.0	4,645	4,650	506
PH18B	12/10/2021	4	<0.0402	4.04	526	4,080	<49.9	4,606	4,610	<5.00
PH19	12/10/2021	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	336
PH19A	12/10/2021	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	741
PH19B	12/10/2021	8	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	574
PH19C	12/10/2021	10	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2,220
PH19D	12/10/2021	12	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	355
PH19E	12/10/2021	14	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	307
PH19F	12/10/2021	16	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	352



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NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
PH20	12/10/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	418
PH20A	12/10/2021	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	836
PH20B	01/12/2022	8	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	306
PH20C	01/12/2022	12	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	195
PH20D	01/12/2022	14	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	226
PH20E	01/12/2022	16	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	248
PH20F	01/12/2022	17	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	255
PH21	01/13/2022	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	74.5
PH21A	01/13/2022	2	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	162
PH21B	01/13/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,820
PH21C	01/13/2022	8	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	1,650
PH21D	01/13/2022	10	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	388
PH21E	01/13/2022	12	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	300
PH21F	01/13/2022	14	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	234
PH21G	01/13/2022	16	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	192
PH22	01/13/2022	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	162
PH22A	01/13/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	61.5
PH22B	01/13/2022	8	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	185
PH22C	01/14/2022	12	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	272
PH22D	01/14/2022	14	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	240
PH22E	01/14/2022	16	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	238
PH23	01/14/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,140
PH23A	01/14/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	211
PH23B	01/14/2022	6	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	488
PH23C	01/14/2022	8	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	369
PH23D	01/14/2022	12	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	267
PH23E	01/14/2022	14	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	209
PH23F	01/14/2022	16	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	199



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Poker Lake Unit 25 Brushy Draw 901H
 XTO Energy, Inc.
 Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
PH24	02/17/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	491
PH24A	02/17/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	337
PH24B	02/17/2022	6	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	74.4
PH24C	02/17/2022	8	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	131
PH24D	02/17/2022	10	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	197
PH24E	02/17/2022	12	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	42.4
PH24F	02/17/2022	14	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	81.8
PH24G	02/17/2022	16	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	33.4
PH24H	02/17/2022	17	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	21.1

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.

NE - Not Established

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard

Text impacted soil was excavated



APPENDIX A

Well Record and Log



2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

03/11/2021

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4498 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4498Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive style.

Lucas Middleton

Enclosures: as noted above

DSE DII MAR 11 2021 PM 4:22





WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DIV / APR 11 2021 PM 4:22

APPLICABLE

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4498	
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)	
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE ZIP TX 79707
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES 32°	SECONDS 6' 1.96" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LONGITUDE	-103°	50' 26.19" W		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW SW NE Sec. 25 T25S R30E						

2. DRILLING & CASING INFORMATION	LICENSE NO. 1249	NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.			
	DRILLING STARTED 02/24/2021	DRILLING ENDED 02/24/2021	DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 109	DEPTH WATER FIRST ENCOUNTERED (FT) n/a			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a			
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	109	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

OSE DJT MPR 11 2021 PM 4:22

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES/NO)		ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			Y	N	
	0	34	34	Caliche, tan, no odor, no stain, gravel, dry	Y	✓ N	
	34	40	6	sand/ caliche, tan, no odor, no stain, m-f grain, well sorted, dry	Y	✓ N	
	40	56	16	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y	✓ N	
	56	72	16	sandstone, low consolidation, tan, no odor, no stain, m-f grain, well sorted, dry	Y	✓ N	
	72	79	7	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y	✓ N	
	79	109	30	sandstone, low - medium consolidation, tan, no odor, m-f grained, well sorted, m	Y	✓ N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00		
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION:	Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	<i>Jackie Atkins</i>			Jackie D. Atkins		03/11/2021	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE	

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)			
FILE NO.	POD NO.	TRN NO.			
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2			



PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4498- POD1

Well owner: XTO ENERGY (Kyle Littrell)

Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland

State: Texas

Zip code: 79707

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/21

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge

4) Date well plugging began: 03/02/2021 Date well plugging concluded: 03/02/2021

5) GPS Well Location: Latitude: 32 deg, 6 min, 1.96 sec
Longitude: -103 deg, 50 min, 26.19 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 109 ft below ground level (bgl),
by the following manner: weighted tape

7) Static water level measured at initiation of plugging: n/a ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 12/01/2020

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	Approx. 16 gallons	16 gallons	Augers	
10'-109'	Drill Cuttings	Approx. 171 gallons	171 gallons	Boring	



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MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jack Atkins

Signature of Well Driller

03/11/2021

Date






2020-03-10_C-4498-POD1_OSE_Well Record and Log-forsign

Final Audit Report

2021-03-11

Created:	2021-03-11
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAq2m7g1wGV8cRoBzMugpPTk25-4ojFW8H

"2020-03-10_C-4498-POD1_OSE_Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2021-03-11 - 7:17:39 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-03-11 - 7:18:18 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2021-03-11 - 7:29:33 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-03-11 - 7:31:05 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.
2021-03-11 - 7:31:05 PM GMT



OSE DJT MAR 11 2021 PM4:22



USGS 320628103533001 25S.30E.21.333424

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▾

GO

Well Site**DESCRIPTION:**

Latitude 32°06'28", Longitude 103°53'30" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 288 feet

Land surface altitude: 3,207 feet above NAVD88.

Well completed in "Pecos River Basin alluvial aquifer" (N100PCSRVR) national aquifer.

Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-21	1998-01-28	4
Revisions	Unavailable (site:0) (timeseries:0)		

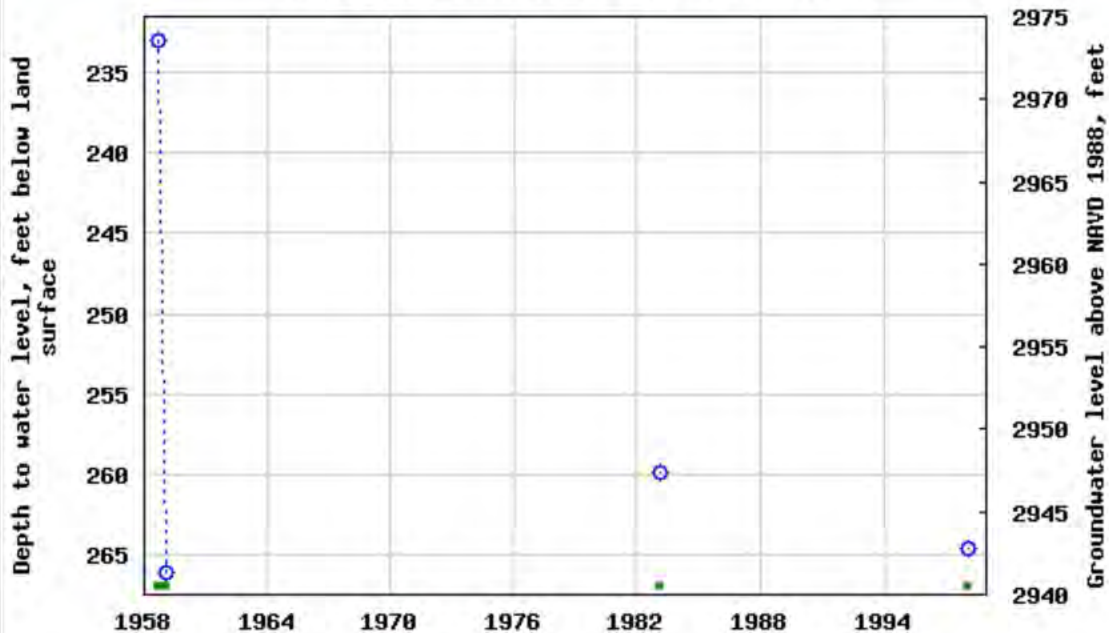
OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)



USGS 320628103533001 25S.30E.21.333424



Period of approved data



APPENDIX B

Photographic Log



Photographic Log

XTO Energy, Inc.

Poker Lake Unit 25 Brushy Draw 901H

Incident Number NAPP2116546260



Photograph 1
 Date: September 20, 2021
 Description: Photo of PH10 taken facing Northwest.



Photograph 2
 Date: November 23, 2021
 Description: Photo of excavation taken facing East.



Photograph 3
 Date: September 16, 2021
 Description: Photo of excavation extent.





Photograph 4
 Date: January 14, 2022
 Description: PH20 taken facing West.





APPENDIX C


Lithologic Soil Sampling Logs


		Sample Name: PH01		Date: 09/15/2021				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: JH		Method: Backhoe				
Coordinates:		Hole Diameter: NA		Total Depth: 2'				
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<162	0.6	N			1	CCHE	CALICHE w/ silt, red to light brown, no stain, no odor.
D	162	1.9	N	PH01	2	2	CCHE	SAA.
						TD @ 2 feet bgs		
<div style="position: absolute; top: 0; right: 0; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black;"></div>								


		Sample Name: PH06		Date: 09/16/2021				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: JH		Method: Backhoe				
Coordinates:		Hole Diameter: NA		Total Depth: 2'				
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D			N			1	SW-SM	SAND w/ clay, well graded, brown, no stain, no odor.
D	112	0.9	N	PH06	2	2	CL	CLAY w/ sand, brown-red, low-medium plasticity, no stain, no odor.
						TD @ 2 foot bgs		


		Sample Name: PH07		Date: 09/16/2021				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: JH		Method: Backhoe		
Coordinates:				Hole Diameter: NA		Total Depth: 2'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D			N			1	SW-SM	SAND w/ clay, well graded, brown, no stain, no odor.
D	252	0.2	N	PH07	2	2	CL	CLAY w/ sand, brown-red, low-medium plasticity, no stain, no odor.
TD @ 2 foot bgs								


				Sample Name: PH08		Date: 09/17/2021		
				Site Name: Poker Lake Unit 25 Brushy Draw 901H				
				Incident Number: NAPP2116546260				
				Job Number: 03E1558027				
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: JH		Method: Backhoe		
Coordinates:				Hole Diameter: NA		Total Depth: 2'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
					0			
D	704	0.7	N	PH08	0.5	0.5	SW-SM	SAND w/ clay, some caliche gravel, well graded, brown/gray, no stain, no odor.
D	1,108	0.8	N	PH08A	1	1	SW-SM	SAA
D	1,108	0.5	N	PH08B	2	2	CL	CLAY w/ sand, brown-red, low-medium plasticity, no stain, no odor.
TD @ 2 foot bgs								


					Sample Name: PH09		Date: 09/20/2021					
					Site Name: Poker Lake Unit 25 Brushy Draw 901H				Incident Number: NAPP2116546260			
					Job Number: 03E1558027				Logged By: EL		Method: Backhoe	
					LITHOLOGIC / SOIL SAMPLING LOG				Hole Diameter: NA		Total Depth: 2'	
Coordinates:					Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.							
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions				
M	369	5.1	N	PH09	0.5	0	SW-SM	SAND, brown, fine-medium grain, moist, some silt, abundant CCHE gravel, no stain, no odor.				
M	224	1.7	N	PH09A	1	1	SW-SM	SAA, dark brown.				
M	<179	3.7	N	PH09B	2	2	SW-SM	SAA				
TD @ 2 foot bgs												


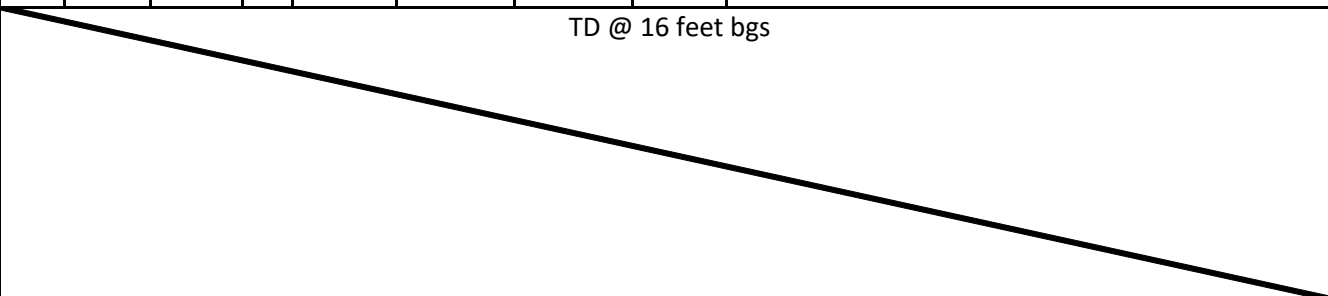
					Sample Name: PH10		Date: 09/20/2021					
					Site Name: Poker Lake Unit 25 Brushy Draw 901H				Incident Number: NAPP2116546260			
					Job Number: 03E1558027				Logged By: EL		Method: Backhoe	
					LITHOLOGIC / SOIL SAMPLING LOG				Hole Diameter: NA		Total Depth: 3'	
Coordinates:												
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.												
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions				
M	1,036	39.6	N	PH10	0.5	0	SW-SM	SAND, brown, fine-medium grain, moist, some silt, abundant CCHE gravel, no stain, no odor.				
M	369	30.9	N	PH10A	1	1	SW-SM	SAA, dark brown.				
M	588	392.2	N	PH10B	2	2	SW-SM	SAA, tan.				
TD @ 2 feet bgs												


								Sample Name: PH15		Date: 12/10/2021	
								Site Name: Poker Lake Unit 25 Brushy Draw 901H			
								Incident Number: NAPP2116546260			
								Job Number: 03E1558027			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: BB		Method: Backhoe	
Coordinates:								Hole Diameter: NA		Total Depth: 16'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
M	/	338.4	Y	PH15	0.5	0	CCHE (fill)	0-1', CALICHE, moist, tan-light brown, poorly consolidated, some dark brown fine grain sand, strong H/C odor, light brown staining, fill.			
D	/	733	Y			2	CCHE	1'-13', CALICHE, tan, well consolidated, thin (1cm) laminations, strong H/C odor, trace light brown staining.			
M	/	882	N	PH15A	4	4		2'-13', no staining, laminations absent. 4'-13', moist.			
M	/	1,323	N			6					
M	/	1,419	N	PH15B	8	8		8'-13', moderately-well consolidated.			
M	/	1,096	N			10					
M	/	1,045	N	PH15C	12	12					
M	/	1,651	N	PH15D	14	14	SP-S	13'-16', SANDSTONE, moist, tan-light brown, well consolidated, poorly graded, medium grain, strong H/C odor, no stain.			
M	/	1,462	N	PH15E	16	16					
TD @ 16 feet bgs											


		Sample Name: PH16		Date: 12/10/2021				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: BB		Method: Trackhoe		
Coordinates:				Hole Diameter: NA		Total Depth: 21'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	/	918	N			0	OPEN EXC.	0'-6', OPEN EXCAVATION.
						0.5		
						2		
						4		
M	/	930	N	PH16	8	8	CCHE	6'-14', CALICHE, moist, tan, well consolidated, induriated, strong H/C odor, no stain.
M	/	1,425	N	PH16A	10	10		
M	/	72.9	N	PH16B	12	12		12'-14', trace H/C odor.
M	/	62.5	N	PH16C	14	14	SP-S	14'-21', SANDSTONE, moist, tan-light brown, well consolidated, poorly graded, medium grain, trace H/C odor, no stain.
M	/	1.6	N	PH16D	16	16		16'-21', no odor.
M	/	1.8	N			18		
M	/	3.1	N	PH16E	21	21		
						22		
								TD @ 21 feet bgs


		Sample Name: PH17		Date: 12/10/2021				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: BB		Method: Hydrovac			
			Hole Diameter: NA		Total Depth: 6'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	/	2.1	N	PH17		0 0.5 1 2 3	CCHE (fill)	0-5', CALICHE, moist, tan-light brown, poorly consolidated, some dark brown fine grain sand, no stain, no odor, fill.
M	/	2.0	N			4		4'-5', trace H/C odor.
M	/	64.0	N	PH17A	4	4		
						5	CCHE	5'-6', CALICHE, dry, tan, well consolidated, induriated, moderate H/C odor, no stain.
D	/	399.4	N	PH17B	6	6		
						TD @ 6 feet bgs		


		Sample Name: PH18		Date: 12/10/2021				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: BB		Method: Hydrovac		
Coordinates:				Hole Diameter: NA		Total Depth: 4'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	/	600	N	PH18	0.5	0	CCHE (fill)	0-4', CALICHE, moist, tan-light brown, poorly consolidated, some dark brown fine grain sand, no stain, strong H/C odor, fill.
						1		1'-4', dark brown sand absent.
M	/	616	N	PH18A	2	2		
						3		
M	/	349	N	PH18B	4	4		Hydrovac refusal due to caliche.
TD @ 4 feet bgs								


		Sample Name: PH19		Date: 12/10/2021					
		Site Name: Poker Lake Unit 25 Brushy Draw 901H							
		Incident Number: NAPP2116546260							
		Job Number: 03E1558027							
LITHOLOGIC / SOIL SAMPLING LOG									
Coordinates:			Logged By: BB		Method: Trackhoe				
			Hole Diameter: NA		Total Depth: 16'				
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
M	/	3.4	N	PH19	0.5	0	CCHE (fill)	0-1', CALICHE, moist, tan-light brown, poorly consolidated, some dark fine grain sand, no odor, no stain.	
D	/	5.2	N			2	CCHE	1'-14', CALICHE, dry, tan, well induriated, thin (1cm) laminations, no stain, no odor. 2'-14', thin laminations	
D	/	5.2	N	PH19A	4	4			
D	/	2.5	N			6			
D	/	1.2	N	PH19B	8	8			
D	/	1.2	N	PH19C	10	10			
D	/	1.2	N	PH19D	12	12			
D	/		N	PH19E	14	14	SP-S	14'-16', SANDSTONE, dry, light brown-tan, well consolidated, medium grain, poorly graded, no stain, no odor.	
D	/	1.2	N	PH19F	16	16			
TD @ 16 feet bgs									

		Sample Name: PH20		Date: 12/10/21 - 1/12/22				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: BB		Method: Trackhoe			
			Hole Diameter: NA		Total Depth: 17'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	/	1.2	N	PH20	0.5	0	CCHE (fill)	0-1', CALICHE, moist, tan-light brown, poorly consolidated, some dark fine grain sand, no odor, no stain.
D	/	1.2	N			2	CCHE	1'-4', CALICHE, tan, try, well consolidated, thin (1cm) laminations, no stain, no odor. 2'-4', thin laminations absent.
D	/	1.4	N	PH20A	4	4	SP-S	4'-10', SANDSTONE, dry, tan, well consolidated, cemented, very fine-fine grained, poorly graded, few brown angular calcite inclusions, no stain, no odor.
D	263	1.7	N			6		
D	308	1.6	N	PH20B	8	8		
D	263	4.1	N			10		
D	/	4.6	N	PH20C	12	12		
D	/	5.6	N	PH20D	14	14		14'-17', SANDSTONE w/ calcite, dry, light brown-tan, well consolidated, poorly graded, fine to very fine grained, some abundant large calcite inclusions, off white to cream in color, no stain, no odor.
D	/	88.3	N	PH20E	16	16		
D	/	31.5		PH20F	17	17		16'-17', trace H/C odor.
						TD @ 17 feet bgs		

		Sample Name: PH21		Date: 1/13/2022				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates:			Logged By: BB		Method: Trackhoe			
			Hole Diameter: NA		Total Depth: 16'			
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	/	0.6	N	PH21	0.5	0	CCHE (fill)	0'-2', CALICHE w/ sand, moist, brown-light brown, unconsolidated fill, no stain, no odor.
D	/	1.3	N	PH21A	2	2	CCHE	
D	/	4.5	N	PH21B	4	4		2'-6', CALICHE, dry, tan-off white, well consolidated, some silt, no stain, no odor.
D	/	5.1	N			6	SP-5	
D	/	3.7	N	PH21C	8	8		6'-12', SANDSTONE, dry, tan, well consolidated, very fine-fine grained, poorly graded, trace brown-light brown angular calcite inclusions, no stain, no odor.
D	/	2.8	N	PH21D	10	10		
D	/	7.4	N	PH21E	12	12		12'-16', SANDSTONE, dry, tan-off white, well consolidated, very fine-fine grained, poorly graded, no stain, no odor.
D	/	4.2	N	PH21F	14	14		
D	/	3.8	N	PH21G	16	16		
TD @ 16 feet bgs								

		Sample Name: PH22		Date: 1/13-14/2022					
		Site Name: Poker Lake Unit 25 Brushy Draw 901H							
		Incident Number: NAPP2116546260							
		Job Number: 03E1558027							
LITHOLOGIC / SOIL SAMPLING LOG									
Coordinates:			Logged By: BB		Method: Trackhoe				
			Hole Diameter: NA		Total Depth: 16'				
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
M	/	0.7	N	PH22	1	1	CCHE (fill)	0'-2', CALICHE w/ sand, moist, brown-light brown, unconsolidated fill, no stain, no odor.	
M	/	1.3	N			2	CCHE		
D	/	0.7	N	PH22A	4	4		2'-6', CALICHE, dry, tan-off white, well consolidated, some silt, no stain, no odor.	
D	/	1.3	N	PH22B	6	6	SP-5		
D	/	1.5	N	PH22C	8	8		6'-12', SANDSTONE, dry, tan, well consolidated, very fine-fine grained, poorly graded, trace brown-light brown angular calcite inclusions, no stain, no odor.	
D	/	1.2	N			10			
D	/	1.5	N	PH22D	12	12		12'-16', SANDSTONE, dry, tan-off white, well consolidated, very fine-fine grained, poorly graded, no stain, no odor.	
D	/	4.5	N	PH22E	14	14			
D	/	4.0	N	PH22F	16	16			
TD @ 16 feet bgs									

		Sample Name: PH23		Date: 1/14/2022				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: BB		Method: Trackhoe		
Coordinates:				Hole Diameter: NA		Total Depth: 16'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
M	/	0.7	N	PH23	1	0	CCHE (fill)	0-0.5', CALICHE w/ sand, moist, brown-light brown, unconsolidated fill, no stain, no odor.
D	/	1.3	N			1	CCHE	0.5'-3', CALICHE, dry, tan-off white, well consolidated, some silt, no stain, no odor.
D	/	1.5	N	PH23A	4	2	SP-S	3'-16', SANDSTONE, dry, tan, well consolidated, very fine-fine grained, poorly graded, some off white-light brown calcite inclusions, some white-tan chert, no stain, no odor.
D	/	2.0	N	PH23B	6	4		
D	/	4.1	N	PH23C	8	6		
D	/	4.0	N			8		
D	/	6.5	N	PH23D	12	10		
D	/	1.2	N	PH23E	14	12		
D	/	1.2	N	PH23F	16	14		
						16		
TD @ 16 feet bgs								

		Sample Name: PH24		Date: 2/17/2022				
		Site Name: Poker Lake Unit 25 Brushy Draw 901H						
		Incident Number: NAPP2116546260						
		Job Number: 03E1558027						
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: BB		Method: Trackhoe		
Coordinates:				Hole Diameter: NA		Total Depth: 17'		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	/	0.0	N	PH24	1	0	CCHE (fill)	0-0.5', CALICHE w/ sand, moist, brown-light brown, unconsolidated fill, no stain, no odor.
D	/	0	N			1	CCHE	0.5'-3', CALICHE, dry, tan-off white, well consolidated, some silt, no stain, no odor.
D	/	0.4	N	PH24A	4	2	SP-S	3'-17', SANDSTONE, dry, tan, well consolidated, very fine-fine grained, poorly graded, some off white-light brown calcite inclusions, some white-tan chert, no stain, no odor.
D	/	0.4	N	PH24B	6	4		
D	/	1.2	N	PH24C	8	6		
D	/	1.4	N			8		
D	/	0.9	N	PH24D	12	10		SAA.
D	/	1.0	N	PH24E	14	12		
D	/	1.8	N	PH24F	16	14		
D	/	2	N	PH24G	17	16		SAA.
						TD @ 17 feet bgs		



APPENDIX E
NMOCD Notifications

Green, Garrett J

From: Green, Garrett J
Sent: Wednesday, June 2, 2021 1:26 PM
To: 'Mike Bratcher'; 'Victoria Venegas'; 'Rob Hamlet'; 'emily.hernandez@state.nm.us'; 'camorgan@blm.gov'; 'blm_nm_cfo_spill@blm.gov'
Cc: Littrell, Kyle; Baker, Adrian; McSpadden, Wes; Weaver, John; Thames, Jennifer
Subject: XTO 24 hour notification - PLU 25 BD 901H release date 6/1/21

Good afternoon,

This is notification of a release greater than 25 barrels. The release occurred yesterday at the PLU 25 BD 901H near the GPS coordinates given below. Details will be provided with a form C-141. Please contact us with any questions or concerns.

GPS: 32.10202, -103.84167

Garrett Green
Environmental Coordinator
Delaware Business Unit
(575) 200-0729
Garrett.Green@ExxonMobil.com

XTO Energy, Inc.
3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

Collins, Melanie

From: Collins, Melanie
Sent: Monday, August 30, 2021 4:13 PM
To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us
Cc: DelawareSpills /SM; Jennings, Kalei; Ager, Ashley; Cole, Aimee; Morrissey, Tacoma
Subject: Poker Lake Unit 25 Brushy Draw 901H (Incident Number nAPP2116546260)

All,

XTO is requesting an extension of the current August 30, 2021 deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the Poker Lake Unit 25 Brushy Draw 901H (Incident Number nAPP2116546260). The release was discovered on June 1, 2021 and remediation activities are ongoing. Based on the most recent laboratory analytical results, additional remediation work is required. In order to complete the remediation activities and submit a remediation work plan or closure report, XTO requests a 90-day extension of the deadline until November 28, 2021.

Thank you,

Melanie Collins

SSHE Technician



An **ExxonMobil** Subsidiary
6401 Holiday Hill Rd, Bldg 5
Midland, TX 79707
432-218-3709

Baker, Adrian

From: Baker, Adrian
Sent: Tuesday, November 23, 2021 11:01 AM
To: 'ocd.enviro@state.nm.us'; 'Bratcher, Mike, EMNRD'
Cc: DelawareSpills /SM; WSP-XTO-Project-Team
Subject: XTO extension request - PLU 25 BD 901H (Incident Number NAPP2116546260)

All,

XTO is requesting an extension for the current deadline of November 28, 2021 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the PLU 25 BD 901H (Incident Number NAPP2116546260). The release was discovered on June 1, 2021 and initial site assessment was conducted. The most recent laboratory analytical results indicate further remediation work is warranted. At this time, XTO and WSP are discussing remedial options to address remaining impacts in an effort to ensure protection of public health and the environment, while remaining compliant with XTO's safety guidelines. In order to discuss remedial options, complete the remediation work, and submit a remediation work plan or closure report XTO requests a 90-day extension of this deadline until February 26, 2022.

Adrian Baker
Environmental Coordinator
Permian Business Unit

XTO Energy Inc.
6401 N. Holiday Hill Dr.
Midland, Tx 79707
Mobile:(432)-236-3808
adrian.baker@exxonmobil.com

From: [Green, Garrett J](#)
To: [Kalei Jennings](#)
Subject: FW: XTO Site Activities for the Week of Jan 10
Date: Friday, May 6, 2022 9:48:10 AM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

From: Morrissey, Tacoma [mailto:Tacoma.Morrissey@wsp.com]
Sent: Friday, January 7, 2022 5:33 AM
To: OCD.Enviro@state.nm.us
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; WSP-XTO-Project-Team <WSP-XTO-Project-Team@wsp.com>
Subject: XTO Site Activities for the Week of Jan 10

All,

XTO will be completing excavation and sampling activities at the following sites next week. We anticipate collecting final confirmation samples.

Monday:

- PLU PB 25-25-30 / nAPP2130837821

Tuesday:

- PLU PB 25-25-30 / nAPP2130837821
- * PLU 293 Flow Line / NAPP2126045826
- *Poker Lake Unit 25 Brushy Draw / NAPP2134345504

Wednesday:

- *PLU 25 BD 901H /nAPP2116546260
- Ross Ranch 6/ nAPP2034638293
- *Corral Canyon 10E / nAPP2133445985

Thursday:

- PLU 25 BD 901H / nAPP2116546260
- Corral Canyon 10E / nAPP2133445985

Friday:

Thank you,

Tacoma Morrissey
Consultant Geologist
Office Manager, Midland



M+ 1 337-257-8307
WSP USA
3300 North A Street
Bldg 1, Unit 222
Midland, Texas 79705

wsp.com

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-LAEmHhHzdJzBITWfa4Hgs7pbKl

Collins, Melanie

From: Collins, Melanie
Sent: Friday, February 25, 2022 3:13 PM
To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us
Cc: DelawareSpills /SM; Cole, Aimee; Jennings, Kalei; Morrissey, Tacoma; Belill, Benjamin
Subject: XTO Extension Request - PLU 25 BD 901H (Incident Number NAPP2116546260)

All,

PLU 25 BD 901H (Incident Number NAPP2116546260)

XTO is requesting an extension for the current deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the PLU 25 BD 901H (Incident Number NAPP2116546260). The release was discovered on June 1, 2021 and initial site assessment and excavation was conducted. The most recent laboratory analytical results indicate further remediation work is warranted. In order to complete the remediation work, and submit a remediation work plan or deferral report XTO requests a 60-day extension of this deadline until April 27, 2022.

Please do not hesitate to reach out should you have any questions regarding this request.

Thank you,

Melanie Collins

SSHE Technician



An **ExxonMobil** Subsidiary
6401 Holiday Hill Rd, Bldg 5
Midland, TX 79707
432-218-3709

Collins, Melanie

From: Collins, Melanie
Sent: Tuesday, April 26, 2022 4:27 PM
To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us
Cc: DelawareSpills /SM; Tacoma Morrissey; Kalei Jennings
Subject: XTO- Extension Request - PLU 25 BD 901H (Incident Number NAPP2116546260)

All,

PLU 25 BD 901H (Incident Number NAPP2116546260)

XTO is requesting an extension for the current deadline of April 27, 2022 for submitting a deferral report required in 19.15.29.12.B.(1) NMAC at the PLU 25 BD 901H (Incident Number NAPP2116546260). The release was discovered on June 1, 2021 and remediation activities are complete. Final laboratory analytical results are pending. In order to prepare and submit a deferral request, XTO requests a 30-day extension of this deadline until May 27, 2022.

Thank you,

Melanie Collins

SSHE Technician



An **ExxonMobil** Subsidiary
6401 Holiday Hill Rd, Bldg 5
Midland, TX 79707
432-218-3709

Kalei Jennings

From: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Sent: Wednesday, April 27, 2022 9:28 AM
To: Collins, Melanie Suzanne
Cc: DelawareSpills /SM; Tacoma Morrissey; Kalei Jennings; Bratcher, Mike, EMNRD; Nobui, Jennifer, EMNRD
Subject: (Extension Denied) - XTO - PLU 25 BD 901H (Incident Number NAPP2116546260)

[****EXTERNAL EMAIL****]

RE: Incident #**NAPP2116546260**

Melanie,

An extension for this release has already been granted. Your request for another extension is **denied**. Include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Tuesday, April 26, 2022 3:37 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Subject: Fw: [EXTERNAL] XTO- Extension Request - PLU 25 BD 901H (Incident Number NAPP2116546260)

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Tuesday, April 26, 2022 3:27 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Tacoma Morrissey <tmorrissey@ensolum.com>; Kalei Jennings <kjennings@ensolum.com>
Subject: [EXTERNAL] XTO- Extension Request - PLU 25 BD 901H (Incident Number NAPP2116546260)

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

All,

PLU 25 BD 901H (Incident Number NAPP2116546260)

XTO is requesting an extension for the current deadline of April 27, 2022 for submitting a deferral report required in 19.15.29.12.B.(1) NMAC at the PLU 25 BD 901H (Incident Number NAPP2116546260). The release was discovered on June 1, 2021 and remediation activities are complete. Final laboratory analytical results are pending. In order to prepare and submit a deferral request, XTO requests a 30-day extension of this deadline until May 27, 2022.

Thank you,

Melanie Collins

SSHE Technician



An **ExxonMobil** Subsidiary

6401 Holiday Hill Rd, Bldg 5

Midland, TX 79707

432-218-3709



APPENDIX B

NMOCD Correspondence

Begin forwarded message:

From: "Hamlet, Robert, EMNRD" <Robert.Hamlet@emnrd.nm.gov>
Date: October 27, 2022 at 8:05:24 AM MDT
To: "Green, Garrett J" <garrett.green@exxonmobil.com>
Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@emnrd.nm.gov>, "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@emnrd.nm.gov>, "Billings, Bradford, EMNRD" <Bradford.Billings@emnrd.nm.gov>
Subject: RE: [EXTERNAL] RE: The Oil Conservation Division (OCD) has rejected the application, Application ID: 104965

External Email - Think Before You Click

Garrett,

One stipulation for granting a deferral is that the release needs to be fully delineated. The OCD needs to evaluate the scope and severity of the release. We aren't asking XTO to delineated the release in the middle of the pipeline corridor, but the rig could be moved safely outside of that area to gain some delineation samples. Sample points can certainly be requested for deferral on pad, but the OCD needs to understand how deep the contaminants went before the deferral can be granted. Also, as much of the contaminated soil should be removed with alternative methods before a deferral is requested.

Regards,

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave. | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Tuesday, October 25, 2022 2:46 PM
To: ocdonline, emnrd, EMNRD <emnrd.ocdonline@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: [EXTERNAL] RE: The Oil Conservation Division (OCD) has rejected the application, Application ID: 104965

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

Mr. Hamlet,

XTO appreciates the timely response to the deferral request at the Poker Lake Unit 25 Brushy Draw 901H for Incident Number NAPP2116546260. Following a review of the comments provided we would like to provide the following clarifications and request that you reconsider approval of the deferral request.

1. *“Chain of Custody and Analysis Request form on 9/13/21 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 12.8 deg. Celsius. Please, make sure samples are relinquished at a proper temperature on future projects.”*
 1. The referenced analytical report is 890-1251. These samples did arrive at the lab and the temperature was measured at 12.8 degrees Celsius. The samples were submitted to the lab in a cooler, preserved on ice under proper chain of custody procedures, as documented in the Login Sample Receipt Checklist and quality summary. The reason the samples were still at a higher, though acceptable, temperature is because the samples were collected on September 13, 2021 and submitted on the same day. The time between sample collection and sample delivery was short and the ambient temperature of the samples had not yet been reduced by the ice in the cooler. The Login Sample Receipt Checklist contains the following comment “Received same day of collection; chilling process has begun.”
2. *“A deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. Pothole locations PH15, PH17, and PH18 will need to be fully delineated before a deferral request is granted.”*
 1. The locations of the potholes mentioned, PH15, PH17, and PH18 prohibit additional vertical delineation. The potholes were completed in a pipeline corridor containing the following at 5 feet below ground surface:
 1. Six 4-inch high pressure gas lines
 2. Three 2-inch high-pressure gas lines,
 3. Two 2-inch fiber optic lines
 2. Pothole PH15 was just east of the pipeline corridor and pothole PH17 just west. Pothole PH18 was completed above the pipelines. Pothole PH15 was taken as deep as possible, with a trackhoe, but to go deeper would require the excavation of a bench at depth for heavy equipment access, which is not feasible due to the subsurface lithology (indurated caliche and the underlying competent sandstones) and the nearby hazardous buried lines. Potholes PH17 and PH18 had to be completed utilizing a hydrovac, as the use of any mechanical equipment would have

- compromised the safety of personnel onsite and possibly resulted in an additional release.
3. Hand augering could not be completed due to the subsurface lithology as described above (see attached photographic log for a visual of the subsurface lithology). Utilization of a core drill, geo probe, or drilling rig would not allow the location of the delineation samples to be completed closer to the pipelines or in between the pipelines. As such, additional delineation was completed as near to the impacted soil as possible at pothole PH20 to laterally delineate soil identified in PH15, pothole PH24 to laterally delineate soil collected from PH17, and potholes PH10, PH21, and PH22 to laterally delineate soil identified in PH18. Samples from PH16, collected within the proposed deferred area, provides vertical delineation as near to the pipelines as possible. While the deepest samples from PH15, PH17, and PH18 do not provide complete vertical delineation, the soil sampling data provided do provide information to estimate vertical delineation and rule out significant vertical impact. The clean samples from surrounding potholes described above and those collected at depth from PH16 provide evidence that vertical delineation is approximately 16 to 20 feet bgs in the proposed deferral area. Those same data confirm extensive vertical impacts are not pervasive within and immediately outside of the requested deferral area. Depth to groundwater is confirmed to be greater than 100 feet bgs. The deferral request is for residual impacts (gross impacts have been removed) on pad.
 4. XTO agrees further remediation will be required, however this work cannot be completed without major facility reconstruction or risk to health and safety of on-site workers. As such, XTO respectfully requests reconsideration of the remediation completed and approval of the deferral based on the delineation provided. We have attached the deferral figure and some additional photos for your reference.
 5. If NMOCD will not reconsider the deferral request, XTO would request a meeting with NMOCD to discuss appropriate methods for achieving NMOCD's goals in this scenario.

With these clarifications in mind, XTO requests that you reconsider and grant approval of the deferral request. Final removal of the impacted soil will occur during major facility construction or immediately following plugging and abandonment of the facility.

Thank you,

From: OCDOnline@state.nm.us [<mailto:OCDOnline@state.nm.us>]

Sent: Wednesday, August 24, 2022 3:46 PM

To: Green, Garrett J <garrett.green@exxonmobil.com>

Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 104965

External Email - Think Before You Click

To whom it may concern (c/o Garrett Green for XTO ENERGY, INC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2116546260, for the following reasons:

- 1. The deferral request is denied. A deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. Pothole locations PH15, PH17, and PH18 will need to be fully delineated before a deferral request is granted. Chain of Custody and Analysis Request form on 9/13/21 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 12.8 deg. Celsius. Please, make sure samples are relinquished at a proper temperature on future projects.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 104965.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,

Robert Hamlet

575-748-1283

Robert.Hamlet@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505



APPENDIX C

Photographic Log



Photographic Log

XTO Energy, Inc.
Poker Lake Unit 25 Brushy Draw 901H
Incident Number NAPP2116546260



Photograph 1 Date: November 23, 2021
Description: View of excavation above the pipeline corridor facing north. The red outlines highlight trenches utilized to spot the six subsurface lines.



Photograph 2 Date: November 23, 2021
Description: View of spotting trench within the excavation. Several of the eleven lines are visible.



Photograph 3 Date: December 9, 2021
Description: View of excavation extent facing southeast.



Photograph 5 Date: November 22, 2021
Description: View of field pothole 13, collected in open excavation and not submitted for laboratory analysis. Collecting samples at 3 feet and 4 feet was extremely difficult. Hydrovac hit refusal at 4 feet.



Photographic Log

XTO Energy, Inc.
Poker Lake Unit 25 Brushy Draw 901H
Incident Number NAPP2116546260



Photograph 5 1/12/2022

Description: View of PH20. Indurated caliche visible approximately 1 foot bgs. Hydrovac had hit refusal at approximately 4 feet bgs in this location on 12/10/21. Trackhoe hit refusal at 16 feet bgs.



Photograph 2 Date: January 13, 2022

Description: View of PH21. Indurated caliche visible 2 feet bgs. Each pothole was taking approximately 1 day to complete



Photograph 2 Date: January 14, 2022

Description: View of PH22. Indurated caliche visible 2 feet bgs. Each pothole was taking approximately 1 day to complete



Photograph 4 Date: January 14, 2022

Description: View of calcareous cemented sandstone encountered in the potholes.



APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation



Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1016-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
8/2/2021 1:30:28 PM

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



LINKS

Review your project
results through
TotalAccess

Have a Question?



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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- 13
- 14

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1016-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Job ID: 890-1016-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1016-1

Receipt

The samples were received on 7/27/2021 3:36 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

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.

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Client Sample ID: SS01

Lab Sample ID: 890-1016-1

Date Collected: 07/27/21 10:40

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/29/21 08:38	07/29/21 16:42	1
Toluene	<0.00199	U	0.00199	mg/Kg		07/29/21 08:38	07/29/21 16:42	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		07/29/21 08:38	07/29/21 16:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		07/29/21 08:38	07/29/21 16:42	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		07/29/21 08:38	07/29/21 16:42	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		07/29/21 08:38	07/29/21 16:42	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		07/29/21 08:38	07/29/21 16:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			07/29/21 08:38	07/29/21 16:42	1
1,4-Difluorobenzene (Surr)	113		70 - 130			07/29/21 08:38	07/29/21 16:42	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		07/30/21 10:16	07/31/21 06:49	1
Diesel Range Organics (Over C10-C28)	402		50.0	mg/Kg		07/30/21 10:16	07/31/21 06:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/30/21 10:16	07/31/21 06:49	1
Total TPH	402		50.0	mg/Kg		07/30/21 10:16	07/31/21 06:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			07/30/21 10:16	07/31/21 06:49	1
o-Terphenyl	105		70 - 130			07/30/21 10:16	07/31/21 06:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	326		5.00	mg/Kg			07/30/21 19:43	1

Client Sample ID: SS02

Lab Sample ID: 890-1016-2

Date Collected: 07/27/21 10:44

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/29/21 08:38	07/29/21 17:03	1
Toluene	0.00273		0.00199	mg/Kg		07/29/21 08:38	07/29/21 17:03	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		07/29/21 08:38	07/29/21 17:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		07/29/21 08:38	07/29/21 17:03	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		07/29/21 08:38	07/29/21 17:03	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		07/29/21 08:38	07/29/21 17:03	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		07/29/21 08:38	07/29/21 17:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			07/29/21 08:38	07/29/21 17:03	1
1,4-Difluorobenzene (Surr)	109		70 - 130			07/29/21 08:38	07/29/21 17:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Client Sample ID: SS02

Lab Sample ID: 890-1016-2

Date Collected: 07/27/21 10:44

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/30/21 10:16	07/31/21 07:53	1
Diesel Range Organics (Over C10-C28)	4190		49.9	mg/Kg		07/30/21 10:16	07/31/21 07:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		07/30/21 10:16	07/31/21 07:53	1
Total TPH	4190		49.9	mg/Kg		07/30/21 10:16	07/31/21 07:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	07/30/21 10:16	07/31/21 07:53	1
o-Terphenyl	100		70 - 130	07/30/21 10:16	07/31/21 07:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	394		4.95	mg/Kg			07/30/21 19:48	1

Client Sample ID: SS03

Lab Sample ID: 890-1016-3

Date Collected: 07/27/21 10:47

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/29/21 08:38	07/29/21 17:23	1
Toluene	0.00307		0.00201	mg/Kg		07/29/21 08:38	07/29/21 17:23	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		07/29/21 08:38	07/29/21 17:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		07/29/21 08:38	07/29/21 17:23	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		07/29/21 08:38	07/29/21 17:23	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		07/29/21 08:38	07/29/21 17:23	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		07/29/21 08:38	07/29/21 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	07/29/21 08:38	07/29/21 17:23	1
1,4-Difluorobenzene (Surr)	120		70 - 130	07/29/21 08:38	07/29/21 17:23	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		07/30/21 10:16	07/31/21 08:14	1
Diesel Range Organics (Over C10-C28)	6620		50.0	mg/Kg		07/30/21 10:16	07/31/21 08:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/30/21 10:16	07/31/21 08:14	1
Total TPH	6620		50.0	mg/Kg		07/30/21 10:16	07/31/21 08:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	07/30/21 10:16	07/31/21 08:14	1
o-Terphenyl	106		70 - 130	07/30/21 10:16	07/31/21 08:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.1		5.04	mg/Kg			07/30/21 19:53	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Client Sample ID: SS04

Lab Sample ID: 890-1016-4

Date Collected: 07/27/21 11:05

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/29/21 08:38	07/29/21 17:43	1
Toluene	<0.00202	U	0.00202	mg/Kg		07/29/21 08:38	07/29/21 17:43	1
Ethylbenzene	0.00262		0.00202	mg/Kg		07/29/21 08:38	07/29/21 17:43	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		07/29/21 08:38	07/29/21 17:43	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		07/29/21 08:38	07/29/21 17:43	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		07/29/21 08:38	07/29/21 17:43	1
Total BTEX	<0.00403	U	0.00403	mg/Kg		07/29/21 08:38	07/29/21 17:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			07/29/21 08:38	07/29/21 17:43	1
1,4-Difluorobenzene (Surr)	105		70 - 130			07/29/21 08:38	07/29/21 17:43	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		07/30/21 10:16	07/31/21 08:35	1
Diesel Range Organics (Over C10-C28)	1080		50.0	mg/Kg		07/30/21 10:16	07/31/21 08:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/30/21 10:16	07/31/21 08:35	1
Total TPH	1080		50.0	mg/Kg		07/30/21 10:16	07/31/21 08:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			07/30/21 10:16	07/31/21 08:35	1
o-Terphenyl	109		70 - 130			07/30/21 10:16	07/31/21 08:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.7		4.98	mg/Kg			07/30/21 19:59	1

Client Sample ID: SS05

Lab Sample ID: 890-1016-5

Date Collected: 07/27/21 11:08

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/29/21 08:38	07/29/21 18:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 18:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 18:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		07/29/21 08:38	07/29/21 18:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 18:04	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		07/29/21 08:38	07/29/21 18:04	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		07/29/21 08:38	07/29/21 18:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			07/29/21 08:38	07/29/21 18:04	1
1,4-Difluorobenzene (Surr)	106		70 - 130			07/29/21 08:38	07/29/21 18:04	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Client Sample ID: SS05

Lab Sample ID: 890-1016-5

Date Collected: 07/27/21 11:08

Matrix: Solid

Date Received: 07/27/21 15:36

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	<49.8	U	49.8	mg/Kg		07/30/21 10:16	07/31/21 08:56	1
Diesel Range Organics (Over C10-C28)	50.6		49.8	mg/Kg		07/30/21 10:16	07/31/21 08:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		07/30/21 10:16	07/31/21 08:56	1
Total TPH	50.6		49.8	mg/Kg		07/30/21 10:16	07/31/21 08:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	07/30/21 10:16	07/31/21 08:56	1
o-Terphenyl	102		70 - 130	07/30/21 10:16	07/31/21 08:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		5.02	mg/Kg			07/30/21 20:15	1

Client Sample ID: SS06

Lab Sample ID: 890-1016-6

Date Collected: 07/27/21 11:11

Matrix: Solid

Date Received: 07/27/21 15:36

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		07/29/21 08:38	07/29/21 18:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 18:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 18:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		07/29/21 08:38	07/29/21 18:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 18:24	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		07/29/21 08:38	07/29/21 18:24	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		07/29/21 08:38	07/29/21 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	07/29/21 08:38	07/29/21 18:24	1
1,4-Difluorobenzene (Surr)	88		70 - 130	07/29/21 08:38	07/29/21 18:24	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	<49.7	U	49.7	mg/Kg		07/30/21 10:16	07/31/21 09:17	1
Diesel Range Organics (Over C10-C28)	509		49.7	mg/Kg		07/30/21 10:16	07/31/21 09:17	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		07/30/21 10:16	07/31/21 09:17	1
Total TPH	509		49.7	mg/Kg		07/30/21 10:16	07/31/21 09:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/30/21 10:16	07/31/21 09:17	1
o-Terphenyl	106		70 - 130	07/30/21 10:16	07/31/21 09:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.7		5.01	mg/Kg			07/30/21 20:20	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1016-1	SS01	105	113
890-1016-2	SS02	125	109
890-1016-3	SS03	128	120
890-1016-4	SS04	105	105
890-1016-5	SS05	125	106
890-1016-6	SS06	110	88
LCS 880-5780/1-A	Lab Control Sample	111	104
LCSD 880-5780/2-A	Lab Control Sample Dup	115	104
MB 880-5780/5-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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1016-1	SS01	92	105
890-1016-1 MS	SS01	88	92
890-1016-1 MSD	SS01	92	95
890-1016-2	SS02	95	100
890-1016-3	SS03	115	106
890-1016-4	SS04	95	109
890-1016-5	SS05	88	102
890-1016-6	SS06	93	106
LCS 880-5867/2-A	Lab Control Sample	102	107
LCSD 880-5867/3-A	Lab Control Sample Dup	103	113
MB 880-5867/1-A	Method Blank	93	109

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5780/5-A
Matrix: Solid
Analysis Batch: 5781

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5780

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 11:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 11:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/29/21 08:38	07/29/21 11:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/29/21 08:38	07/29/21 11:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/29/21 08:38	07/29/21 11:55	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		07/29/21 08:38	07/29/21 11:55	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	87		70 - 130	07/29/21 08:38	07/29/21 11:55	1
1,4-Difluorobenzene (Surr)	96		70 - 130	07/29/21 08:38	07/29/21 11:55	1

Lab Sample ID: LCS 880-5780/1-A
Matrix: Solid
Analysis Batch: 5781

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5780

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.09452		mg/Kg		95	70 - 130
Toluene	0.100	0.09010		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09237		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1909		mg/Kg		95	70 - 130
o-Xylene	0.100	0.09473		mg/Kg		95	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-5780/2-A
Matrix: Solid
Analysis Batch: 5781

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5780

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.09537		mg/Kg		95	70 - 130	1	35
Toluene	0.100	0.09149		mg/Kg		91	70 - 130	2	35
Ethylbenzene	0.100	0.09539		mg/Kg		95	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1973		mg/Kg		99	70 - 130	3	35
o-Xylene	0.100	0.09802		mg/Kg		98	70 - 130	3	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-5867/1-A
Matrix: Solid
Analysis Batch: 5854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5867

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		07/30/21 10:16	07/31/21 05:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/30/21 10:16	07/31/21 05:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/30/21 10:16	07/31/21 05:47	1
Total TPH	<50.0	U	50.0	mg/Kg		07/30/21 10:16	07/31/21 05:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/30/21 10:16	07/31/21 05:47	1
o-Terphenyl	109		70 - 130	07/30/21 10:16	07/31/21 05:47	1

Lab Sample ID: LCS 880-5867/2-A
Matrix: Solid
Analysis Batch: 5854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5867

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	849.6		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1029		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-5867/3-A
Matrix: Solid
Analysis Batch: 5854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5867

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1025		mg/Kg		102	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	1083		mg/Kg		108	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-1016-1 MS
Matrix: Solid
Analysis Batch: 5854

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 5867

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	996	779.0		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	402		996	1362		mg/Kg		96	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1016-1 MS
Matrix: Solid
Analysis Batch: 5854

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 5867

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-1016-1 MSD
Matrix: Solid
Analysis Batch: 5854

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 5867

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	996	877.3		mg/Kg		88	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	402		996	1428		mg/Kg		103	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	95		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5810/1-A
Matrix: Solid
Analysis Batch: 5879

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			07/30/21 18:27	1

Lab Sample ID: LCS 880-5810/2-A
Matrix: Solid
Analysis Batch: 5879

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	243.7		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-5810/3-A
Matrix: Solid
Analysis Batch: 5879

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	243.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-1016-4 MS
Matrix: Solid
Analysis Batch: 5879

Client Sample ID: SS04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	62.7		249	295.4		mg/Kg		93	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1016-4 MSD
Matrix: Solid
Analysis Batch: 5879

Client Sample ID: SS04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	62.7		249	295.5		mg/Kg		93	90 - 110	0	20

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

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 5780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1016-1	SS01	Total/NA	Solid	5035	
890-1016-2	SS02	Total/NA	Solid	5035	
890-1016-3	SS03	Total/NA	Solid	5035	
890-1016-4	SS04	Total/NA	Solid	5035	
890-1016-5	SS05	Total/NA	Solid	5035	
890-1016-6	SS06	Total/NA	Solid	5035	
MB 880-5780/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5780/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5780/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1016-1	SS01	Total/NA	Solid	8021B	5780
890-1016-2	SS02	Total/NA	Solid	8021B	5780
890-1016-3	SS03	Total/NA	Solid	8021B	5780
890-1016-4	SS04	Total/NA	Solid	8021B	5780
890-1016-5	SS05	Total/NA	Solid	8021B	5780
890-1016-6	SS06	Total/NA	Solid	8021B	5780
MB 880-5780/5-A	Method Blank	Total/NA	Solid	8021B	5780
LCS 880-5780/1-A	Lab Control Sample	Total/NA	Solid	8021B	5780
LCSD 880-5780/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5780

GC Semi VOA

Analysis Batch: 5854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1016-1	SS01	Total/NA	Solid	8015B NM	5867
890-1016-2	SS02	Total/NA	Solid	8015B NM	5867
890-1016-3	SS03	Total/NA	Solid	8015B NM	5867
890-1016-4	SS04	Total/NA	Solid	8015B NM	5867
890-1016-5	SS05	Total/NA	Solid	8015B NM	5867
890-1016-6	SS06	Total/NA	Solid	8015B NM	5867
MB 880-5867/1-A	Method Blank	Total/NA	Solid	8015B NM	5867
LCS 880-5867/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5867
LCSD 880-5867/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5867
890-1016-1 MS	SS01	Total/NA	Solid	8015B NM	5867
890-1016-1 MSD	SS01	Total/NA	Solid	8015B NM	5867

Prep Batch: 5867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1016-1	SS01	Total/NA	Solid	8015NM Prep	
890-1016-2	SS02	Total/NA	Solid	8015NM Prep	
890-1016-3	SS03	Total/NA	Solid	8015NM Prep	
890-1016-4	SS04	Total/NA	Solid	8015NM Prep	
890-1016-5	SS05	Total/NA	Solid	8015NM Prep	
890-1016-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-5867/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5867/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5867/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1016-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-1016-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
 SDG: 31403236.022.0129

HPLC/IC

Leach Batch: 5810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1016-1	SS01	Soluble	Solid	DI Leach	
890-1016-2	SS02	Soluble	Solid	DI Leach	
890-1016-3	SS03	Soluble	Solid	DI Leach	
890-1016-4	SS04	Soluble	Solid	DI Leach	
890-1016-5	SS05	Soluble	Solid	DI Leach	
890-1016-6	SS06	Soluble	Solid	DI Leach	
MB 880-5810/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5810/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5810/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1016-4 MS	SS04	Soluble	Solid	DI Leach	
890-1016-4 MSD	SS04	Soluble	Solid	DI Leach	

Analysis Batch: 5879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1016-1	SS01	Soluble	Solid	300.0	5810
890-1016-2	SS02	Soluble	Solid	300.0	5810
890-1016-3	SS03	Soluble	Solid	300.0	5810
890-1016-4	SS04	Soluble	Solid	300.0	5810
890-1016-5	SS05	Soluble	Solid	300.0	5810
890-1016-6	SS06	Soluble	Solid	300.0	5810
MB 880-5810/1-A	Method Blank	Soluble	Solid	300.0	5810
LCS 880-5810/2-A	Lab Control Sample	Soluble	Solid	300.0	5810
LCSD 880-5810/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5810
890-1016-4 MS	SS04	Soluble	Solid	300.0	5810
890-1016-4 MSD	SS04	Soluble	Solid	300.0	5810

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Client Sample ID: SS01

Lab Sample ID: 890-1016-1

Date Collected: 07/27/21 10:40

Matrix: Solid

Date Received: 07/27/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5780	07/29/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5781	07/29/21 16:42	KL	XEN MID
Total/NA	Prep	8015NM Prep			5867	07/30/21 10:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5854	07/31/21 06:49	AJ	XEN MID
Soluble	Leach	DI Leach			5810	07/29/21 12:57	CH	XEN MID
Soluble	Analysis	300.0		1	5879	07/30/21 19:43	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1016-2

Date Collected: 07/27/21 10:44

Matrix: Solid

Date Received: 07/27/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5780	07/29/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5781	07/29/21 17:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			5867	07/30/21 10:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5854	07/31/21 07:53	AJ	XEN MID
Soluble	Leach	DI Leach			5810	07/29/21 12:57	CH	XEN MID
Soluble	Analysis	300.0		1	5879	07/30/21 19:48	CH	XEN MID

Client Sample ID: SS03

Lab Sample ID: 890-1016-3

Date Collected: 07/27/21 10:47

Matrix: Solid

Date Received: 07/27/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5780	07/29/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5781	07/29/21 17:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			5867	07/30/21 10:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5854	07/31/21 08:14	AJ	XEN MID
Soluble	Leach	DI Leach			5810	07/29/21 12:57	CH	XEN MID
Soluble	Analysis	300.0		1	5879	07/30/21 19:53	CH	XEN MID

Client Sample ID: SS04

Lab Sample ID: 890-1016-4

Date Collected: 07/27/21 11:05

Matrix: Solid

Date Received: 07/27/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5780	07/29/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5781	07/29/21 17:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			5867	07/30/21 10:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5854	07/31/21 08:35	AJ	XEN MID
Soluble	Leach	DI Leach			5810	07/29/21 12:57	CH	XEN MID
Soluble	Analysis	300.0		1	5879	07/30/21 19:59	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Client Sample ID: SS05

Lab Sample ID: 890-1016-5

Date Collected: 07/27/21 11:08

Matrix: Solid

Date Received: 07/27/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5780	07/29/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5781	07/29/21 18:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			5867	07/30/21 10:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5854	07/31/21 08:56	AJ	XEN MID
Soluble	Leach	DI Leach			5810	07/29/21 12:57	CH	XEN MID
Soluble	Analysis	300.0		1	5879	07/30/21 20:15	CH	XEN MID

Client Sample ID: SS06

Lab Sample ID: 890-1016-6

Date Collected: 07/27/21 11:11

Matrix: Solid

Date Received: 07/27/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5780	07/29/21 08:38	KL	XEN MID
Total/NA	Analysis	8021B		1	5781	07/29/21 18:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			5867	07/30/21 10:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5854	07/31/21 09:17	AJ	XEN MID
Soluble	Leach	DI Leach			5810	07/29/21 12:57	CH	XEN MID
Soluble	Analysis	300.0		1	5879	07/30/21 20:20	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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



Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1016-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1016-1	SS01	Solid	07/27/21 10:40	07/27/21 15:36	- 0.5
890-1016-2	SS02	Solid	07/27/21 10:44	07/27/21 15:36	- 0.5
890-1016-3	SS03	Solid	07/27/21 10:47	07/27/21 15:36	- 0.5
890-1016-4	SS04	Solid	07/27/21 11:05	07/27/21 15:36	- 0.5
890-1016-5	SS05	Solid	07/27/21 11:08	07/27/21 15:36	- 0.5
890-1016-6	SS06	Solid	07/27/21 11:11	07/27/21 15:36	- 0.5

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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
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Chain of Custody

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carsbad, NM 88220
Phone:	817-683-2503	Email:	payton.benner@wsp.com, kalei.jennings@wsp.com

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

Project Name:	PLU 25 BD 901H	Turn Around	<input checked="" type="checkbox"/>
Project Number:	31403236.022.0129	Routine	<input type="checkbox"/>
P.O. Number:		Rush:	
Sampler's Name:	Payton Benner	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	16 / 1.4	Thermometer ID				
Received Intact:	Yes	No	Correction Factor: F-11M-007			
Cooler Custody Seals:	Yes	No	Total Containers: -0.2			
Sample Custody Seals:	Yes	No	N/A			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
SS01	S	7/27/2021	1040	0.5'	1					
SS02	S	7/27/201	1044	0.5'	1					
SS03	S	7/27/202	1047	0.5'	1					
SS04	S	7/27/203	1105	0.5'	1					
SS05	S	7/27/204	1108	0.5'	1					
SS06	S	7/27/205	1111	0.5'	1					



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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/27/21 5:36			

CC-166621001 INCIDENT NUMBER: NAPP2110540260

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)

Client Contact: Eurofins Xenco
Shipping/Receiving: Eurofins Xenco

Address: 1211 W Florida Ave
City: Midland
State zip: TX 79701
Phone: 432-704-5440(Tel)
Email:

Lab PM: Kramer Jessica
E-Mail: jessica.kramer@eurofinsnet.com
Accreditations Required (See note): NELAP - Louisiana NELAP - Texas

Carrier Tracking No(s):
State of Origin: New Mexico

COC No: 890-322-1
Page: Page 1 of 1
Job #: 890-1016-1

Due Date Requested: 8/3/2021
TAT Requested (days):

PO #: WO #:

Project Name: PLU 25 BD 901H
Project #: 89000004
SSOW#:

Site:

Sample Identification - Client ID (Lab ID)

Sample ID	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	MATRIX (Water-Soluble, Organic, BT-Issue, A=Al)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
SS01 (890-1016-1)	7/27/21	10 40	Mountain	Solid	X	X	8015MOD_NM/8015NM_S_Prep Full TPH	1	
SS02 (890-1016-2)	7/27/21	10 44	Mountain	Solid	X	X	300_ORGFM_28D/DI_LEACH Chloride	1	
SS03 (890-1016-3)	7/27/21	10 47	Mountain	Solid	X	X	8021B/5035FP_Calc BTEX	1	
SS04 (890-1016-4)	7/27/21	11 05	Mountain	Solid	X	X		1	
SS05 (890-1016-5)	7/27/21	11 08	Mountain	Solid	X	X		1	
SS06 (890-1016-6)	7/27/21	11 11	Mountain	Solid	X	X		1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC

Possible Hazard Identification
Unconfirmed
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2
Special Instructions/QC Requirements

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____
Relinquished by: *Coe Cup 7-28-21* Date/Time: _____ Company: _____
Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____ Custody Seal No: _____
Cooler Temperature(s) °C and Other Remarks

Method of Shipment: _____ Date/Time: _____ Company: _____
Date/Time: _____ Company: _____
Date/Time: _____ Company: _____

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1016-1

SDG Number: 31403236.022.0129

Login Number: 1016

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1016-1

SDG Number: 31403236.022.0129

Login Number: 1016

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 07/29/21 10:35 AM

Creator: Copeland, Tatiana

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

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1251-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/17/2021 9:18:32 AM

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

LINKS

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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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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1251-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Job ID: 890-1251-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1251-1

Receipt

The samples were received on 9/13/2021 2:28 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 12.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7902 and analytical batch 880-7936 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: SS08 (890-1251-2), SS12 (890-1251-6) and (890-1251-A-1-C 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.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS11 (890-1251-5), SS13 (890-1251-7) and (MB 880-7950/1-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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS07

Lab Sample ID: 890-1251-1

Date Collected: 09/13/21 10:55

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 17:36	1
Toluene	<0.00198	U F1	0.00198	mg/Kg		09/15/21 11:30	09/15/21 17:36	1
Ethylbenzene	<0.00198	U F1	0.00198	mg/Kg		09/15/21 11:30	09/15/21 17:36	1
m-Xylene & p-Xylene	<0.00397	U F1	0.00397	mg/Kg		09/15/21 11:30	09/15/21 17:36	1
o-Xylene	<0.00198	U F1	0.00198	mg/Kg		09/15/21 11:30	09/15/21 17:36	1
Xylenes, Total	<0.00397	U F1	0.00397	mg/Kg		09/15/21 11:30	09/15/21 17:36	1
Total BTEX	<0.00397	U F1 F2	0.00397	mg/Kg		09/15/21 11:30	09/15/21 17:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			09/15/21 11:30	09/15/21 17:36	1
1,4-Difluorobenzene (Surr)	76		70 - 130			09/15/21 11:30	09/15/21 17:36	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		09/15/21 15:24	09/15/21 23:30	1
Diesel Range Organics (Over C10-C28)	71.8		50.0	mg/Kg		09/15/21 15:24	09/15/21 23:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/15/21 23:30	1
Total TPH	71.8		50.0	mg/Kg		09/15/21 15:24	09/15/21 23:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			09/15/21 15:24	09/15/21 23:30	1
o-Terphenyl	125		70 - 130			09/15/21 15:24	09/15/21 23:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	159		4.97	mg/Kg			09/17/21 01:34	1

Client Sample ID: SS08

Lab Sample ID: 890-1251-2

Date Collected: 09/13/21 10:58

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 17:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:30	09/15/21 17:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:30	09/15/21 17:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 17:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:30	09/15/21 17:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 17:57	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130			09/15/21 11:30	09/15/21 17:57	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130			09/15/21 11:30	09/15/21 17:57	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS08

Lab Sample ID: 890-1251-2

Date Collected: 09/13/21 10:58

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 15:24	09/15/21 23:51	1
Diesel Range Organics (Over C10-C28)	60.5		49.9	mg/Kg		09/15/21 15:24	09/15/21 23:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/15/21 23:51	1
Total TPH	60.5		49.9	mg/Kg		09/15/21 15:24	09/15/21 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	09/15/21 15:24	09/15/21 23:51	1
o-Terphenyl	132	S1+	70 - 130	09/15/21 15:24	09/15/21 23:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.7		4.99	mg/Kg			09/17/21 01:40	1

Client Sample ID: SS09

Lab Sample ID: 890-1251-3

Date Collected: 09/13/21 11:01

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 18:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:30	09/15/21 18:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:30	09/15/21 18:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 18:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:30	09/15/21 18:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 18:17	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	09/15/21 11:30	09/15/21 18:17	1
1,4-Difluorobenzene (Surr)	77		70 - 130	09/15/21 11:30	09/15/21 18:17	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		09/15/21 15:24	09/16/21 00:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 00:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 00:12	1
Total TPH	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 00:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/15/21 15:24	09/16/21 00:12	1
o-Terphenyl	110		70 - 130	09/15/21 15:24	09/16/21 00:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.02		5.00	mg/Kg			09/17/21 01:56	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS10

Lab Sample ID: 890-1251-4

Date Collected: 09/13/21 11:04

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 18:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/15/21 11:30	09/15/21 18:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/15/21 11:30	09/15/21 18:38	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/15/21 11:30	09/15/21 18:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			09/15/21 11:30	09/15/21 18:38	1
1,4-Difluorobenzene (Surr)	78		70 - 130			09/15/21 11:30	09/15/21 18:38	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	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 00:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 00:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 00:33	1
Total TPH	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 00:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/15/21 15:24	09/16/21 00:33	1
o-Terphenyl	109		70 - 130			09/15/21 15:24	09/16/21 00:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.83		5.00	mg/Kg			09/17/21 02:02	1

Client Sample ID: SS11

Lab Sample ID: 890-1251-5

Date Collected: 09/13/21 11:08

Matrix: Solid

Date Received: 09/13/21 14:28

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00308		0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/15/21 11:30	09/15/21 18:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			09/15/21 11:30	09/15/21 18:59	1
1,4-Difluorobenzene (Surr)	98		70 - 130			09/15/21 11:30	09/15/21 18:59	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS11

Lab Sample ID: 890-1251-5

Date Collected: 09/13/21 11:08

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 15:24	09/16/21 00:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/16/21 00:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/16/21 00:54	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/16/21 00:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130	09/15/21 15:24	09/16/21 00:54	1
o-Terphenyl	131	S1+	70 - 130	09/15/21 15:24	09/16/21 00:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.20		4.98	mg/Kg			09/17/21 02:08	1

Client Sample ID: SS12

Lab Sample ID: 890-1251-6

Date Collected: 09/13/21 11:10

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 19:19	1
Toluene	0.00257		0.00199	mg/Kg		09/15/21 11:30	09/15/21 19:19	1
Ethylbenzene	0.00226		0.00199	mg/Kg		09/15/21 11:30	09/15/21 19:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 19:19	1
o-Xylene	0.00264		0.00199	mg/Kg		09/15/21 11:30	09/15/21 19:19	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/15/21 11:30	09/15/21 19:19	1
Total BTEX	0.00747		0.00398	mg/Kg		09/15/21 11:30	09/15/21 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	148	S1+	70 - 130	09/15/21 11:30	09/15/21 19:19	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/15/21 11:30	09/15/21 19:19	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		09/15/21 15:24	09/16/21 01:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 01:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 01:15	1
Total TPH	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 01:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	09/15/21 15:24	09/16/21 01:15	1
o-Terphenyl	127		70 - 130	09/15/21 15:24	09/16/21 01:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.53		4.95	mg/Kg			09/17/21 02:13	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS13

Lab Sample ID: 890-1251-7

Date Collected: 09/13/21 11:13

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 19:40	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/15/21 11:30	09/15/21 19:40	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/15/21 11:30	09/15/21 19:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/15/21 11:30	09/15/21 19:40	1
o-Xylene	0.00202		0.00201	mg/Kg		09/15/21 11:30	09/15/21 19:40	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/15/21 11:30	09/15/21 19:40	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		09/15/21 11:30	09/15/21 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			09/15/21 11:30	09/15/21 19:40	1
1,4-Difluorobenzene (Surr)	90		70 - 130			09/15/21 11:30	09/15/21 19:40	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		09/15/21 15:24	09/16/21 01:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 01:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 01:36	1
Total TPH	<49.9	U	49.9	mg/Kg		09/15/21 15:24	09/16/21 01:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130			09/15/21 15:24	09/16/21 01:36	1
o-Terphenyl	132	S1+	70 - 130			09/15/21 15:24	09/16/21 01:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.7		5.04	mg/Kg			09/17/21 02:19	1

Client Sample ID: SS14

Lab Sample ID: 890-1251-8

Date Collected: 09/13/21 11:15

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 20:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 20:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 20:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/15/21 11:30	09/15/21 20:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 20:01	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/15/21 11:30	09/15/21 20:01	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/15/21 11:30	09/15/21 20:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			09/15/21 11:30	09/15/21 20:01	1
1,4-Difluorobenzene (Surr)	86		70 - 130			09/15/21 11:30	09/15/21 20:01	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS14

Lab Sample ID: 890-1251-8

Date Collected: 09/13/21 11:15

Matrix: Solid

Date Received: 09/13/21 14:28

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	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 01:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 01:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 01:57	1
Total TPH	<49.8	U	49.8	mg/Kg		09/15/21 15:24	09/16/21 01:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/15/21 15:24	09/16/21 01:57	1
o-Terphenyl	127		70 - 130	09/15/21 15:24	09/16/21 01:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.48		4.96	mg/Kg			09/17/21 02:24	1

Client Sample ID: SS15

Lab Sample ID: 890-1251-9

Date Collected: 09/13/21 11:18

Matrix: Solid

Date Received: 09/13/21 14:28

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		09/15/21 11:30	09/15/21 20:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 20:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 20:21	1
m-Xylene & p-Xylene	0.00466		0.00401	mg/Kg		09/15/21 11:30	09/15/21 20:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 20:21	1
Xylenes, Total	0.00466		0.00401	mg/Kg		09/15/21 11:30	09/15/21 20:21	1
Total BTEX	0.00466		0.00401	mg/Kg		09/15/21 11:30	09/15/21 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/15/21 11:30	09/15/21 20:21	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/15/21 11:30	09/15/21 20:21	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		09/15/21 15:24	09/16/21 02:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/16/21 02:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/16/21 02:18	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/16/21 02:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/15/21 15:24	09/16/21 02:18	1
o-Terphenyl	116		70 - 130	09/15/21 15:24	09/16/21 02:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.10		5.00	mg/Kg			09/17/21 02:30	1

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Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
 SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1251-1	SS07	93	76
890-1251-1 MS	SS07	103	86
890-1251-1 MSD	SS07	129	136 S1+
890-1251-2	SS08	136 S1+	68 S1-
890-1251-3	SS09	87	77
890-1251-4	SS10	95	78
890-1251-5	SS11	119	98
890-1251-6	SS12	148 S1+	95
890-1251-7	SS13	109	90
890-1251-8	SS14	106	86
890-1251-9	SS15	113	83
LCS 880-7902/1-A	Lab Control Sample	93	94
LCSD 880-7902/2-A	Lab Control Sample Dup	109	85
MB 880-7902/5-A	Method Blank	126	79

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-6143-A-20-E MS	Matrix Spike	120	117
880-6143-A-20-F MSD	Matrix Spike Duplicate	124	119
890-1251-1	SS07	119	125
890-1251-2	SS08	125	132 S1+
890-1251-3	SS09	103	110
890-1251-4	SS10	102	109
890-1251-5	SS11	123	131 S1+
890-1251-6	SS12	118	127
890-1251-7	SS13	126	132 S1+
890-1251-8	SS14	116	127
890-1251-9	SS15	109	116
LCS 880-7950/2-A	Lab Control Sample	122	121
LCSD 880-7950/3-A	Lab Control Sample Dup	120	117
MB 880-7950/1-A	Method Blank	127	143 S1+

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7902/5-A
Matrix: Solid
Analysis Batch: 7936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7902

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 17:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 17:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 17:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/15/21 11:30	09/15/21 17:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:30	09/15/21 17:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/15/21 11:30	09/15/21 17:14	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/15/21 11:30	09/15/21 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	09/15/21 11:30	09/15/21 17:14	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/15/21 11:30	09/15/21 17:14	1

Lab Sample ID: LCS 880-7902/1-A
Matrix: Solid
Analysis Batch: 7936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09603		mg/Kg		96	70 - 130
Toluene	0.100	0.09131		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.08740		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1638		mg/Kg		82	70 - 130
o-Xylene	0.100	0.08069		mg/Kg		81	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-7902/2-A
Matrix: Solid
Analysis Batch: 7936

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7902

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09621		mg/Kg		96	70 - 130	0	35
Toluene	0.100	0.1032		mg/Kg		103	70 - 130	12	35
Ethylbenzene	0.100	0.1117		mg/Kg		112	70 - 130	24	35
m-Xylene & p-Xylene	0.200	0.2030		mg/Kg		102	70 - 130	21	35
o-Xylene	0.100	0.09017		mg/Kg		90	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 890-1251-1 MS
Matrix: Solid
Analysis Batch: 7936

Client Sample ID: SS07
Prep Type: Total/NA
Prep Batch: 7902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.100	0.05838	F1	mg/Kg		58	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1251-1 MS
Matrix: Solid
Analysis Batch: 7936

Client Sample ID: SS07
Prep Type: Total/NA
Prep Batch: 7902

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Toluene	<0.00198	U F1	0.100	0.06726	F1	mg/Kg		67	70 - 130
Ethylbenzene	<0.00198	U F1	0.100	0.06569	F1	mg/Kg		66	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.1297	F1	mg/Kg		65	70 - 130
o-Xylene	<0.00198	U F1	0.100	0.06071	F1	mg/Kg		61	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		70 - 130						
1,4-Difluorobenzene (Surr)	86		70 - 130						

Lab Sample ID: 890-1251-1 MSD
Matrix: Solid
Analysis Batch: 7936

Client Sample ID: SS07
Prep Type: Total/NA
Prep Batch: 7902

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier		Result	Qualifier					
Benzene	<0.00198	U F1	0.0996	0.06949		mg/Kg		70	70 - 130	17 35
Toluene	<0.00198	U F1	0.0996	0.09316		mg/Kg		94	70 - 130	32 35
Ethylbenzene	<0.00198	U F1	0.0996	0.08910		mg/Kg		89	70 - 130	30 35
m-Xylene & p-Xylene	<0.00397	U F1	0.199	0.1547		mg/Kg		78	70 - 130	18 35
o-Xylene	<0.00198	U F1	0.0996	0.07571		mg/Kg		76	70 - 130	22 35
MSD MSD										
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	129		70 - 130							
1,4-Difluorobenzene (Surr)	136	S1+	70 - 130							

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

Lab Sample ID: MB 880-7950/1-A
Matrix: Solid
Analysis Batch: 7910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7950

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/15/21 21:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/15/21 21:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/15/21 21:22	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 15:24	09/15/21 21:22	1
MB MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	127		70 - 130	09/15/21 15:24	09/15/21 21:22	1		
o-Terphenyl	143	S1+	70 - 130	09/15/21 15:24	09/15/21 21:22	1		

Lab Sample ID: LCS 880-7950/2-A
Matrix: Solid
Analysis Batch: 7910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7950

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	979.3		mg/Kg		98	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-7950/2-A
Matrix: Solid
Analysis Batch: 7910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	1160		mg/Kg		116	70 - 130
Surrogate		LCS %Recovery	LCS Qualifier				Limits
1-Chlorooctane		122					70 - 130
o-Terphenyl		121					70 - 130

Lab Sample ID: LCSD 880-7950/3-A
Matrix: Solid
Analysis Batch: 7910

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7950

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	963.1		mg/Kg		96	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1119		mg/Kg		112	70 - 130	4	20
Surrogate		LCSD %Recovery	LCSD Qualifier				Limits		
1-Chlorooctane		120					70 - 130		
o-Terphenyl		117					70 - 130		

Lab Sample ID: 880-6143-A-20-E MS
Matrix: Solid
Analysis Batch: 7910

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7950

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	997	986.0		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1187		mg/Kg		117	70 - 130
Surrogate				MS %Recovery	MS Qualifier				Limits
1-Chlorooctane				120					70 - 130
o-Terphenyl				117					70 - 130

Lab Sample ID: 880-6143-A-20-F MSD
Matrix: Solid
Analysis Batch: 7910

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7950

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	999	982.5		mg/Kg		98	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1232		mg/Kg		121	70 - 130	4	20
Surrogate				MSD %Recovery	MSD Qualifier				Limits		
1-Chlorooctane				124					70 - 130		
o-Terphenyl				119					70 - 130		

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7867/1-A
Matrix: Solid
Analysis Batch: 7982

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			09/16/21 23:42	1

Lab Sample ID: LCS 880-7867/2-A
Matrix: Solid
Analysis Batch: 7982

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	251.8		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-7867/3-A
Matrix: Solid
Analysis Batch: 7982

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	252.7		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-1250-A-10-B MS
Matrix: Solid
Analysis Batch: 7982

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	275		252	532.1		mg/Kg		102	90 - 110

Lab Sample ID: 890-1250-A-10-C MSD
Matrix: Solid
Analysis Batch: 7982

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	275		252	532.4		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 7902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1251-1	SS07	Total/NA	Solid	5035	
890-1251-2	SS08	Total/NA	Solid	5035	
890-1251-3	SS09	Total/NA	Solid	5035	
890-1251-4	SS10	Total/NA	Solid	5035	
890-1251-5	SS11	Total/NA	Solid	5035	
890-1251-6	SS12	Total/NA	Solid	5035	
890-1251-7	SS13	Total/NA	Solid	5035	
890-1251-8	SS14	Total/NA	Solid	5035	
890-1251-9	SS15	Total/NA	Solid	5035	
MB 880-7902/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7902/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7902/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1251-1 MS	SS07	Total/NA	Solid	5035	
890-1251-1 MSD	SS07	Total/NA	Solid	5035	

Analysis Batch: 7936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1251-1	SS07	Total/NA	Solid	8021B	7902
890-1251-2	SS08	Total/NA	Solid	8021B	7902
890-1251-3	SS09	Total/NA	Solid	8021B	7902
890-1251-4	SS10	Total/NA	Solid	8021B	7902
890-1251-5	SS11	Total/NA	Solid	8021B	7902
890-1251-6	SS12	Total/NA	Solid	8021B	7902
890-1251-7	SS13	Total/NA	Solid	8021B	7902
890-1251-8	SS14	Total/NA	Solid	8021B	7902
890-1251-9	SS15	Total/NA	Solid	8021B	7902
MB 880-7902/5-A	Method Blank	Total/NA	Solid	8021B	7902
LCS 880-7902/1-A	Lab Control Sample	Total/NA	Solid	8021B	7902
LCSD 880-7902/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7902
890-1251-1 MS	SS07	Total/NA	Solid	8021B	7902
890-1251-1 MSD	SS07	Total/NA	Solid	8021B	7902

GC Semi VOA

Analysis Batch: 7910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1251-1	SS07	Total/NA	Solid	8015B NM	7950
890-1251-2	SS08	Total/NA	Solid	8015B NM	7950
890-1251-3	SS09	Total/NA	Solid	8015B NM	7950
890-1251-4	SS10	Total/NA	Solid	8015B NM	7950
890-1251-5	SS11	Total/NA	Solid	8015B NM	7950
890-1251-6	SS12	Total/NA	Solid	8015B NM	7950
890-1251-7	SS13	Total/NA	Solid	8015B NM	7950
890-1251-8	SS14	Total/NA	Solid	8015B NM	7950
890-1251-9	SS15	Total/NA	Solid	8015B NM	7950
MB 880-7950/1-A	Method Blank	Total/NA	Solid	8015B NM	7950
LCS 880-7950/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7950
LCSD 880-7950/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7950
880-6143-A-20-E MS	Matrix Spike	Total/NA	Solid	8015B NM	7950
880-6143-A-20-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7950

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

GC Semi VOA

Prep Batch: 7950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1251-1	SS07	Total/NA	Solid	8015NM Prep	
890-1251-2	SS08	Total/NA	Solid	8015NM Prep	
890-1251-3	SS09	Total/NA	Solid	8015NM Prep	
890-1251-4	SS10	Total/NA	Solid	8015NM Prep	
890-1251-5	SS11	Total/NA	Solid	8015NM Prep	
890-1251-6	SS12	Total/NA	Solid	8015NM Prep	
890-1251-7	SS13	Total/NA	Solid	8015NM Prep	
890-1251-8	SS14	Total/NA	Solid	8015NM Prep	
890-1251-9	SS15	Total/NA	Solid	8015NM Prep	
MB 880-7950/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7950/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7950/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6143-A-20-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6143-A-20-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1251-1	SS07	Soluble	Solid	DI Leach	
890-1251-2	SS08	Soluble	Solid	DI Leach	
890-1251-3	SS09	Soluble	Solid	DI Leach	
890-1251-4	SS10	Soluble	Solid	DI Leach	
890-1251-5	SS11	Soluble	Solid	DI Leach	
890-1251-6	SS12	Soluble	Solid	DI Leach	
890-1251-7	SS13	Soluble	Solid	DI Leach	
890-1251-8	SS14	Soluble	Solid	DI Leach	
890-1251-9	SS15	Soluble	Solid	DI Leach	
MB 880-7867/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7867/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7867/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1250-A-10-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1250-A-10-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 7982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1251-1	SS07	Soluble	Solid	300.0	7867
890-1251-2	SS08	Soluble	Solid	300.0	7867
890-1251-3	SS09	Soluble	Solid	300.0	7867
890-1251-4	SS10	Soluble	Solid	300.0	7867
890-1251-5	SS11	Soluble	Solid	300.0	7867
890-1251-6	SS12	Soluble	Solid	300.0	7867
890-1251-7	SS13	Soluble	Solid	300.0	7867
890-1251-8	SS14	Soluble	Solid	300.0	7867
890-1251-9	SS15	Soluble	Solid	300.0	7867
MB 880-7867/1-A	Method Blank	Soluble	Solid	300.0	7867
LCS 880-7867/2-A	Lab Control Sample	Soluble	Solid	300.0	7867
LCSD 880-7867/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7867
890-1250-A-10-B MS	Matrix Spike	Soluble	Solid	300.0	7867
890-1250-A-10-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7867

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS07

Lab Sample ID: 890-1251-1

Date Collected: 09/13/21 10:55

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 17:36	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/15/21 23:30	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 01:34	CH	XEN MID

Client Sample ID: SS08

Lab Sample ID: 890-1251-2

Date Collected: 09/13/21 10:58

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 17:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/15/21 23:51	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 01:40	CH	XEN MID

Client Sample ID: SS09

Lab Sample ID: 890-1251-3

Date Collected: 09/13/21 11:01

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 18:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 00:12	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 01:56	CH	XEN MID

Client Sample ID: SS10

Lab Sample ID: 890-1251-4

Date Collected: 09/13/21 11:04

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 18:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 00:33	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 02:02	CH	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS11

Lab Sample ID: 890-1251-5

Date Collected: 09/13/21 11:08

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 18:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 00:54	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 02:08	CH	XEN MID

Client Sample ID: SS12

Lab Sample ID: 890-1251-6

Date Collected: 09/13/21 11:10

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 19:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 01:15	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 02:13	CH	XEN MID

Client Sample ID: SS13

Lab Sample ID: 890-1251-7

Date Collected: 09/13/21 11:13

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 19:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 01:36	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 02:19	CH	XEN MID

Client Sample ID: SS14

Lab Sample ID: 890-1251-8

Date Collected: 09/13/21 11:15

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 20:01	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 01:57	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 02:24	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Client Sample ID: SS15

Lab Sample ID: 890-1251-9

Date Collected: 09/13/21 11:18

Matrix: Solid

Date Received: 09/13/21 14:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7902	09/15/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	7936	09/15/21 20:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			7950	09/15/21 15:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7910	09/16/21 02:18	AM	XEN MID
Soluble	Leach	DI Leach			7867	09/14/21 09:37	CH	XEN MID
Soluble	Analysis	300.0		1	7982	09/17/21 02:30	CH	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1251-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1251-1	SS07	Solid	09/13/21 10:55	09/13/21 14:28	0.5
890-1251-2	SS08	Solid	09/13/21 10:58	09/13/21 14:28	0.5
890-1251-3	SS09	Solid	09/13/21 11:01	09/13/21 14:28	0.5
890-1251-4	SS10	Solid	09/13/21 11:04	09/13/21 14:28	0.5
890-1251-5	SS11	Solid	09/13/21 11:08	09/13/21 14:28	0.5
890-1251-6	SS12	Solid	09/13/21 11:10	09/13/21 14:28	0.5
890-1251-7	SS13	Solid	09/13/21 11:13	09/13/21 14:28	0.5
890-1251-8	SS14	Solid	09/13/21 11:15	09/13/21 14:28	0.5
890-1251-9	SS15	Solid	09/13/21 11:18	09/13/21 14:28	0.5

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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)

Chain of Custody

Work Order No: _____

Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mernod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	Jeremy.Hill@wsp.com Dan.Moir@wsp.com

Program: UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RC	<input type="checkbox"/> \$perfund
State of Project:				
Reporting Level:	Level II <input type="checkbox"/>	Level III <input type="checkbox"/>	UST <input type="checkbox"/>	RP <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/>	ADAPT <input type="checkbox"/>	Other:	

Project Name:	PLU 25 RD 901H	Turn Around	
Project Number:	31403336 000-0109	Routine	<input checked="" type="checkbox"/>
P.O. Number:	5011 dts 6/1/11	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Temperature (°C):	13.0/12.8	Thermometer ID		
Received Inact:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Correction Factor:	-0.2	
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Total Containers:		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Sample Comments
5507	S	9/13/11	1055	0.5'	1	X	X	X	discrete
5508			1058						
5509			1101						
5510			1104						
5511			1108						
5512			1110						
5513			1113						
5514			1115						
5515			1118						

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

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
<i>[Signature]</i>	<i>[Signature]</i>	9.13.21 1428			



Eurofins Xenco, Carlsbad

Chain of Custody Record



Environment Testing America

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

Client Information (Sub Contract Lab)

Client Contact: Shipping/Receiving
Company: Eurofins Xenco
Address: 1211 W Florida Ave
City: Midland
State Zip: TX 79701
Phone: 432-704-5440(Tel)
Email: PLU 25 BD 901H
Site

Sample: Kramer Jessica
Phone: Jessica.kramer@eurofins.com
E-Mail: Jessica.kramer@eurofins.com
Accreditations Required (See note): NELAP - Louisiana NELAP - Texas

Carrier Tracking No(s):
State of Origin: New Mexico

COC No: 890-405-1
Page: Page 1 of 1
Job #: 890-1251-1

Due Date Requested: 9/17/2021
TAT Requested (days):

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=grad)	Matrix (W=water, S=solid, O=overstabil, B=BTX, 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/6035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
SS07 (890-1251-1)	9/13/21	10 55	Mountain	Solid	X	X	X	X	X	1	
SS08 (890-1251-2)	9/13/21	10 58	Mountain	Solid	X	X	X	X	X	1	
SS09 (890-1251-3)	9/13/21	11 01	Mountain	Solid	X	X	X	X	X	1	
SS10 (890-1251-4)	9/13/21	11 04	Mountain	Solid	X	X	X	X	X	1	
SS11 (890-1251-5)	9/13/21	11 08	Mountain	Solid	X	X	X	X	X	1	
SS12 (890-1251-6)	9/13/21	11 10	Mountain	Solid	X	X	X	X	X	1	
SS13 (890-1251-7)	9/13/21	11 13	Mountain	Solid	X	X	X	X	X	1	
SS14 (890-1251-8)	9/13/21	11 15	Mountain	Solid	X	X	X	X	X	1	
SS15 (890-1251-9)	9/13/21	11 18	Mountain	Solid	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & 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 analysts/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC Laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2
Special Instructions/QC Requirements

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by	Date	Time	Method of Shipment:
Relinquished by: <i>Cue Corp</i>	9.14.21		
Relinquished by:	Date/Time	Company	Received by: <i>[Signature]</i>
Relinquished by:	Date/Time	Company	Received by: <i>[Signature]</i>

Custody Seals Intact: Yes No
Custody Seal No: *217210*

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1251-1

SDG Number: 31403236.022.0129

Login Number: 1251

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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.	N/A	Received same day of collection; chilling process has begun.
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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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1251-1

SDG Number: 31403236.022.0129

Login Number: 1251

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 09/15/21 11:30 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	2.1 / 2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1257-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/20/2021 3:29:25 PM

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



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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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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1257-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Job ID: 890-1257-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1257-1

Receipt

The samples were received on 9/16/2021 12:24 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

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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Client Sample ID: FS05

Lab Sample ID: 890-1257-1

Date Collected: 09/15/21 13:45

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/17/21 09:00	09/17/21 13:22	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/17/21 09:00	09/17/21 13:22	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/17/21 09:00	09/17/21 13:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/17/21 09:00	09/17/21 13:22	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/17/21 09:00	09/17/21 13:22	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/17/21 09:00	09/17/21 13:22	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/17/21 09:00	09/17/21 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/17/21 09:00	09/17/21 13:22	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/17/21 09:00	09/17/21 13:22	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	<49.8	U	49.8	mg/Kg		09/17/21 11:25	09/17/21 13:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/17/21 11:25	09/17/21 13:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 11:25	09/17/21 13:20	1
Total TPH	<49.8	U	49.8	mg/Kg		09/17/21 11:25	09/17/21 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/17/21 11:25	09/17/21 13:20	1
o-Terphenyl	112		70 - 130	09/17/21 11:25	09/17/21 13:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	735		5.04	mg/Kg			09/17/21 15:44	1

Client Sample ID: FS17

Lab Sample ID: 890-1257-2

Date Collected: 09/15/21 15:08

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/17/21 09:00	09/17/21 13:43	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/17/21 09:00	09/17/21 13:43	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/17/21 09:00	09/17/21 13:43	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/17/21 09:00	09/17/21 13:43	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/17/21 09:00	09/17/21 13:43	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/17/21 09:00	09/17/21 13:43	1
Total BTEX	<0.00403	U	0.00403	mg/Kg		09/17/21 09:00	09/17/21 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/17/21 09:00	09/17/21 13:43	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/17/21 09:00	09/17/21 13:43	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Client Sample ID: FS17

Lab Sample ID: 890-1257-2

Date Collected: 09/15/21 15:08

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1.0

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		09/17/21 11:25	09/17/21 14:25	1
Diesel Range Organics (Over C10-C28)	53.4		50.0	mg/Kg		09/17/21 11:25	09/17/21 14:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 11:25	09/17/21 14:25	1
Total TPH	53.4		50.0	mg/Kg		09/17/21 11:25	09/17/21 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/17/21 11:25	09/17/21 14:25	1
o-Terphenyl	114		70 - 130	09/17/21 11:25	09/17/21 14:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		4.98	mg/Kg			09/17/21 15:49	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1257-1	FS05	116	83
890-1257-1 MS	FS05	103	90
890-1257-2	FS17	118	86
LCS 880-8015/1-A	Lab Control Sample	109	88
LCS 880-8015/2-A	Lab Control Sample Dup	108	86
MB 880-8015/5-A	Method Blank	109	83

Surrogate Legend

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1257-1 MSD	FS05		

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1257-1	FS05	104	112
890-1257-1 MS	FS05	102	101
890-1257-1 MSD	FS05	101	100
890-1257-2	FS17	107	114
LCS 880-8039/2-A	Lab Control Sample	110	113
LCS 880-8039/3-A	Lab Control Sample Dup	110	116
MB 880-8039/1-A	Method Blank	101	114

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8015/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8015

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 09:00	09/17/21 13:01	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	09/17/21 09:00	09/17/21 13:01	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/17/21 09:00	09/17/21 13:01	1

Lab Sample ID: LCS 880-8015/1-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8015

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.09571		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09354		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1942		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09669		mg/Kg		97	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-8015/2-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8015

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Benzene	0.100	0.09432		mg/Kg		94	70 - 130	7	35
Toluene	0.100	0.08817		mg/Kg		88	70 - 130	8	35
Ethylbenzene	0.100	0.08889		mg/Kg		89	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1813		mg/Kg		91	70 - 130	7	35
o-Xylene	0.100	0.08977		mg/Kg		90	70 - 130	7	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: 890-1257-1 MSD
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: FS05
Prep Type: Total/NA
Prep Batch: 8015

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
										RPD	Limit
Benzene	<0.00199	U	0.0992	0.04952		mg/Kg					

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1257-1 MSD
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: FS05
Prep Type: Total/NA
Prep Batch: 8015

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	<0.00199	U	0.0992	0.02410		mg/Kg					
Ethylbenzene	<0.00199	U	0.0992	0.01213		mg/Kg					
m-Xylene & p-Xylene	<0.00398	U	0.198	0.03233		mg/Kg					
o-Xylene	<0.00199	U	0.0992	0.006431		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: 890-1257-1 MS
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: FS05
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

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

Lab Sample ID: MB 880-8039/1-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8039

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		09/17/21 11:25	09/17/21 12:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 11:25	09/17/21 12:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 11:25	09/17/21 12:14	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 11:25	09/17/21 12:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/17/21 11:25	09/17/21 12:14	1
o-Terphenyl	114		70 - 130	09/17/21 11:25	09/17/21 12:14	1

Lab Sample ID: LCS 880-8039/2-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	797.3		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	857.1		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	113		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8039/3-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8039

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	849.8		mg/Kg		85	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	1000	865.6		mg/Kg		87	70 - 130	1	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	110		70 - 130							
o-Terphenyl	116		70 - 130							

Lab Sample ID: 890-1257-1 MS
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: FS05
Prep Type: Total/NA
Prep Batch: 8039

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	868.8		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	863.8		mg/Kg		84	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: 890-1257-1 MSD
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: FS05
Prep Type: Total/NA
Prep Batch: 8039

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	850.4		mg/Kg		85	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	866.3		mg/Kg		84	70 - 130	0	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	100		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8030/1-A
Matrix: Solid
Analysis Batch: 8044

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			09/17/21 14:59	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-8030/2-A
Matrix: Solid
Analysis Batch: 8044

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	250.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-8030/3-A
Matrix: Solid
Analysis Batch: 8044

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	244.3		mg/Kg		98	90 - 110	2	20

Lab Sample ID: 880-6208-A-1-B MS
Matrix: Solid
Analysis Batch: 8044

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	558	F1	249	834.0	F1	mg/Kg		111	90 - 110

Lab Sample ID: 880-6208-A-1-C MSD
Matrix: Solid
Analysis Batch: 8044

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	558	F1	249	820.4		mg/Kg		105	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1257-1	FS05	Total/NA	Solid	5035	
890-1257-2	FS17	Total/NA	Solid	5035	
MB 880-8015/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8015/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8015/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1257-1 MSD	FS05	Total/NA	Solid	5035	

Analysis Batch: 8017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1257-1	FS05	Total/NA	Solid	8021B	8015
890-1257-2	FS17	Total/NA	Solid	8021B	8015
MB 880-8015/5-A	Method Blank	Total/NA	Solid	8021B	8015
LCS 880-8015/1-A	Lab Control Sample	Total/NA	Solid	8021B	8015
LCSD 880-8015/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8015
890-1257-1 MS	FS05	Total/NA	Solid	8021B	
890-1257-1 MSD	FS05	Total/NA	Solid	8021B	8015

GC Semi VOA

Analysis Batch: 8026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1257-1	FS05	Total/NA	Solid	8015B NM	8039
890-1257-2	FS17	Total/NA	Solid	8015B NM	8039
MB 880-8039/1-A	Method Blank	Total/NA	Solid	8015B NM	8039
LCS 880-8039/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8039
LCSD 880-8039/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8039
890-1257-1 MS	FS05	Total/NA	Solid	8015B NM	8039
890-1257-1 MSD	FS05	Total/NA	Solid	8015B NM	8039

Prep Batch: 8039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1257-1	FS05	Total/NA	Solid	8015NM Prep	
890-1257-2	FS17	Total/NA	Solid	8015NM Prep	
MB 880-8039/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8039/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8039/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1257-1 MS	FS05	Total/NA	Solid	8015NM Prep	
890-1257-1 MSD	FS05	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 8030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1257-1	FS05	Soluble	Solid	DI Leach	
890-1257-2	FS17	Soluble	Solid	DI Leach	
MB 880-8030/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8030/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8030/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6208-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6208-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

HPLC/IC

Analysis Batch: 8044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1257-1	FS05	Soluble	Solid	300.0	8030
890-1257-2	FS17	Soluble	Solid	300.0	8030
MB 880-8030/1-A	Method Blank	Soluble	Solid	300.0	8030
LCS 880-8030/2-A	Lab Control Sample	Soluble	Solid	300.0	8030
LCSD 880-8030/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8030
880-6208-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	8030
880-6208-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8030

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

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Client Sample ID: FS05

Lab Sample ID: 890-1257-1

Date Collected: 09/15/21 13:45

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8015	09/17/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/17/21 13:22	KL	XEN MID
Total/NA	Prep	8015NM Prep			8039	09/17/21 11:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/17/21 13:20	AJ	XEN MID
Soluble	Leach	DI Leach			8030	09/17/21 10:17	CH	XEN MID
Soluble	Analysis	300.0		1	8044	09/17/21 15:44	CH	XEN MID

Client Sample ID: FS17

Lab Sample ID: 890-1257-2

Date Collected: 09/15/21 15:08

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8015	09/17/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/17/21 13:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			8039	09/17/21 11:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/17/21 14:25	AJ	XEN MID
Soluble	Leach	DI Leach			8030	09/17/21 10:17	CH	XEN MID
Soluble	Analysis	300.0		1	8044	09/17/21 15:49	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

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

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1257-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1257-1	FS05	Solid	09/15/21 13:45	09/16/21 12:24	1.0
890-1257-2	FS17	Solid	09/15/21 15:08	09/16/21 12:24	1.0

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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) 794-1298
Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

Chain of Custody

Work Order No: _____

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	Jeremy.Hill@wsp.com, Dan.Moir@wsp.com

Program:	UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RC	<input type="checkbox"/> perflund
State of Project:					
Reporting Level:	Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> PT/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Deliverables:	EDD	<input type="checkbox"/>	ADAPT	<input type="checkbox"/>	Other: _____

Project Name:	PLV JS BD 90114	Turn Around	
Project Number:	31403336.000.019	Routine	<input type="checkbox"/>
P.O. Number:	611/21 59.11	Rush:	24hr
Sampler's Name:	Jeremy Hill	Due Date:	9/17/21

Temperature (°C):	14/1.2	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Received Inact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID			
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:	TRM. 507		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:	-0.2		

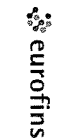
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
FS05	S	9/15/21	1345	1.0	1	X	X	X		The ADPP 2116 546360 1666631001 ADP 36-015-845863
FS17	S	9/15/21	1508	1.0	1	X	X	X		ADP 36-015-845863
[Large scribble]										

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 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
		9.16.21 1224			

Chain of Custody Record



Environment Testing America

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

Client Information (Sub Contract Lab)				Sampler	Lab PM	Carrier/Tracking No(s)	COC No																																								
Client Contact:	Shipping/Receiving	Company:	Eurofins Xenco	Phone	Kramer Jessica	890-409 1	890-1257-1																																								
Address				Due Date Requested	Accreditations Required (See note):		Page:																																								
1211 W Florida Ave				9/17/2021	NELAP - Louisiana NELAP - Texas		Page 1 of 1																																								
City	Midland	TAT Requested (days):		Analysis Requested																																											
State Zip	TX 79701																																														
Phone	432-704-5440(Tel)	PO #:		<table border="1"> <thead> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td></td> <td>8016MOD_NM/8016NM_S_Prep Full TPH</td> <td></td> <td></td> </tr> <tr> <td></td> <td>300_ORGFM_28DDI_LEACH Chloride</td> <td></td> <td></td> </tr> <tr> <td></td> <td>8021B/6036FP_Calc BTEX</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:		8016MOD_NM/8016NM_S_Prep Full TPH				300_ORGFM_28DDI_LEACH Chloride				8021B/6036FP_Calc BTEX																										
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	8021B/6036FP_Calc BTEX																																														
Project Name	PLU 25 BD 901H	Project #:	89000004																																												
Site		SSOW#:																																													
Sample Identification - Client ID (Lab ID)																																															
FS05 (890-1257-1)	9/15/21	Sample Date	13 45	Sample Time	Mountain	Sample Type (G=grab)	Matrix (W=water, S=solid, O=waterfall, BT=tissue, A=AI)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:																																				
FS17 (890-1257-2)	9/15/21		15 08		Mountain	Solid	Solid	X	X	X																																					

Note: Since laboratory accreditations are subject to change, Eurofins Xenco 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/statematrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2
 Empty Kit Relinquished by Date
 Relinquished by *Joe Cuy* 9-16-21 Date/Time
 Relinquished by Date/Time Company
 Relinquished by Date/Time Company
 Custody Seals Intact: Custody Seal No
 Yes No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements
 Method of Shipment:
 Received by *W. Samuel* Date/Time *9/17/21 11:5* Company
 Received by Date/Time Company
 Cooler Temperature(s) °C and Other Remarks *33/38*
 Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1257-1

SDG Number: 31403236.022.0129

Login Number: 1257

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1257-1
SDG Number: 31403236.022.0129

Login Number: 1257
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland
List Creation: 09/17/21 11:19 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	3.3/3.8
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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1261-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/21/2021 3:58:33 PM

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



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results through
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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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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1261-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Job ID: 890-1261-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1261-1

Receipt

The samples were received on 9/16/2021 12:24 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

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS08 (890-1261-9) and FS09 (890-1261-10). 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

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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: PH02

Lab Sample ID: 890-1261-1

Date Collected: 09/15/21 12:51

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/17/21 09:44	09/17/21 20:46	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/17/21 09:44	09/17/21 20:46	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/17/21 09:44	09/17/21 20:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/17/21 09:44	09/17/21 20:46	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/17/21 09:44	09/17/21 20:46	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/17/21 09:44	09/17/21 20:46	1
Total BTEX	<0.00396	U	0.00396	mg/Kg		09/17/21 09:44	09/17/21 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/17/21 09:44	09/17/21 20:46	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/17/21 09:44	09/17/21 20:46	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		09/17/21 16:14	09/18/21 00:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 00:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 00:48	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/17/21 16:14	09/18/21 00:48	1
o-Terphenyl	110		70 - 130	09/17/21 16:14	09/18/21 00:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.4		4.95	mg/Kg			09/20/21 15:51	1

Client Sample ID: PH01

Lab Sample ID: 890-1261-2

Date Collected: 09/15/21 13:11

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1 F2	0.00198	mg/Kg		09/17/21 11:43	09/18/21 01:04	1
Toluene	<0.00198	U F1 F2	0.00198	mg/Kg		09/17/21 11:43	09/18/21 01:04	1
Ethylbenzene	<0.00198	U F1 F2	0.00198	mg/Kg		09/17/21 11:43	09/18/21 01:04	1
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.00397	mg/Kg		09/17/21 11:43	09/18/21 01:04	1
o-Xylene	<0.00198	U F1 F2	0.00198	mg/Kg		09/17/21 11:43	09/18/21 01:04	1
Xylenes, Total	<0.00397	U F1 F2	0.00397	mg/Kg		09/17/21 11:43	09/18/21 01:04	1
Total BTEX	<0.00397	U F1 F2	0.00397	mg/Kg		09/17/21 11:43	09/18/21 01:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/17/21 11:43	09/18/21 01:04	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/17/21 11:43	09/18/21 01:04	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: PH01

Lab Sample ID: 890-1261-2

Date Collected: 09/15/21 13:11

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 2.0

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		09/17/21 16:14	09/18/21 01:10	1
Diesel Range Organics (Over C10-C28)	121		49.8	mg/Kg		09/17/21 16:14	09/18/21 01:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 01:10	1
Total TPH	121		49.8	mg/Kg		09/17/21 16:14	09/18/21 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/17/21 16:14	09/18/21 01:10	1
o-Terphenyl	112		70 - 130	09/17/21 16:14	09/18/21 01:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		5.01	mg/Kg			09/20/21 15:56	1

Client Sample ID: FS01

Lab Sample ID: 890-1261-3

Date Collected: 09/15/21 13:33

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 01:24	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 01:24	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 01:24	1
m-Xylene & p-Xylene	0.00934		0.00398	mg/Kg		09/17/21 11:43	09/18/21 01:24	1
o-Xylene	0.00286		0.00199	mg/Kg		09/17/21 11:43	09/18/21 01:24	1
Xylenes, Total	0.0122		0.00398	mg/Kg		09/17/21 11:43	09/18/21 01:24	1
Total BTEX	0.0122		0.00398	mg/Kg		09/17/21 11:43	09/18/21 01:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	09/17/21 11:43	09/18/21 01:24	1
1,4-Difluorobenzene (Surr)	77		70 - 130	09/17/21 11:43	09/18/21 01:24	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		09/17/21 16:14	09/18/21 01:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 01:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 01:31	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 01:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/17/21 16:14	09/18/21 01:31	1
o-Terphenyl	112		70 - 130	09/17/21 16:14	09/18/21 01:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	466		4.98	mg/Kg			09/20/21 16:36	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS02

Lab Sample ID: 890-1261-4

Date Collected: 09/15/21 13:35

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 01:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			09/17/21 11:43	09/18/21 01:44	1
1,4-Difluorobenzene (Surr)	104		70 - 130			09/17/21 11:43	09/18/21 01:44	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		09/17/21 16:14	09/18/21 01:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 01:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 01:52	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 01:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			09/17/21 16:14	09/18/21 01:52	1
o-Terphenyl	115		70 - 130			09/17/21 16:14	09/18/21 01:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		4.95	mg/Kg			09/20/21 16:41	1

Client Sample ID: FS03

Lab Sample ID: 890-1261-5

Date Collected: 09/15/21 13:38

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 02:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130			09/17/21 11:43	09/18/21 02:05	1
1,4-Difluorobenzene (Surr)	97		70 - 130			09/17/21 11:43	09/18/21 02:05	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS03

Lab Sample ID: 890-1261-5

Date Collected: 09/15/21 13:38

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

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		09/17/21 16:14	09/18/21 02:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 02:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 02:14	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 02:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/17/21 16:14	09/18/21 02:14	1
o-Terphenyl	110		70 - 130	09/17/21 16:14	09/18/21 02:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	627		5.02	mg/Kg			09/20/21 16:47	1

Client Sample ID: FS04

Lab Sample ID: 890-1261-6

Date Collected: 09/15/21 13:41

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:25	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:25	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 02:25	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 02:25	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 02:25	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 02:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/17/21 11:43	09/18/21 02:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/17/21 11:43	09/18/21 02:25	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		09/17/21 16:14	09/18/21 02:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 02:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 02:35	1
Total TPH	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 02:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	09/17/21 16:14	09/18/21 02:35	1
o-Terphenyl	109		70 - 130	09/17/21 16:14	09/18/21 02:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	135		4.98	mg/Kg			09/20/21 16:52	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS06

Lab Sample ID: 890-1261-7

Date Collected: 09/15/21 13:47

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 02:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			09/17/21 11:43	09/18/21 02:46	1
1,4-Difluorobenzene (Surr)	100		70 - 130			09/17/21 11:43	09/18/21 02:46	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		09/17/21 16:14	09/18/21 02:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 02:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 02:56	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 02:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			09/17/21 16:14	09/18/21 02:56	1
o-Terphenyl	107		70 - 130			09/17/21 16:14	09/18/21 02:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.9		4.95	mg/Kg			09/20/21 16:58	1

Client Sample ID: FS07

Lab Sample ID: 890-1261-8

Date Collected: 09/15/21 13:50

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 03:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			09/17/21 11:43	09/18/21 03:06	1
1,4-Difluorobenzene (Surr)	103		70 - 130			09/17/21 11:43	09/18/21 03:06	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS07

Lab Sample ID: 890-1261-8

Date Collected: 09/15/21 13:50

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

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		09/17/21 16:14	09/18/21 03:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 03:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 03:38	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 03:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/17/21 16:14	09/18/21 03:38	1
o-Terphenyl	112		70 - 130	09/17/21 16:14	09/18/21 03:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	598		5.00	mg/Kg			09/20/21 17:04	1

Client Sample ID: FS08

Lab Sample ID: 890-1261-9

Date Collected: 09/15/21 13:53

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00534		0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:26	1
Toluene	0.00835		0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:26	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:26	1
m-Xylene & p-Xylene	0.00613		0.00403	mg/Kg		09/17/21 11:43	09/18/21 03:26	1
o-Xylene	0.0134		0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:26	1
Xylenes, Total	0.0195		0.00403	mg/Kg		09/17/21 11:43	09/18/21 03:26	1
Total BTEX	0.0332		0.00403	mg/Kg		09/17/21 11:43	09/18/21 03:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	169	S1+	70 - 130	09/17/21 11:43	09/18/21 03:26	1
1,4-Difluorobenzene (Surr)	84		70 - 130	09/17/21 11:43	09/18/21 03:26	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		09/17/21 16:14	09/18/21 03:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 03:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 03:59	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 03:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	09/17/21 16:14	09/18/21 03:59	1
o-Terphenyl	108		70 - 130	09/17/21 16:14	09/18/21 03:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128		4.96	mg/Kg			09/20/21 17:21	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS09

Lab Sample ID: 890-1261-10

Date Collected: 09/15/21 13:55

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00355		0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:47	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:47	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/17/21 11:43	09/18/21 03:47	1
o-Xylene	0.00390		0.00202	mg/Kg		09/17/21 11:43	09/18/21 03:47	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/17/21 11:43	09/18/21 03:47	1
Total BTEX	0.00745		0.00403	mg/Kg		09/17/21 11:43	09/18/21 03:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	09/17/21 11:43	09/18/21 03:47	1
1,4-Difluorobenzene (Surr)	149	S1+	70 - 130	09/17/21 11:43	09/18/21 03:47	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		09/17/21 16:14	09/18/21 04:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 04:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 04:21	1
Total TPH	<49.9	U	49.9	mg/Kg		09/17/21 16:14	09/18/21 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/17/21 16:14	09/18/21 04:21	1
o-Terphenyl	110		70 - 130	09/17/21 16:14	09/18/21 04:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.7		5.04	mg/Kg			09/20/21 17:26	1

Client Sample ID: FS10

Lab Sample ID: 890-1261-11

Date Collected: 09/15/21 14:21

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 04:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 04:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 04:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 04:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 04:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 04:07	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 04:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/17/21 11:43	09/18/21 04:07	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/17/21 11:43	09/18/21 04:07	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS10

Lab Sample ID: 890-1261-11

Date Collected: 09/15/21 14:21

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

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		09/17/21 16:14	09/18/21 04:42	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 04:42	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 04:42	1
Total TPH	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 04:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/17/21 16:14	09/18/21 04:42	1
o-Terphenyl	117		70 - 130	09/17/21 16:14	09/18/21 04:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.3		4.98	mg/Kg			09/20/21 17:43	1

Client Sample ID: FS11

Lab Sample ID: 890-1261-12

Date Collected: 09/15/21 14:24

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 05:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 05:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 05:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 05:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 05:56	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 05:56	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/17/21 11:43	09/18/21 05:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/17/21 11:43	09/18/21 05:56	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/17/21 11:43	09/18/21 05:56	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		09/17/21 16:14	09/18/21 05:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 05:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 05:03	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 05:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/17/21 16:14	09/18/21 05:03	1
o-Terphenyl	107		70 - 130	09/17/21 16:14	09/18/21 05:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.1		4.99	mg/Kg			09/20/21 17:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS12

Lab Sample ID: 890-1261-13

Date Collected: 09/15/21 14:26

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 06:17	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 06:17	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 06:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/17/21 11:43	09/18/21 06:17	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 06:17	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/17/21 11:43	09/18/21 06:17	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		09/17/21 11:43	09/18/21 06:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/17/21 11:43	09/18/21 06:17	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/17/21 11:43	09/18/21 06:17	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		09/17/21 16:14	09/18/21 05:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 05:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 05:24	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 05:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	09/17/21 16:14	09/18/21 05:24	1
o-Terphenyl	108		70 - 130	09/17/21 16:14	09/18/21 05:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	166		4.95	mg/Kg			09/20/21 17:55	1

Client Sample ID: FS13

Lab Sample ID: 890-1261-14

Date Collected: 09/15/21 14:29

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/17/21 11:43	09/18/21 06:37	1
Toluene	0.00251		0.00202	mg/Kg		09/17/21 11:43	09/18/21 06:37	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/17/21 11:43	09/18/21 06:37	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/17/21 11:43	09/18/21 06:37	1
o-Xylene	0.00440		0.00202	mg/Kg		09/17/21 11:43	09/18/21 06:37	1
Xylenes, Total	0.00440		0.00403	mg/Kg		09/17/21 11:43	09/18/21 06:37	1
Total BTEX	0.00691		0.00403	mg/Kg		09/17/21 11:43	09/18/21 06:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	09/17/21 11:43	09/18/21 06:37	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/17/21 11:43	09/18/21 06:37	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS13

Lab Sample ID: 890-1261-14

Date Collected: 09/15/21 14:29

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

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		09/17/21 16:14	09/18/21 05:45	1
Diesel Range Organics (Over C10-C28)	214		49.8	mg/Kg		09/17/21 16:14	09/18/21 05:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 05:45	1
Total TPH	214		49.8	mg/Kg		09/17/21 16:14	09/18/21 05:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/17/21 16:14	09/18/21 05:45	1
o-Terphenyl	118		70 - 130	09/17/21 16:14	09/18/21 05:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168		4.97	mg/Kg			09/20/21 18:00	1

Client Sample ID: FS14

Lab Sample ID: 890-1261-15

Date Collected: 09/15/21 15:01

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 06:58	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 06:58	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 06:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 06:58	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/17/21 11:43	09/18/21 06:58	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 06:58	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/17/21 11:43	09/18/21 06:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/17/21 11:43	09/18/21 06:58	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/17/21 11:43	09/18/21 06:58	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		09/17/21 16:14	09/18/21 06:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 06:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 06:06	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/18/21 06:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	09/17/21 16:14	09/18/21 06:06	1
o-Terphenyl	108		70 - 130	09/17/21 16:14	09/18/21 06:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	228		4.96	mg/Kg			09/20/21 18:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS15

Lab Sample ID: 890-1261-16

Date Collected: 09/15/21 15:04

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 07:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 07:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/17/21 11:43	09/18/21 07:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/17/21 11:43	09/18/21 07:18	1
o-Xylene	0.00221		0.00201	mg/Kg		09/17/21 11:43	09/18/21 07:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/17/21 11:43	09/18/21 07:18	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		09/17/21 11:43	09/18/21 07:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	09/17/21 11:43	09/18/21 07:18	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/17/21 11:43	09/18/21 07:18	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		09/17/21 16:14	09/18/21 06:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 06:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 06:27	1
Total TPH	<49.8	U	49.8	mg/Kg		09/17/21 16:14	09/18/21 06:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/17/21 16:14	09/18/21 06:27	1
o-Terphenyl	107		70 - 130	09/17/21 16:14	09/18/21 06:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		4.95	mg/Kg			09/20/21 18:11	1

Client Sample ID: FS16

Lab Sample ID: 890-1261-17

Date Collected: 09/15/21 15:06

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:08	09/18/21 02:57	1
Toluene	0.00455		0.00200	mg/Kg		09/17/21 09:08	09/18/21 02:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:08	09/18/21 02:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/17/21 09:08	09/18/21 02:57	1
o-Xylene	0.00401		0.00200	mg/Kg		09/17/21 09:08	09/18/21 02:57	1
Xylenes, Total	0.00401		0.00399	mg/Kg		09/17/21 09:08	09/18/21 02:57	1
Total BTEX	0.00856		0.00399	mg/Kg		09/17/21 09:08	09/18/21 02:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	09/17/21 09:08	09/18/21 02:57	1
1,4-Difluorobenzene (Surr)	85		70 - 130	09/17/21 09:08	09/18/21 02:57	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS16

Lab Sample ID: 890-1261-17

Date Collected: 09/15/21 15:06

Matrix: Solid

Date Received: 09/16/21 12:24

Sample Depth: 1..0

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		09/20/21 08:35	09/20/21 20:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 08:35	09/20/21 20:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 08:35	09/20/21 20:13	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 08:35	09/20/21 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/20/21 08:35	09/20/21 20:13	1
o-Terphenyl	99		70 - 130	09/20/21 08:35	09/20/21 20:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.2		5.00	mg/Kg			09/20/21 18:17	1

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
 SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-6199-A-1-E MSD	Matrix Spike Duplicate	252 S1+	75
880-6199-A-1-F MS	Matrix Spike	296 S1+	72
890-1261-1	PH02	102	104
890-1261-2	PH01	114	96
890-1261-2 MS	PH01	129	87
890-1261-2 MSD	PH01	101	81
890-1261-3	FS01	91	77
890-1261-4	FS02	111	104
890-1261-5	FS03	117	97
890-1261-6	FS04	116	89
890-1261-7	FS06	100	100
890-1261-8	FS07	122	103
890-1261-9	FS08	169 S1+	84
890-1261-10	FS09	147 S1+	149 S1+
890-1261-11	FS10	112	98
890-1261-12	FS11	118	101
890-1261-13	FS12	111	102
890-1261-14	FS13	130	86
890-1261-15	FS14	121	107
890-1261-16	FS15	128	96
890-1261-17	FS16	158 S1+	85
LCS 880-8016/1-A	Lab Control Sample	111	81
LCS 880-8021/1-A	Lab Control Sample	94	89
LCS 880-8041/1-A	Lab Control Sample	106	94
LCS D 880-8016/2-A	Lab Control Sample Dup	108	84
LCS D 880-8021/2-A	Lab Control Sample Dup	102	84
LCS D 880-8041/2-A	Lab Control Sample Dup	101	91
MB 880-8015/5-A	Method Blank	109	83
MB 880-8016/5-A	Method Blank	104	76
MB 880-8021/5-A	Method Blank	114	101
MB 880-8041/5-A	Method Blank	128	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-6238-A-1-C MS	Matrix Spike	100	101
880-6238-A-1-D MSD	Matrix Spike Duplicate	100	100
890-1261-1	PH02	103	110
890-1261-2	PH01	105	112
890-1261-3	FS01	103	112
890-1261-4	FS02	104	115
890-1261-5	FS03	101	110
890-1261-6	FS04	100	109

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
 SDG: 31403236.022.0129

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1261-7	FS06	98	107
890-1261-8	FS07	102	112
890-1261-9	FS08	100	108
890-1261-10	FS09	99	110
890-1261-11	FS10	109	117
890-1261-12	FS11	99	107
890-1261-13	FS12	100	108
890-1261-14	FS13	108	118
890-1261-15	FS14	100	108
890-1261-16	FS15	99	107
890-1261-17	FS16	94	99
890-1271-A-21-E MS	Matrix Spike	107	102
890-1271-A-21-F MSD	Matrix Spike Duplicate	107	101
LCS 880-8049/2-A	Lab Control Sample	111	114
LCS 880-8093/2-A	Lab Control Sample	105	99
LCSD 880-8049/3-A	Lab Control Sample Dup	111	113
LCSD 880-8093/3-A	Lab Control Sample Dup	114	109
MB 880-8049/1-A	Method Blank	102	113
MB 880-8093/1-A	Method Blank	102	111

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8015/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8015

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 09:00	09/17/21 13:01	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 09:00	09/17/21 13:01	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	09/17/21 09:00	09/17/21 13:01	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/17/21 09:00	09/17/21 13:01	1

Lab Sample ID: MB 880-8016/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8016

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:08	09/17/21 23:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:08	09/17/21 23:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:08	09/17/21 23:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 09:08	09/17/21 23:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:08	09/17/21 23:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 09:08	09/17/21 23:52	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 09:08	09/17/21 23:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	104		70 - 130	09/17/21 09:08	09/17/21 23:52	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/17/21 09:08	09/17/21 23:52	1

Lab Sample ID: LCS 880-8016/1-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8016

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.08650		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08666		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1803		mg/Kg		90	70 - 130
o-Xylene	0.100	0.09009		mg/Kg		90	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8016/2-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8016

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09419		mg/Kg		94	70 - 130	9	35
Toluene	0.100	0.09331		mg/Kg		93	70 - 130	8	35
Ethylbenzene	0.100	0.09208		mg/Kg		92	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1919		mg/Kg		96	70 - 130	6	35
o-Xylene	0.100	0.09469		mg/Kg		95	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: 880-6199-A-1-E MSD
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8016

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0136		0.0990	0.06796		mg/Kg					
Toluene	0.233		0.0990	0.2845		mg/Kg					
Ethylbenzene	0.319		0.0990	0.2977		mg/Kg					
m-Xylene & p-Xylene	0.727		0.198	0.7124		mg/Kg					
o-Xylene	0.372		0.0990	0.3597		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	252	S1+	70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

Lab Sample ID: 880-6199-A-1-F MS
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8016

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	296	S1+	70 - 130
1,4-Difluorobenzene (Surr)	72		70 - 130

Lab Sample ID: MB 880-8021/5-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8021

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 09:44	09/17/21 13:00	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 09:44	09/17/21 13:00	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8021/5-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8021

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	114		70 - 130	09/17/21 09:44	09/17/21 13:00	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/17/21 09:44	09/17/21 13:00	1

Lab Sample ID: LCS 880-8021/1-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.09398		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09569		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1710		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08522		mg/Kg		85	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-8021/2-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8021

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Benzene	0.100	0.09187		mg/Kg		92	70 - 130	9	35
Toluene	0.100	0.1003		mg/Kg		100	70 - 130	6	35
Ethylbenzene	0.100	0.1076		mg/Kg		108	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1881		mg/Kg		94	70 - 130	10	35
o-Xylene	0.100	0.09564		mg/Kg		96	70 - 130	12	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: MB 880-8041/5-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8041

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 00:35	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 00:35	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 00:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 00:35	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 11:43	09/18/21 00:35	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 00:35	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 11:43	09/18/21 00:35	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8041/5-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8041

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	128		70 - 130	09/17/21 11:43	09/18/21 00:35	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/17/21 11:43	09/18/21 00:35	1

Lab Sample ID: LCS 880-8041/1-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	0.100	0.07662		mg/Kg		77	70 - 130	
Toluene	0.100	0.09388		mg/Kg		94	70 - 130	
Ethylbenzene	0.100	0.09752		mg/Kg		98	70 - 130	
m-Xylene & p-Xylene	0.200	0.1859		mg/Kg		93	70 - 130	
o-Xylene	0.100	0.09275		mg/Kg		93	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-8041/2-A
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8041

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD Limit	
Benzene	0.100	0.07816		mg/Kg		78	70 - 130	2	35	
Toluene	0.100	0.09453		mg/Kg		95	70 - 130	1	35	
Ethylbenzene	0.100	0.09867		mg/Kg		99	70 - 130	1	35	
m-Xylene & p-Xylene	0.200	0.1838		mg/Kg		92	70 - 130	1	35	
o-Xylene	0.100	0.09240		mg/Kg		92	70 - 130	0	35	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 890-1261-2 MS
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 8041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	<0.00198	U F1 F2	0.0998	0.01052	F1	mg/Kg		11	70 - 130	
Toluene	<0.00198	U F1 F2	0.0998	0.03687	F1	mg/Kg		37	70 - 130	
Ethylbenzene	<0.00198	U F1 F2	0.0998	0.04346	F1	mg/Kg		44	70 - 130	
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.200	0.07924	F1	mg/Kg		39	70 - 130	
o-Xylene	<0.00198	U F1 F2	0.0998	0.04927	F1	mg/Kg		49	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1261-2 MSD
Matrix: Solid
Analysis Batch: 8018

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 8041

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Benzene	<0.00198	U F1 F2	0.101	0.07054	F2	mg/Kg		70	70 - 130	148	35
Toluene	<0.00198	U F1 F2	0.101	0.08170	F2	mg/Kg		81	70 - 130	76	35
Ethylbenzene	<0.00198	U F1 F2	0.101	0.08675	F2	mg/Kg		86	70 - 130	66	35
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.202	0.1604	F2	mg/Kg		79	70 - 130	68	35
o-Xylene	<0.00198	U F1 F2	0.101	0.07731	F2	mg/Kg		76	70 - 130	44	35
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	101		70 - 130								
1,4-Difluorobenzene (Surr)	81		70 - 130								

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

Lab Sample ID: MB 880-8049/1-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8049

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/17/21 21:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/17/21 21:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/17/21 21:59	1
Total TPH	<50.0	U	50.0	mg/Kg		09/17/21 16:14	09/17/21 21:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/17/21 16:14	09/17/21 21:59	1
o-Terphenyl	113		70 - 130			09/17/21 16:14	09/17/21 21:59	1

Lab Sample ID: LCS 880-8049/2-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8049

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Gasoline Range Organics (GRO)-C6-C10	1000	801.7		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.0		mg/Kg		87	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	114		70 - 130				

Lab Sample ID: LCSD 880-8049/3-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8049

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
		Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	888.3		mg/Kg		89	70 - 130	10	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8049/3-A
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8049

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	924.0		mg/Kg		92	70 - 130	6	20
Surrogate		LCSD %Recovery	LCSD Qualifier				Limits		
1-Chlorooctane		111					70 - 130		
o-Terphenyl		113					70 - 130		

Lab Sample ID: 880-6238-A-1-C MS
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8049

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	836.0		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	897.2		mg/Kg		90	70 - 130		
Surrogate		MS %Recovery	MS Qualifier						Limits		
1-Chlorooctane		100							70 - 130		
o-Terphenyl		101							70 - 130		

Lab Sample ID: 880-6238-A-1-D MSD
Matrix: Solid
Analysis Batch: 8026

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8049

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	999	870.1		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	902.4		mg/Kg		90	70 - 130	1	20
Surrogate		MSD %Recovery	MSD Qualifier						Limits		
1-Chlorooctane		100							70 - 130		
o-Terphenyl		100							70 - 130		

Lab Sample ID: MB 880-8093/1-A
Matrix: Solid
Analysis Batch: 8103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8093

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		09/20/21 08:35	09/20/21 10:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 08:35	09/20/21 10:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 08:35	09/20/21 10:50	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 08:35	09/20/21 10:50	1
Surrogate		MB %Recovery	MB Qualifier			Prepared	Analyzed	Dil Fac
1-Chlorooctane		102				09/20/21 08:35	09/20/21 10:50	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8093/1-A
Matrix: Solid
Analysis Batch: 8103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8093

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	111		70 - 130	09/20/21 08:35	09/20/21 10:50	1

Lab Sample ID: LCS 880-8093/2-A
Matrix: Solid
Analysis Batch: 8103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	1000	961.7		mg/Kg		96	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1033		mg/Kg		103	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	105		70 - 130
<i>o</i> -Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-8093/3-A
Matrix: Solid
Analysis Batch: 8103

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8093

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1019		mg/Kg		102	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	1000	1147		mg/Kg		115	70 - 130	10	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	114		70 - 130
<i>o</i> -Terphenyl	109		70 - 130

Lab Sample ID: 890-1271-A-21-E MS
Matrix: Solid
Analysis Batch: 8103

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	923.8		mg/Kg		93	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1065		mg/Kg		107	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>1</i> -Chlorooctane	107		70 - 130
<i>o</i> -Terphenyl	102		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1271-A-21-F MSD
Matrix: Solid
Analysis Batch: 8103

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8093

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	999	948.8		mg/Kg		95	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1060		mg/Kg		106	70 - 130	0	20
Surrogate	%Recovery	MSD Qualifier	MSD	Limits							
1-Chlorooctane	107			70 - 130							
o-Terphenyl	101			70 - 130							

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8115/1-A
Matrix: Solid
Analysis Batch: 8147

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			09/20/21 15:06	1

Lab Sample ID: LCS 880-8115/2-A
Matrix: Solid
Analysis Batch: 8147

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	243.4		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-8115/3-A
Matrix: Solid
Analysis Batch: 8147

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	243.6		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-1261-8 MS
Matrix: Solid
Analysis Batch: 8147

Client Sample ID: FS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	598		250	825.7		mg/Kg		91	90 - 110

Lab Sample ID: 890-1261-8 MSD
Matrix: Solid
Analysis Batch: 8147

Client Sample ID: FS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	598		250	827.0		mg/Kg		92	90 - 110	0	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8015/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-17	FS16	Total/NA	Solid	5035	
MB 880-8016/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8016/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8016/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6199-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
880-6199-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 8017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-17	FS16	Total/NA	Solid	8021B	8016
MB 880-8015/5-A	Method Blank	Total/NA	Solid	8021B	8015
MB 880-8016/5-A	Method Blank	Total/NA	Solid	8021B	8016
LCS 880-8016/1-A	Lab Control Sample	Total/NA	Solid	8021B	8016
LCSD 880-8016/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8016
880-6199-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8016
880-6199-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	8016

Analysis Batch: 8018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-1	PH02	Total/NA	Solid	8021B	8021
890-1261-2	PH01	Total/NA	Solid	8021B	8041
890-1261-3	FS01	Total/NA	Solid	8021B	8041
890-1261-4	FS02	Total/NA	Solid	8021B	8041
890-1261-5	FS03	Total/NA	Solid	8021B	8041
890-1261-6	FS04	Total/NA	Solid	8021B	8041
890-1261-7	FS06	Total/NA	Solid	8021B	8041
890-1261-8	FS07	Total/NA	Solid	8021B	8041
890-1261-9	FS08	Total/NA	Solid	8021B	8041
890-1261-10	FS09	Total/NA	Solid	8021B	8041
890-1261-11	FS10	Total/NA	Solid	8021B	8041
890-1261-12	FS11	Total/NA	Solid	8021B	8041
890-1261-13	FS12	Total/NA	Solid	8021B	8041
890-1261-14	FS13	Total/NA	Solid	8021B	8041
890-1261-15	FS14	Total/NA	Solid	8021B	8041
890-1261-16	FS15	Total/NA	Solid	8021B	8041
MB 880-8021/5-A	Method Blank	Total/NA	Solid	8021B	8021
MB 880-8041/5-A	Method Blank	Total/NA	Solid	8021B	8041
LCS 880-8021/1-A	Lab Control Sample	Total/NA	Solid	8021B	8021
LCS 880-8041/1-A	Lab Control Sample	Total/NA	Solid	8021B	8041
LCSD 880-8021/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8021
LCSD 880-8041/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8041
890-1261-2 MS	PH01	Total/NA	Solid	8021B	8041
890-1261-2 MSD	PH01	Total/NA	Solid	8021B	8041

Prep Batch: 8021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-1	PH02	Total/NA	Solid	5035	

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
 SDG: 31403236.022.0129

GC VOA (Continued)

Prep Batch: 8021 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8021/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8021/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8021/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 8041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-2	PH01	Total/NA	Solid	5035	
890-1261-3	FS01	Total/NA	Solid	5035	
890-1261-4	FS02	Total/NA	Solid	5035	
890-1261-5	FS03	Total/NA	Solid	5035	
890-1261-6	FS04	Total/NA	Solid	5035	
890-1261-7	FS06	Total/NA	Solid	5035	
890-1261-8	FS07	Total/NA	Solid	5035	
890-1261-9	FS08	Total/NA	Solid	5035	
890-1261-10	FS09	Total/NA	Solid	5035	
890-1261-11	FS10	Total/NA	Solid	5035	
890-1261-12	FS11	Total/NA	Solid	5035	
890-1261-13	FS12	Total/NA	Solid	5035	
890-1261-14	FS13	Total/NA	Solid	5035	
890-1261-15	FS14	Total/NA	Solid	5035	
890-1261-16	FS15	Total/NA	Solid	5035	
MB 880-8041/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8041/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8041/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1261-2 MS	PH01	Total/NA	Solid	5035	
890-1261-2 MSD	PH01	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 8026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-1	PH02	Total/NA	Solid	8015B NM	8049
890-1261-2	PH01	Total/NA	Solid	8015B NM	8049
890-1261-3	FS01	Total/NA	Solid	8015B NM	8049
890-1261-4	FS02	Total/NA	Solid	8015B NM	8049
890-1261-5	FS03	Total/NA	Solid	8015B NM	8049
890-1261-6	FS04	Total/NA	Solid	8015B NM	8049
890-1261-7	FS06	Total/NA	Solid	8015B NM	8049
890-1261-8	FS07	Total/NA	Solid	8015B NM	8049
890-1261-9	FS08	Total/NA	Solid	8015B NM	8049
890-1261-10	FS09	Total/NA	Solid	8015B NM	8049
890-1261-11	FS10	Total/NA	Solid	8015B NM	8049
890-1261-12	FS11	Total/NA	Solid	8015B NM	8049
890-1261-13	FS12	Total/NA	Solid	8015B NM	8049
890-1261-14	FS13	Total/NA	Solid	8015B NM	8049
890-1261-15	FS14	Total/NA	Solid	8015B NM	8049
890-1261-16	FS15	Total/NA	Solid	8015B NM	8049
MB 880-8049/1-A	Method Blank	Total/NA	Solid	8015B NM	8049
LCS 880-8049/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8049
LCSD 880-8049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8049
880-6238-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	8049

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 8026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6238-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8049

Prep Batch: 8049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-1	PH02	Total/NA	Solid	8015NM Prep	
890-1261-2	PH01	Total/NA	Solid	8015NM Prep	
890-1261-3	FS01	Total/NA	Solid	8015NM Prep	
890-1261-4	FS02	Total/NA	Solid	8015NM Prep	
890-1261-5	FS03	Total/NA	Solid	8015NM Prep	
890-1261-6	FS04	Total/NA	Solid	8015NM Prep	
890-1261-7	FS06	Total/NA	Solid	8015NM Prep	
890-1261-8	FS07	Total/NA	Solid	8015NM Prep	
890-1261-9	FS08	Total/NA	Solid	8015NM Prep	
890-1261-10	FS09	Total/NA	Solid	8015NM Prep	
890-1261-11	FS10	Total/NA	Solid	8015NM Prep	
890-1261-12	FS11	Total/NA	Solid	8015NM Prep	
890-1261-13	FS12	Total/NA	Solid	8015NM Prep	
890-1261-14	FS13	Total/NA	Solid	8015NM Prep	
890-1261-15	FS14	Total/NA	Solid	8015NM Prep	
890-1261-16	FS15	Total/NA	Solid	8015NM Prep	
MB 880-8049/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8049/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6238-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6238-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-17	FS16	Total/NA	Solid	8015NM Prep	
MB 880-8093/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8093/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1271-A-21-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1271-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-17	FS16	Total/NA	Solid	8015B NM	8093
MB 880-8093/1-A	Method Blank	Total/NA	Solid	8015B NM	8093
LCS 880-8093/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8093
LCSD 880-8093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8093
890-1271-A-21-E MS	Matrix Spike	Total/NA	Solid	8015B NM	8093
890-1271-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8093

HPLC/IC

Leach Batch: 8115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-1	PH02	Soluble	Solid	DI Leach	
890-1261-2	PH01	Soluble	Solid	DI Leach	
890-1261-3	FS01	Soluble	Solid	DI Leach	

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
 SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 8115 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-4	FS02	Soluble	Solid	DI Leach	
890-1261-5	FS03	Soluble	Solid	DI Leach	
890-1261-6	FS04	Soluble	Solid	DI Leach	
890-1261-7	FS06	Soluble	Solid	DI Leach	
890-1261-8	FS07	Soluble	Solid	DI Leach	
890-1261-9	FS08	Soluble	Solid	DI Leach	
890-1261-10	FS09	Soluble	Solid	DI Leach	
890-1261-11	FS10	Soluble	Solid	DI Leach	
890-1261-12	FS11	Soluble	Solid	DI Leach	
890-1261-13	FS12	Soluble	Solid	DI Leach	
890-1261-14	FS13	Soluble	Solid	DI Leach	
890-1261-15	FS14	Soluble	Solid	DI Leach	
890-1261-16	FS15	Soluble	Solid	DI Leach	
890-1261-17	FS16	Soluble	Solid	DI Leach	
MB 880-8115/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8115/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8115/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1261-8 MS	FS07	Soluble	Solid	DI Leach	
890-1261-8 MSD	FS07	Soluble	Solid	DI Leach	

Analysis Batch: 8147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1261-1	PH02	Soluble	Solid	300.0	8115
890-1261-2	PH01	Soluble	Solid	300.0	8115
890-1261-3	FS01	Soluble	Solid	300.0	8115
890-1261-4	FS02	Soluble	Solid	300.0	8115
890-1261-5	FS03	Soluble	Solid	300.0	8115
890-1261-6	FS04	Soluble	Solid	300.0	8115
890-1261-7	FS06	Soluble	Solid	300.0	8115
890-1261-8	FS07	Soluble	Solid	300.0	8115
890-1261-9	FS08	Soluble	Solid	300.0	8115
890-1261-10	FS09	Soluble	Solid	300.0	8115
890-1261-11	FS10	Soluble	Solid	300.0	8115
890-1261-12	FS11	Soluble	Solid	300.0	8115
890-1261-13	FS12	Soluble	Solid	300.0	8115
890-1261-14	FS13	Soluble	Solid	300.0	8115
890-1261-15	FS14	Soluble	Solid	300.0	8115
890-1261-16	FS15	Soluble	Solid	300.0	8115
890-1261-17	FS16	Soluble	Solid	300.0	8115
MB 880-8115/1-A	Method Blank	Soluble	Solid	300.0	8115
LCS 880-8115/2-A	Lab Control Sample	Soluble	Solid	300.0	8115
LCSD 880-8115/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8115
890-1261-8 MS	FS07	Soluble	Solid	300.0	8115
890-1261-8 MSD	FS07	Soluble	Solid	300.0	8115

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: PH02

Lab Sample ID: 890-1261-1

Date Collected: 09/15/21 12:51

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8021	09/17/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/17/21 20:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 00:48	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 15:51	CH	XEN MID

Client Sample ID: PH01

Lab Sample ID: 890-1261-2

Date Collected: 09/15/21 13:11

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 01:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 01:10	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 15:56	CH	XEN MID

Client Sample ID: FS01

Lab Sample ID: 890-1261-3

Date Collected: 09/15/21 13:33

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 01:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 01:31	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 16:36	CH	XEN MID

Client Sample ID: FS02

Lab Sample ID: 890-1261-4

Date Collected: 09/15/21 13:35

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 01:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 01:52	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 16:41	CH	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS03

Lab Sample ID: 890-1261-5

Date Collected: 09/15/21 13:38

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 02:05	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 02:14	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 16:47	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 890-1261-6

Date Collected: 09/15/21 13:41

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 02:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 02:35	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 16:52	CH	XEN MID

Client Sample ID: FS06

Lab Sample ID: 890-1261-7

Date Collected: 09/15/21 13:47

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 02:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 02:56	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 16:58	CH	XEN MID

Client Sample ID: FS07

Lab Sample ID: 890-1261-8

Date Collected: 09/15/21 13:50

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 03:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 03:38	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 17:04	CH	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS08

Lab Sample ID: 890-1261-9

Date Collected: 09/15/21 13:53

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 03:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 03:59	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 17:21	CH	XEN MID

Client Sample ID: FS09

Lab Sample ID: 890-1261-10

Date Collected: 09/15/21 13:55

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 03:47	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 04:21	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 17:26	CH	XEN MID

Client Sample ID: FS10

Lab Sample ID: 890-1261-11

Date Collected: 09/15/21 14:21

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 04:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 04:42	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 17:43	CH	XEN MID

Client Sample ID: FS11

Lab Sample ID: 890-1261-12

Date Collected: 09/15/21 14:24

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 05:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 05:03	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 17:49	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS12

Lab Sample ID: 890-1261-13

Date Collected: 09/15/21 14:26

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 06:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 05:24	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 17:55	CH	XEN MID

Client Sample ID: FS13

Lab Sample ID: 890-1261-14

Date Collected: 09/15/21 14:29

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 06:37	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 05:45	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 18:00	CH	XEN MID

Client Sample ID: FS14

Lab Sample ID: 890-1261-15

Date Collected: 09/15/21 15:01

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 06:58	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 06:06	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 18:06	CH	XEN MID

Client Sample ID: FS15

Lab Sample ID: 890-1261-16

Date Collected: 09/15/21 15:04

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8041	09/17/21 11:43	MR	XEN MID
Total/NA	Analysis	8021B		1	8018	09/18/21 07:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			8049	09/17/21 16:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8026	09/18/21 06:27	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 18:11	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Client Sample ID: FS16

Lab Sample ID: 890-1261-17

Date Collected: 09/15/21 15:06

Matrix: Solid

Date Received: 09/16/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8016	09/17/21 09:08	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/18/21 02:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			8093	09/20/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8103	09/20/21 20:13	AJ	XEN MID
Soluble	Leach	DI Leach			8115	09/20/21 11:47	CH	XEN MID
Soluble	Analysis	300.0		1	8147	09/20/21 18:17	CH	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1261-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1261-1	PH02	Solid	09/15/21 12:51	09/16/21 12:24	1.0
890-1261-2	PH01	Solid	09/15/21 13:11	09/16/21 12:24	2.0
890-1261-3	FS01	Solid	09/15/21 13:33	09/16/21 12:24	1.0
890-1261-4	FS02	Solid	09/15/21 13:35	09/16/21 12:24	1.0
890-1261-5	FS03	Solid	09/15/21 13:38	09/16/21 12:24	1.0
890-1261-6	FS04	Solid	09/15/21 13:41	09/16/21 12:24	1.0
890-1261-7	FS06	Solid	09/15/21 13:47	09/16/21 12:24	1.0
890-1261-8	FS07	Solid	09/15/21 13:50	09/16/21 12:24	1.0
890-1261-9	FS08	Solid	09/15/21 13:53	09/16/21 12:24	1.0
890-1261-10	FS09	Solid	09/15/21 13:55	09/16/21 12:24	1.0
890-1261-11	FS10	Solid	09/15/21 14:21	09/16/21 12:24	1.0
890-1261-12	FS11	Solid	09/15/21 14:24	09/16/21 12:24	1.0
890-1261-13	FS12	Solid	09/15/21 14:26	09/16/21 12:24	1.0
890-1261-14	FS13	Solid	09/15/21 14:29	09/16/21 12:24	1.0
890-1261-15	FS14	Solid	09/15/21 15:01	09/16/21 12:24	1.0
890-1261-16	FS15	Solid	09/15/21 15:04	09/16/21 12:24	1.0
890-1261-17	FS16	Solid	09/15/21 15:06	09/16/21 12:24	1.0

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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)885-3443 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)

Chain of Custody

Work Order No: _____

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Page 1 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program:	UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Growfields	<input type="checkbox"/> RC	<input type="checkbox"/> Perturfund
State of Project:	Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Reporting Level:	EDD	<input type="checkbox"/> ADAPT	<input type="checkbox"/> Other:		

Project Name:	PLV 25 RD 261H	Turn Around	
Project Number:	314 63336.000.0129	Routine	<input checked="" type="checkbox"/>
P.O. Number:	6/1/21 50.1	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	

Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	1.4/1.2	Thermometer ID			
Received Inact:	Yes	No	Correction Factor:	TMM001	
Cooler Custody Seals:	Yes	No	Total Containers:	-0.2	
Sample Custody Seals:	Yes	No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			Sample Comments
					TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	
P1402	S	8/15/21	1:51	1.0'	X	X	X	discards
P1461			1:11	2.0'	X	X	X	discards
P501			1:33	1.0'	X	X	X	discards
P502			1:35		X	X	X	discards
P503			1:38		X	X	X	discards
P504			1:41		X	X	X	discards
P506			1:47		X	X	X	discards
P507			1:50		X	X	X	discards
P508			1:53		X	X	X	discards
P509			1:55		X	X	X	discards



890-1261 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1634124511747017471 : 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.

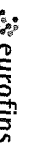
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	9.16.21 12:24			

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing
 America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No				
Client Contact:	Phone	Kramer Jessica	E-Mail	State of Origin:	890-409-1				
Shipping/Receiving Company:		Jessica.kramer@eurofinsnet.com	Accreditations Required (See note)	Page 1 of 2	Page				
Eurofins Xenco		NELAP - Louisiana, NELAP - Texas		Job #	890-1261-1				
Address	Due Date Requested								
1211 W Florida Ave	9/23/2021								
City	TAT Requested (days)								
Midland									
State/Zip									
TX 79701									
Phone	PO #								
432-704-5440(Tel)									
Email	WO #								
Project Name:	Project #								
PLU 25 BD 901H	89000004								
Site	SSOV#:								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/Oil, BT=tissue, AA=)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
PH02 (890-1261-1)	9/15/21	12 51	Mountain	Solid		X	X	X	
PH01 (890-1261-2)	9/15/21	13 11	Mountain	Solid		X	X	X	
FS01 (890-1261-3)	9/15/21	13 33	Mountain	Solid		X	X	X	
FS02 (890-1261-4)	9/15/21	13 35	Mountain	Solid		X	X	X	
FS03 (890-1261-5)	9/15/21	13 38	Mountain	Solid		X	X	X	
FS04 (890-1261-6)	9/15/21	13 41	Mountain	Solid		X	X	X	
FS06 (890-1261-7)	9/15/21	13 47	Mountain	Solid		X	X	X	
FS07 (890-1261-8)	9/15/21	13 50	Mountain	Solid		X	X	X	
FS08 (890-1261-9)	9/15/21	13 53	Mountain	Solid		X	X	X	
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco 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/testing/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>									
Possible Hazard Identification									
Unconfirmed									
Deliverable Requested I, II, III, IV Other (specify) _____ Primary Deliverable Rank: 2									
Empty Kit Relinquished by _____ Date _____									
Relinquished by <i>Cue Coy 9.16.21</i> Date/Time _____ Company _____									
Relinquished by _____ Date/Time _____ Company _____									
Custody Seals Intact: _____ Custody Seal No _____									
Cooler Temperature(s) °C and Other Remarks: <i>33/3.8</i>									



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

Chain of Custody Record



Client Information (Sub Contract Lab), Shipping/Receiving, Eurofins Xenco, Address, City, State Zip, Phone, Email, Project Name, Site, Sample Identification - Client ID (Lab ID), Sample Date, Sample Time, Sample Type, Matrix, Field Filtered Sample, Perform MS/MSD, Analysis Requested, Preservation Codes, Special Instructions/Note, Date, Time, Method of Shipment, Received by, Date/Time, Company, Cooler Temperature(s), Custody Seal No.

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1261-1

SDG Number: 31403236.022.0129

Login Number: 1261

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1261-1
SDG Number: 31403236.022.0129

Login Number: 1261
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland
List Creation: 09/17/21 11:19 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	3.3/3.8
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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1265-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/20/2021 8:07:23 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.

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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1265-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Job ID: 890-1265-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1265-1

Receipt

The samples were received on 9/17/2021 9:01 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 0.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8050 and analytical batch 880-8017 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 sample was outside control limits: FS32 (890-1265-3). 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

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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Client Sample ID: SS16

Lab Sample ID: 890-1265-1

Date Collected: 09/16/21 10:21

Matrix: Solid

Date Received: 09/17/21 09:01

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		09/18/21 10:00	09/18/21 21:59	1
Toluene	<0.00199	U F1	0.00199	mg/Kg		09/18/21 10:00	09/18/21 21:59	1
Ethylbenzene	<0.00199	U F2 F1	0.00199	mg/Kg		09/18/21 10:00	09/18/21 21:59	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398	mg/Kg		09/18/21 10:00	09/18/21 21:59	1
o-Xylene	<0.00199	U F1	0.00199	mg/Kg		09/18/21 10:00	09/18/21 21:59	1
Xylenes, Total	<0.00398	U F2 F1	0.00398	mg/Kg		09/18/21 10:00	09/18/21 21:59	1
Total BTEX	<0.00398	U F2 F1	0.00398	mg/Kg		09/18/21 10:00	09/18/21 21:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	09/18/21 10:00	09/18/21 21:59	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/18/21 10:00	09/18/21 21:59	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		09/20/21 08:36	09/20/21 13:24	1
Diesel Range Organics (Over C10-C28)	81.7		49.9	mg/Kg		09/20/21 08:36	09/20/21 13:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 08:36	09/20/21 13:24	1
Total TPH	81.7		49.9	mg/Kg		09/20/21 08:36	09/20/21 13:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/20/21 08:36	09/20/21 13:24	1
o-Terphenyl	100		70 - 130	09/20/21 08:36	09/20/21 13:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	614		5.00	mg/Kg			09/20/21 12:44	1

Client Sample ID: FS27

Lab Sample ID: 890-1265-2

Date Collected: 09/16/21 12:27

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 22:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 22:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 22:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/18/21 22:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 22:19	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/18/21 22:19	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/18/21 22:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	09/18/21 10:00	09/18/21 22:19	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/18/21 10:00	09/18/21 22:19	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Client Sample ID: FS27

Lab Sample ID: 890-1265-2

Date Collected: 09/16/21 12:27

Matrix: Solid

Date Received: 09/17/21 09:01

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	<49.9	U	49.9	mg/Kg		09/20/21 08:36	09/20/21 13:46	1
Diesel Range Organics (Over C10-C28)	76.5		49.9	mg/Kg		09/20/21 08:36	09/20/21 13:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 08:36	09/20/21 13:46	1
Total TPH	76.5		49.9	mg/Kg		09/20/21 08:36	09/20/21 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/20/21 08:36	09/20/21 13:46	1
o-Terphenyl	115		70 - 130	09/20/21 08:36	09/20/21 13:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	219		5.05	mg/Kg			09/20/21 13:01	1

Client Sample ID: FS32

Lab Sample ID: 890-1265-3

Date Collected: 09/16/21 12:59

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/18/21 22:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/18/21 22:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/18/21 22:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/18/21 22:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/18/21 22:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/18/21 22:40	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/18/21 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	09/18/21 10:00	09/18/21 22:40	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/18/21 10:00	09/18/21 22:40	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		09/20/21 08:36	09/20/21 14:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 08:36	09/20/21 14:08	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 08:36	09/20/21 14:08	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 08:36	09/20/21 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	09/20/21 08:36	09/20/21 14:08	1
o-Terphenyl	98		70 - 130	09/20/21 08:36	09/20/21 14:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	500		4.97	mg/Kg			09/20/21 13:07	1

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-1265-1	SS16	124	86
890-1265-1 MS	SS16	110	88
890-1265-1 MSD	SS16	111	85
890-1265-2	FS27	119	83
890-1265-3	FS32	135 S1+	79
LCS 880-8050/1-A	Lab Control Sample	112	88
LCSD 880-8050/2-A	Lab Control Sample Dup	104	87
MB 880-8047/5-A	Method Blank	109	83
MB 880-8050/5-A	Method Blank	105	83

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	OTPH1
		(70-130)	(70-130)
890-1265-1	SS16	94	100
890-1265-2	FS27	107	115
890-1265-3	FS32	93	98
890-1272-A-1-C MS	Matrix Spike	108	107
890-1272-A-1-D MSD	Matrix Spike Duplicate	107	104
LCS 880-8094/2-A	Lab Control Sample	111	107
LCSD 880-8094/3-A	Lab Control Sample Dup	113	110
MB 880-8094/1-A	Method Blank	97	103

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8047/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8047

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/17/21 15:34	09/18/21 10:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/17/21 15:34	09/18/21 10:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/17/21 15:34	09/18/21 10:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/17/21 15:34	09/18/21 10:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/17/21 15:34	09/18/21 10:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/17/21 15:34	09/18/21 10:44	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/17/21 15:34	09/18/21 10:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	09/17/21 15:34	09/18/21 10:44	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/17/21 15:34	09/18/21 10:44	1

Lab Sample ID: MB 880-8050/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8050

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/18/21 21:37	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		70 - 130	09/18/21 10:00	09/18/21 21:37	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/18/21 10:00	09/18/21 21:37	1

Lab Sample ID: LCS 880-8050/1-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.09645		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09150		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1982		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09831		mg/Kg		98	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8050/2-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8050

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
Benzene	0.100	0.09894		mg/Kg		99	70 - 130	2	35	
Toluene	0.100	0.09341		mg/Kg		93	70 - 130	3	35	
Ethylbenzene	0.100	0.09101		mg/Kg		91	70 - 130	1	35	
m-Xylene & p-Xylene	0.200	0.1872		mg/Kg		94	70 - 130	6	35	
o-Xylene	0.100	0.09330		mg/Kg		93	70 - 130	5	35	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: 890-1265-1 MS
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: SS16
Prep Type: Total/NA
Prep Batch: 8050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
									RPD	Limit
Benzene	<0.00199	U	0.100	0.09008		mg/Kg		90	70 - 130	
Toluene	<0.00199	U F1	0.100	0.08177		mg/Kg		82	70 - 130	
Ethylbenzene	<0.00199	U F2 F1	0.100	0.07768		mg/Kg		78	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1595		mg/Kg		80	70 - 130	
o-Xylene	<0.00199	U F1	0.100	0.08065		mg/Kg		80	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 890-1265-1 MSD
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: SS16
Prep Type: Total/NA
Prep Batch: 8050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits		
									RPD	Limit	
Benzene	<0.00199	U	0.100	0.07263		mg/Kg		73	70 - 130	21	35
Toluene	<0.00199	U F1	0.100	0.06297	F1	mg/Kg		63	70 - 130	26	35
Ethylbenzene	<0.00199	U F2 F1	0.100	0.05276	F2 F1	mg/Kg		53	70 - 130	38	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1093	F2 F1	mg/Kg		55	70 - 130	37	35
o-Xylene	<0.00199	U F1	0.100	0.05656	F1	mg/Kg		57	70 - 130	35	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8094/1-A
Matrix: Solid
Analysis Batch: 8096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8094

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		09/20/21 08:36	09/20/21 11:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 08:36	09/20/21 11:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 08:36	09/20/21 11:18	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 08:36	09/20/21 11:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/20/21 08:36	09/20/21 11:18	1
o-Terphenyl	103		70 - 130	09/20/21 08:36	09/20/21 11:18	1

Lab Sample ID: LCS 880-8094/2-A
Matrix: Solid
Analysis Batch: 8096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1140		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1059		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-8094/3-A
Matrix: Solid
Analysis Batch: 8096

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8094

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1148		mg/Kg		115	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1072		mg/Kg		107	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 890-1272-A-1-C MS
Matrix: Solid
Analysis Batch: 8096

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8094

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	997	1217		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1005		mg/Kg		96	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1272-A-1-C MS
Matrix: Solid
Analysis Batch: 8096

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8094

Surrogate	%Recovery	MS MS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-1272-A-1-D MSD
Matrix: Solid
Analysis Batch: 8096

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8094

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	
				Result	Qualifier				Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	1094		mg/Kg		107	70 - 130	11	20	
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1003		mg/Kg		96	70 - 130	0	20	

Surrogate	%Recovery	MSD MSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	104		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8112/1-A
Matrix: Solid
Analysis Batch: 8117

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			09/19/21 15:45	1

Lab Sample ID: LCS 880-8112/2-A
Matrix: Solid
Analysis Batch: 8117

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.1		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-8112/3-A
Matrix: Solid
Analysis Batch: 8117

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	244.9		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-1265-1 MS
Matrix: Solid
Analysis Batch: 8117

Client Sample ID: SS16
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	614		250	839.0		mg/Kg		90	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1265-1 MSD
Matrix: Solid
Analysis Batch: 8117

Client Sample ID: SS16
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	614		250	838.8		mg/Kg		90	90 - 110	0	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

GC VOA

Analysis Batch: 8017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1265-1	SS16	Total/NA	Solid	8021B	8050
890-1265-2	FS27	Total/NA	Solid	8021B	8050
890-1265-3	FS32	Total/NA	Solid	8021B	8050
MB 880-8047/5-A	Method Blank	Total/NA	Solid	8021B	8047
MB 880-8050/5-A	Method Blank	Total/NA	Solid	8021B	8050
LCS 880-8050/1-A	Lab Control Sample	Total/NA	Solid	8021B	8050
LCSD 880-8050/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8050
890-1265-1 MS	SS16	Total/NA	Solid	8021B	8050
890-1265-1 MSD	SS16	Total/NA	Solid	8021B	8050

Prep Batch: 8047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8047/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1265-1	SS16	Total/NA	Solid	5035	
890-1265-2	FS27	Total/NA	Solid	5035	
890-1265-3	FS32	Total/NA	Solid	5035	
MB 880-8050/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8050/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8050/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1265-1 MS	SS16	Total/NA	Solid	5035	
890-1265-1 MSD	SS16	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 8094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1265-1	SS16	Total/NA	Solid	8015NM Prep	
890-1265-2	FS27	Total/NA	Solid	8015NM Prep	
890-1265-3	FS32	Total/NA	Solid	8015NM Prep	
MB 880-8094/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8094/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8094/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1272-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1272-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1265-1	SS16	Total/NA	Solid	8015B NM	8094
890-1265-2	FS27	Total/NA	Solid	8015B NM	8094
890-1265-3	FS32	Total/NA	Solid	8015B NM	8094
MB 880-8094/1-A	Method Blank	Total/NA	Solid	8015B NM	8094
LCS 880-8094/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8094
LCSD 880-8094/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8094
890-1272-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	8094
890-1272-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8094

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
 SDG: 31403236.022.0129

HPLC/IC

Leach Batch: 8112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1265-1	SS16	Soluble	Solid	DI Leach	
890-1265-2	FS27	Soluble	Solid	DI Leach	
890-1265-3	FS32	Soluble	Solid	DI Leach	
MB 880-8112/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8112/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8112/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1265-1 MS	SS16	Soluble	Solid	DI Leach	
890-1265-1 MSD	SS16	Soluble	Solid	DI Leach	

Analysis Batch: 8117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1265-1	SS16	Soluble	Solid	300.0	8112
890-1265-2	FS27	Soluble	Solid	300.0	8112
890-1265-3	FS32	Soluble	Solid	300.0	8112
MB 880-8112/1-A	Method Blank	Soluble	Solid	300.0	8112
LCS 880-8112/2-A	Lab Control Sample	Soluble	Solid	300.0	8112
LCSD 880-8112/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8112
890-1265-1 MS	SS16	Soluble	Solid	300.0	8112
890-1265-1 MSD	SS16	Soluble	Solid	300.0	8112

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Client Sample ID: SS16

Lab Sample ID: 890-1265-1

Date Collected: 09/16/21 10:21

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8050	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/18/21 21:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			8094	09/20/21 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8096	09/20/21 13:24	AJ	XEN MID
Soluble	Leach	DI Leach			8112	09/20/21 12:17	SC	XEN MID
Soluble	Analysis	300.0		1	8117	09/20/21 12:44	CH	XEN MID

Client Sample ID: FS27

Lab Sample ID: 890-1265-2

Date Collected: 09/16/21 12:27

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8050	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/18/21 22:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			8094	09/20/21 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8096	09/20/21 13:46	AJ	XEN MID
Soluble	Leach	DI Leach			8112	09/20/21 12:17	SC	XEN MID
Soluble	Analysis	300.0		1	8117	09/20/21 13:01	CH	XEN MID

Client Sample ID: FS32

Lab Sample ID: 890-1265-3

Date Collected: 09/16/21 12:59

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8050	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/18/21 22:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			8094	09/20/21 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8096	09/20/21 14:08	AJ	XEN MID
Soluble	Leach	DI Leach			8112	09/20/21 12:17	SC	XEN MID
Soluble	Analysis	300.0		1	8117	09/20/21 13:07	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1265-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1265-1	SS16	Solid	09/16/21 10:21	09/17/21 09:01	0.5
890-1265-2	FS27	Solid	09/16/21 12:27	09/17/21 09:01	1
890-1265-3	FS32	Solid	09/16/21 12:59	09/17/21 09:01	1

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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)

Chain of Custody
Work Order No: _____
www.xenco.com Page 1 of 1

Project Manager: Dan Moir
Company Name: WSP USA
Address: 3300 North A Street
City, State ZIP: Midland, TX 79705
Phone: (432) 236-3849
Bill to: (if different) Kyle Littlell
Company Name: XTO Energy
Address: 522 W. Mermod St.
City, State ZIP: Carlsbad, NM 88220
Email: jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program: UST/PST RP Trownfalls RC \$perfund
State of Project:
Reporting Level: Level II Level III PT/UST RP Level IV
Deliverables: EDD ADAPT Other: _____

Project Name: PLU 25 RD 90114 Turn Around
Project Number: 31403236.002.0119 Routine
P.O. Number: 50.1 6/1/21 Rush: JYH
Sampler's Name: Jeremy Hill Due Date: 9/20/21

SAMPLE RECEIPT
Temperature (°C): 08 / 6.6 Thermometer ID: T-NM-007
Received Intact: Yes No Correction Factor: -0.7
Cooler Custody Seals: Yes No N/A Total Containers:
Sample Custody Seals: Yes No N/A



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Work Order Notes
SS16	S	9-16-21	1621	0.5	1	X	X	X	Inc NA PD 0116546260 CC 1666621001 API 30-615-45863
FS37			1227	1.0					
FS32			1259	1.0					discrete equate

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631/245.1/7470.1/7471.Hg

Relinquished by: (Signature) Received by: (Signature) Date/Time
1 [Signature] N. [Signature] 9/17/21 9:01
2
3 [Signature] 4
5
6

Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)		COC No																																				
Client Contact:	Phone	Kramer Jessica	E-Mail	State of Origin	890-411 1	890-411 1																																				
Shipping/Receiving	Eurofins Xenco	Accreditations Required (See note) NELAP - Louisiana NELAP - Texas		New Mexico	Page 1 of 1	Page 1 of 1																																				
Address	1211 W Florida Ave	Due Date Requested	9/20/2021	Job #: 890-1265-1																																						
City	Midland	TAT Requested (days)		Preservation Codes																																						
State Zip:	TX 79701	PO #		A. HCl	B. NaOH	M. Hexane																																				
Phone	432-704-5440(Tel)	WO #		C. Zn Acetate	D. Nitric Acid	N. None																																				
Email		Project #	89000004	E. NaHSO4	F. MeOH	O. AsH2O2																																				
Project Name	PLU 25 BD 901H	SSOW#		G. Amchlor	H. Ascorbic Acid	P. Na2O4S																																				
Site		Field Filtered Sample (Yes or No)		I. Ice	J. DI Water	Q. Na2SO3																																				
			Perform MS/MSD (Yes or No)	K. EDTA	L. EDTA	R. Na2S2O3																																				
			8015MOD_NM/8015NM_S_Prep Full TPH	S. H2SO4																																						
			300_ORGFM_28D/DI_LEACH Chloride	T. TSP Dodecalhydrate																																						
			8021B/6035FP_Calc BTEX	U. Acetone																																						
				V. MCAA																																						
				W. pH 4.5																																						
				Z. other (specify)																																						
				Other:																																						
<table border="1"> <thead> <tr> <th>Sample Identification - Client ID (Lab ID)</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=C-comp, G=grab)</th> <th>Matrix (V=water S=solid O=overstool B=T-tissue A=Air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>Total Number of containers</th> <th>Special Instructions/Note</th> </tr> </thead> <tbody> <tr> <td>SS16 (890-1265-1)</td> <td>9/16/21</td> <td>10 21</td> <td>Mountain</td> <td>Solid</td> <td>X</td> <td>X</td> <td>1</td> <td></td> </tr> <tr> <td>FS27 (890-1265-2)</td> <td>9/16/21</td> <td>12 27</td> <td>Mountain</td> <td>Solid</td> <td>X</td> <td>X</td> <td>1</td> <td></td> </tr> <tr> <td>FS32 (890-1265-3)</td> <td>9/16/21</td> <td>12 59</td> <td>Mountain</td> <td>Solid</td> <td>X</td> <td>X</td> <td>1</td> <td></td> </tr> </tbody> </table>							Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=C-comp, G=grab)	Matrix (V=water S=solid O=overstool B=T-tissue A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note	SS16 (890-1265-1)	9/16/21	10 21	Mountain	Solid	X	X	1		FS27 (890-1265-2)	9/16/21	12 27	Mountain	Solid	X	X	1		FS32 (890-1265-3)	9/16/21	12 59	Mountain	Solid	X	X	1	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=C-comp, G=grab)	Matrix (V=water S=solid O=overstool B=T-tissue A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note																																		
SS16 (890-1265-1)	9/16/21	10 21	Mountain	Solid	X	X	1																																			
FS27 (890-1265-2)	9/16/21	12 27	Mountain	Solid	X	X	1																																			
FS32 (890-1265-3)	9/16/21	12 59	Mountain	Solid	X	X	1																																			
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analysis & 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.																																										
Possible Hazard Identification Unconfirmed Deliverable Requested: I II III IV Other (specify) _____ Primary Deliverable Rank: 2 Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____ Relinquished by: <i>Clare Coy</i> Date/Time: <i>9.17.21</i> Company: _____ Received by: <i>[Signature]</i> Date/Time: <i>9/16/21</i> Company: <i>[Signature]</i> Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____ Custody Seals Intact: _____ Custody Seal No: _____ Cooler Temperature(s) °C and Other Remarks: _____ A Yes Δ No																																										
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																										
Special Instructions/QC Requirements																																										

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1265-1

SDG Number: 31403236.022.0129

Login Number: 1265

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1265-1

SDG Number: 31403236.022.0129

Login Number: 1265

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/18/21 01:37 PM

Creator: Lowe, Katie

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

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1269-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/24/2021 3:28:52 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.

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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1269-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Job ID: 890-1269-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1269-1

Receipt

The samples were received on 9/17/2021 9:01 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 0.6°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.

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: PH03

Lab Sample ID: 890-1269-1

Date Collected: 09/16/21 09:04

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199	mg/Kg		09/18/21 10:00	09/19/21 08:49	1
Toluene	<0.00199	U F2 F1	0.00199	mg/Kg		09/18/21 10:00	09/19/21 08:49	1
Ethylbenzene	<0.00199	U F2 F1	0.00199	mg/Kg		09/18/21 10:00	09/19/21 08:49	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398	mg/Kg		09/18/21 10:00	09/19/21 08:49	1
o-Xylene	<0.00199	U F2 F1	0.00199	mg/Kg		09/18/21 10:00	09/19/21 08:49	1
Xylenes, Total	<0.00398	U F2 F1	0.00398	mg/Kg		09/18/21 10:00	09/19/21 08:49	1
Total BTEX	<0.00398	U F2 F1	0.00398	mg/Kg		09/18/21 10:00	09/19/21 08:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/18/21 10:00	09/19/21 08:49	1
1,4-Difluorobenzene (Surr)	74		70 - 130	09/18/21 10:00	09/19/21 08:49	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		09/20/21 11:32	09/21/21 12:06	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 12:06	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 12:06	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 12:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	09/20/21 11:32	09/21/21 12:06	1
o-Terphenyl	122		70 - 130	09/20/21 11:32	09/21/21 12:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.3		4.96	mg/Kg			09/23/21 11:28	1

Client Sample ID: FS18

Lab Sample ID: 890-1269-2

Date Collected: 09/16/21 11:01

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 09:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 09:10	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 09:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/18/21 10:00	09/19/21 09:10	1
1,4-Difluorobenzene (Surr)	81		70 - 130	09/18/21 10:00	09/19/21 09:10	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS18

Lab Sample ID: 890-1269-2

Date Collected: 09/16/21 11:01

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

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		09/20/21 11:32	09/21/21 13:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 13:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 13:08	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 13:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/20/21 11:32	09/21/21 13:08	1
o-Terphenyl	101		70 - 130	09/20/21 11:32	09/21/21 13:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	403		5.00	mg/Kg			09/23/21 11:34	1

Client Sample ID: FS19

Lab Sample ID: 890-1269-3

Date Collected: 09/16/21 11:03

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/19/21 09:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:30	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/19/21 09:30	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/19/21 09:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	09/18/21 10:00	09/19/21 09:30	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/18/21 10:00	09/19/21 09:30	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		09/20/21 11:32	09/21/21 13:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 13:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 13:28	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 13:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/20/21 11:32	09/21/21 13:28	1
o-Terphenyl	101		70 - 130	09/20/21 11:32	09/21/21 13:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	383		5.03	mg/Kg			09/23/21 11:40	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS20

Lab Sample ID: 890-1269-4

Date Collected: 09/16/21 11:06

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 09:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 09:51	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 09:51	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 09:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	09/18/21 10:00	09/19/21 09:51	1
1,4-Difluorobenzene (Surr)	80		70 - 130	09/18/21 10:00	09/19/21 09:51	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		09/20/21 11:32	09/21/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 13:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 13:49	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/20/21 11:32	09/21/21 13:49	1
o-Terphenyl	102		70 - 130	09/20/21 11:32	09/21/21 13:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	539		4.98	mg/Kg			09/23/21 11:57	1

Client Sample ID: FS21

Lab Sample ID: 890-1269-5

Date Collected: 09/16/21 11:08

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 10:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:11	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 10:11	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 10:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130	09/18/21 10:00	09/19/21 10:11	1
1,4-Difluorobenzene (Surr)	75		70 - 130	09/18/21 10:00	09/19/21 10:11	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS21

Lab Sample ID: 890-1269-5

Date Collected: 09/16/21 11:08

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

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		09/20/21 11:32	09/21/21 14:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 14:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 14:10	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	09/20/21 11:32	09/21/21 14:10	1
o-Terphenyl	86		70 - 130	09/20/21 11:32	09/21/21 14:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	336		4.96	mg/Kg			09/23/21 12:02	1

Client Sample ID: FS22

Lab Sample ID: 890-1269-6

Date Collected: 09/16/21 11:10

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/18/21 10:00	09/19/21 10:31	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/18/21 10:00	09/19/21 10:31	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/18/21 10:00	09/19/21 10:31	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/18/21 10:00	09/19/21 10:31	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/18/21 10:00	09/19/21 10:31	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/18/21 10:00	09/19/21 10:31	1
Total BTEX	<0.00403	U	0.00403	mg/Kg		09/18/21 10:00	09/19/21 10:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/18/21 10:00	09/19/21 10:31	1
1,4-Difluorobenzene (Surr)	81		70 - 130	09/18/21 10:00	09/19/21 10:31	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		09/20/21 11:32	09/21/21 14:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 14:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 14:30	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/20/21 11:32	09/21/21 14:30	1
o-Terphenyl	99		70 - 130	09/20/21 11:32	09/21/21 14:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	482		5.04	mg/Kg			09/23/21 15:02	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS23

Lab Sample ID: 890-1269-7

Date Collected: 09/16/21 11:13

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 10:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130			09/18/21 10:00	09/19/21 10:52	1
1,4-Difluorobenzene (Surr)	80		70 - 130			09/18/21 10:00	09/19/21 10:52	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	49.9	mg/Kg		09/20/21 11:32	09/21/21 14:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 14:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 14:51	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 14:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			09/20/21 11:32	09/21/21 14:51	1
o-Terphenyl	95		70 - 130			09/20/21 11:32	09/21/21 14:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	612		4.95	mg/Kg			09/23/21 15:22	1

Client Sample ID: FS24

Lab Sample ID: 890-1269-8

Date Collected: 09/16/21 12:20

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 11:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130			09/18/21 10:00	09/19/21 11:12	1
1,4-Difluorobenzene (Surr)	78		70 - 130			09/18/21 10:00	09/19/21 11:12	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS24

Lab Sample ID: 890-1269-8

Date Collected: 09/16/21 12:20

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

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		09/20/21 11:32	09/21/21 15:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 15:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 15:12	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/20/21 11:32	09/21/21 15:12	1
o-Terphenyl	97		70 - 130	09/20/21 11:32	09/21/21 15:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	306		5.01	mg/Kg			09/23/21 16:00	1

Client Sample ID: FS25

Lab Sample ID: 890-1269-9

Date Collected: 09/16/21 12:23

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 11:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 11:33	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 11:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/18/21 10:00	09/19/21 11:33	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/18/21 10:00	09/19/21 11:33	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		09/20/21 11:32	09/21/21 15:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 15:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 15:33	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	09/20/21 11:32	09/21/21 15:33	1
o-Terphenyl	98		70 - 130	09/20/21 11:32	09/21/21 15:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	695		4.97	mg/Kg			09/23/21 16:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS26

Lab Sample ID: 890-1269-10

Date Collected: 09/16/21 12:25

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 11:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130			09/18/21 10:00	09/19/21 11:53	1
1,4-Difluorobenzene (Surr)	81		70 - 130			09/18/21 10:00	09/19/21 11:53	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	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 15:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 15:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 15:54	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 15:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			09/20/21 11:32	09/21/21 15:54	1
o-Terphenyl	100		70 - 130			09/20/21 11:32	09/21/21 15:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.0		4.98	mg/Kg			09/23/21 16:11	1

Client Sample ID: FS29

Lab Sample ID: 890-1269-11

Date Collected: 09/16/21 12:49

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
Total BTEX	<0.00396	U	0.00396	mg/Kg		09/18/21 10:00	09/19/21 13:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			09/18/21 10:00	09/19/21 13:24	1
1,4-Difluorobenzene (Surr)	89		70 - 130			09/18/21 10:00	09/19/21 13:24	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS29

Lab Sample ID: 890-1269-11

Date Collected: 09/16/21 12:49

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

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		09/20/21 11:32	09/21/21 16:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 16:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 16:35	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/20/21 11:32	09/21/21 16:35	1
o-Terphenyl	108		70 - 130	09/20/21 11:32	09/21/21 16:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.8		5.00	mg/Kg			09/23/21 16:28	1

Client Sample ID: FS30

Lab Sample ID: 890-1269-12

Date Collected: 09/16/21 12:53

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 13:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 13:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 13:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 13:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 13:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 13:44	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	09/18/21 10:00	09/19/21 13:44	1
1,4-Difluorobenzene (Surr)	80		70 - 130	09/18/21 10:00	09/19/21 13:44	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		09/20/21 11:32	09/21/21 16:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 16:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 16:56	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/20/21 11:32	09/21/21 16:56	1
o-Terphenyl	98		70 - 130	09/20/21 11:32	09/21/21 16:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		4.96	mg/Kg			09/23/21 16:34	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS31

Lab Sample ID: 890-1269-13

Date Collected: 09/16/21 12:55

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 14:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 14:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 14:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 14:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 14:05	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 14:05	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/18/21 10:00	09/19/21 14:05	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/18/21 10:00	09/19/21 14:05	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		09/20/21 11:32	09/21/21 17:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 17:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 17:17	1
Total TPH	<49.9	U	49.9	mg/Kg		09/20/21 11:32	09/21/21 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/20/21 11:32	09/21/21 17:17	1
o-Terphenyl	98		70 - 130	09/20/21 11:32	09/21/21 17:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.8		5.00	mg/Kg			09/23/21 16:39	1

Client Sample ID: FS33

Lab Sample ID: 890-1269-14

Date Collected: 09/16/21 13:03

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 14:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 14:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 14:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/18/21 10:00	09/19/21 14:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/18/21 10:00	09/19/21 14:25	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/18/21 10:00	09/19/21 14:25	1
Total BTEX	<0.00397	U	0.00397	mg/Kg		09/18/21 10:00	09/19/21 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/18/21 10:00	09/19/21 14:25	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130	09/18/21 10:00	09/19/21 14:25	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS33

Lab Sample ID: 890-1269-14

Date Collected: 09/16/21 13:03

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

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		09/20/21 11:32	09/21/21 17:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 17:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 17:37	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/20/21 11:32	09/21/21 17:37	1
o-Terphenyl	108		70 - 130	09/20/21 11:32	09/21/21 17:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	179		4.95	mg/Kg			09/23/21 16:45	1

Client Sample ID: FS34

Lab Sample ID: 890-1269-15

Date Collected: 09/16/21 13:27

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 14:45	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 14:45	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 14:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 14:45	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 14:45	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 14:45	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/18/21 10:00	09/19/21 14:45	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/18/21 10:00	09/19/21 14:45	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		09/20/21 11:32	09/21/21 17:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 17:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 17:58	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	09/20/21 11:32	09/21/21 17:58	1
o-Terphenyl	98		70 - 130	09/20/21 11:32	09/21/21 17:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.8		4.95	mg/Kg			09/23/21 16:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS35

Lab Sample ID: 890-1269-16

Date Collected: 09/16/21 13:29

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			09/18/21 10:00	09/19/21 15:06	1
1,4-Difluorobenzene (Surr)	78		70 - 130			09/18/21 10:00	09/19/21 15:06	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		09/20/21 11:32	09/21/21 18:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 18:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 18:19	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			09/20/21 11:32	09/21/21 18:19	1
o-Terphenyl	95		70 - 130			09/20/21 11:32	09/21/21 18:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	123		5.01	mg/Kg			09/23/21 16:56	1

Client Sample ID: FS36

Lab Sample ID: 890-1269-17

Date Collected: 09/16/21 13:32

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/18/21 10:00	09/19/21 15:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			09/18/21 10:00	09/19/21 15:26	1
1,4-Difluorobenzene (Surr)	74		70 - 130			09/18/21 10:00	09/19/21 15:26	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS36

Lab Sample ID: 890-1269-17

Date Collected: 09/16/21 13:32

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 1.0

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		09/20/21 11:32	09/21/21 18:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 18:39	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 18:39	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/20/21 11:32	09/21/21 18:39	1
o-Terphenyl	95		70 - 130	09/20/21 11:32	09/21/21 18:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		4.97	mg/Kg			09/23/21 17:13	1

Client Sample ID: PH05

Lab Sample ID: 890-1269-18

Date Collected: 09/16/21 14:01

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/18/21 10:00	09/19/21 15:47	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/18/21 10:00	09/19/21 15:47	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/18/21 10:00	09/19/21 15:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/18/21 10:00	09/19/21 15:47	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/18/21 10:00	09/19/21 15:47	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/18/21 10:00	09/19/21 15:47	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		09/18/21 10:00	09/19/21 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/18/21 10:00	09/19/21 15:47	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/18/21 10:00	09/19/21 15:47	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		09/20/21 11:32	09/21/21 19:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 19:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 19:00	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/20/21 11:32	09/21/21 19:00	1
o-Terphenyl	97		70 - 130	09/20/21 11:32	09/21/21 19:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1140		4.98	mg/Kg			09/23/21 17:19	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: PH06

Lab Sample ID: 890-1269-19

Date Collected: 09/16/21 14:03

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 16:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:07	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 16:07	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		09/18/21 10:00	09/19/21 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	09/18/21 10:00	09/19/21 16:07	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/18/21 10:00	09/19/21 16:07	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	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 19:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 19:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 19:20	1
Total TPH	<49.8	U	49.8	mg/Kg		09/20/21 11:32	09/21/21 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/20/21 11:32	09/21/21 19:20	1
o-Terphenyl	93		70 - 130	09/20/21 11:32	09/21/21 19:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	552		4.96	mg/Kg			09/23/21 17:36	1

Client Sample ID: PH07

Lab Sample ID: 890-1269-20

Date Collected: 09/16/21 14:46

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/19/21 16:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 16:28	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/19/21 16:28	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		09/18/21 10:00	09/19/21 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	09/18/21 10:00	09/19/21 16:28	1
1,4-Difluorobenzene (Surr)	55	S1-	70 - 130	09/18/21 10:00	09/19/21 16:28	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: PH07

Lab Sample ID: 890-1269-20

Date Collected: 09/16/21 14:46

Matrix: Solid

Date Received: 09/17/21 09:01

Sample Depth: 2.0

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		09/20/21 11:32	09/21/21 19:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 19:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 19:40	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/20/21 11:32	09/21/21 19:40	1
o-Terphenyl	104		70 - 130	09/20/21 11:32	09/21/21 19:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		4.95	mg/Kg			09/23/21 17:41	1

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
 SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1269-1	PH03	100	74
890-1269-1 MS	PH03	116	79
890-1269-1 MSD	PH03	108	78
890-1269-2	FS18	125	81
890-1269-3	FS19	131 S1+	79
890-1269-4	FS20	135 S1+	80
890-1269-5	FS21	136 S1+	75
890-1269-6	FS22	125	81
890-1269-7	FS23	131 S1+	80
890-1269-8	FS24	127	78
890-1269-9	FS25	121	78
890-1269-10	FS26	128	81
890-1269-11	FS29	113	89
890-1269-12	FS30	122	80
890-1269-13	FS31	125	79
890-1269-14	FS33	112	65 S1-
890-1269-15	FS34	102	76
890-1269-16	FS35	122	78
890-1269-17	FS36	97	74
890-1269-18	PH05	111	78
890-1269-19	PH06	122	83
890-1269-20	PH07	86	55 S1-
LCS 880-8059/1-A	Lab Control Sample	112	75
LCS D 880-8059/2-A	Lab Control Sample Dup	116	81
MB 880-8050/5-A	Method Blank	105	83
MB 880-8059/5-A	Method Blank	112	77

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1269-1	PH03	114	122
890-1269-1 MS	PH03	103	98
890-1269-1 MSD	PH03	99	95
890-1269-2	FS18	98	101
890-1269-3	FS19	97	101
890-1269-4	FS20	98	102
890-1269-5	FS21	82	86
890-1269-6	FS22	97	99
890-1269-7	FS23	92	95
890-1269-8	FS24	94	97
890-1269-9	FS25	93	98
890-1269-10	FS26	96	100
890-1269-11	FS29	103	108

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Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
 SDG: 31403236.022.0129

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1269-12	FS30	94	98
890-1269-13	FS31	94	98
890-1269-14	FS33	109	108
890-1269-15	FS34	100	98
890-1269-16	FS35	99	95
890-1269-17	FS36	98	95
890-1269-18	PH05	101	97
890-1269-19	PH06	94	93
890-1269-20	PH07	107	104
LCS 880-8113/2-A	Lab Control Sample	92	89
LCSD 880-8113/3-A	Lab Control Sample Dup	91	87
MB 880-8113/1-A	Method Blank	89	95

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8050/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8050

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/18/21 21:37	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/18/21 21:37	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		70 - 130	09/18/21 10:00	09/18/21 21:37	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/18/21 10:00	09/18/21 21:37	1

Lab Sample ID: MB 880-8059/5-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8059

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 08:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 08:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 08:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 08:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/18/21 10:00	09/19/21 08:28	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 08:28	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/18/21 10:00	09/19/21 08:28	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	112		70 - 130	09/18/21 10:00	09/19/21 08:28	1
1,4-Difluorobenzene (Surr)	77		70 - 130	09/18/21 10:00	09/19/21 08:28	1

Lab Sample ID: LCS 880-8059/1-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8059

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.08394		mg/Kg		84	70 - 130
Toluene	0.100	0.08794		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.08790		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1835		mg/Kg		92	70 - 130
o-Xylene	0.100	0.09153		mg/Kg		92	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8059/2-A
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8059

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Benzene	0.100	0.09261		mg/Kg		93	70 - 130	10	35	
Toluene	0.100	0.09410		mg/Kg		94	70 - 130	7	35	
Ethylbenzene	0.100	0.09057		mg/Kg		91	70 - 130	3	35	
m-Xylene & p-Xylene	0.200	0.1934		mg/Kg		97	70 - 130	5	35	
o-Xylene	0.100	0.09661		mg/Kg		97	70 - 130	5	35	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

Lab Sample ID: 890-1269-1 MS
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 8059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U F2 F1	0.101	0.06983	F1	mg/Kg		69	70 - 130		35	
Toluene	<0.00199	U F2 F1	0.101	0.07120		mg/Kg		70	70 - 130		35	
Ethylbenzene	<0.00199	U F2 F1	0.101	0.06931	F1	mg/Kg		69	70 - 130		35	
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.202	0.1444		mg/Kg		71	70 - 130		35	
o-Xylene	<0.00199	U F2 F1	0.101	0.07416		mg/Kg		72	70 - 130		35	

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: 890-1269-1 MSD
Matrix: Solid
Analysis Batch: 8017

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 8059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U F2 F1	0.0996	0.04579	F2 F1	mg/Kg		46	70 - 130	42	35	
Toluene	<0.00199	U F2 F1	0.0996	0.04012	F2 F1	mg/Kg		40	70 - 130	56	35	
Ethylbenzene	<0.00199	U F2 F1	0.0996	0.04482	F2 F1	mg/Kg		45	70 - 130	43	35	
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.09693	F2 F1	mg/Kg		48	70 - 130	39	35	
o-Xylene	<0.00199	U F2 F1	0.0996	0.04974	F2 F1	mg/Kg		49	70 - 130	39	35	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8113/1-A
Matrix: Solid
Analysis Batch: 8175

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8113

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		09/20/21 11:32	09/21/21 11:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 11:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 11:05	1
Total TPH	<50.0	U	50.0	mg/Kg		09/20/21 11:32	09/21/21 11:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/20/21 11:32	09/21/21 11:05	1
o-Terphenyl	95		70 - 130	09/20/21 11:32	09/21/21 11:05	1

Lab Sample ID: LCS 880-8113/2-A
Matrix: Solid
Analysis Batch: 8175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	835.4		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	866.0		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-8113/3-A
Matrix: Solid
Analysis Batch: 8175

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8113

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	872.9		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	853.6		mg/Kg		85	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-1269-1 MS
Matrix: Solid
Analysis Batch: 8175

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 8113

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	997	1053		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	895.5		mg/Kg		88	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1269-1 MS
Matrix: Solid
Analysis Batch: 8175

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 8113

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-1269-1 MSD
Matrix: Solid
Analysis Batch: 8175

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 8113

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	999	948.2		mg/Kg		92	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	882.8		mg/Kg		87	70 - 130	1	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8123/1-A
Matrix: Solid
Analysis Batch: 8272

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			09/23/21 10:04	1

Lab Sample ID: LCS 880-8123/2-A
Matrix: Solid
Analysis Batch: 8272

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	262.4		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-8123/3-A
Matrix: Solid
Analysis Batch: 8272

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

Lab Sample ID: 890-1269-3 MS
Matrix: Solid
Analysis Batch: 8272

Client Sample ID: FS19
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	383		252	642.0		mg/Kg		103	90 - 110

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1269-3 MSD
Matrix: Solid
Analysis Batch: 8274

Client Sample ID: FS19
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	383		252	642.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: MB 880-8124/1-A
Matrix: Solid
Analysis Batch: 8274

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			09/23/21 14:33	1

Lab Sample ID: LCS 880-8124/2-A
Matrix: Solid
Analysis Batch: 8274

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

Lab Sample ID: LCSD 880-8124/3-A
Matrix: Solid
Analysis Batch: 8274

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	250.2		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-1269-6 MS
Matrix: Solid
Analysis Batch: 8274

Client Sample ID: FS22
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	482		252	726.1		mg/Kg		97	90 - 110

Lab Sample ID: 890-1269-6 MSD
Matrix: Solid
Analysis Batch: 8274

Client Sample ID: FS22
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	482		252	727.7		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-1269-16 MS
Matrix: Solid
Analysis Batch: 8274

Client Sample ID: FS35
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	123		251	385.4		mg/Kg		105	90 - 110

Lab Sample ID: 890-1269-16 MSD
Matrix: Solid
Analysis Batch: 8274

Client Sample ID: FS35
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	123		251	386.7		mg/Kg		105	90 - 110	0	20

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
 SDG: 31403236.022.0129

GC VOA

Analysis Batch: 8017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-1	PH03	Total/NA	Solid	8021B	8059
890-1269-2	FS18	Total/NA	Solid	8021B	8059
890-1269-3	FS19	Total/NA	Solid	8021B	8059
890-1269-4	FS20	Total/NA	Solid	8021B	8059
890-1269-5	FS21	Total/NA	Solid	8021B	8059
890-1269-6	FS22	Total/NA	Solid	8021B	8059
890-1269-7	FS23	Total/NA	Solid	8021B	8059
890-1269-8	FS24	Total/NA	Solid	8021B	8059
890-1269-9	FS25	Total/NA	Solid	8021B	8059
890-1269-10	FS26	Total/NA	Solid	8021B	8059
890-1269-11	FS29	Total/NA	Solid	8021B	8059
890-1269-12	FS30	Total/NA	Solid	8021B	8059
890-1269-13	FS31	Total/NA	Solid	8021B	8059
890-1269-14	FS33	Total/NA	Solid	8021B	8059
890-1269-15	FS34	Total/NA	Solid	8021B	8059
890-1269-16	FS35	Total/NA	Solid	8021B	8059
890-1269-17	FS36	Total/NA	Solid	8021B	8059
890-1269-18	PH05	Total/NA	Solid	8021B	8059
890-1269-19	PH06	Total/NA	Solid	8021B	8059
890-1269-20	PH07	Total/NA	Solid	8021B	8059
MB 880-8050/5-A	Method Blank	Total/NA	Solid	8021B	8050
MB 880-8059/5-A	Method Blank	Total/NA	Solid	8021B	8059
LCS 880-8059/1-A	Lab Control Sample	Total/NA	Solid	8021B	8059
LCSD 880-8059/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8059
890-1269-1 MS	PH03	Total/NA	Solid	8021B	8059
890-1269-1 MSD	PH03	Total/NA	Solid	8021B	8059

Prep Batch: 8050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8050/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-1	PH03	Total/NA	Solid	5035	
890-1269-2	FS18	Total/NA	Solid	5035	
890-1269-3	FS19	Total/NA	Solid	5035	
890-1269-4	FS20	Total/NA	Solid	5035	
890-1269-5	FS21	Total/NA	Solid	5035	
890-1269-6	FS22	Total/NA	Solid	5035	
890-1269-7	FS23	Total/NA	Solid	5035	
890-1269-8	FS24	Total/NA	Solid	5035	
890-1269-9	FS25	Total/NA	Solid	5035	
890-1269-10	FS26	Total/NA	Solid	5035	
890-1269-11	FS29	Total/NA	Solid	5035	
890-1269-12	FS30	Total/NA	Solid	5035	
890-1269-13	FS31	Total/NA	Solid	5035	
890-1269-14	FS33	Total/NA	Solid	5035	
890-1269-15	FS34	Total/NA	Solid	5035	
890-1269-16	FS35	Total/NA	Solid	5035	
890-1269-17	FS36	Total/NA	Solid	5035	
890-1269-18	PH05	Total/NA	Solid	5035	

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
 SDG: 31403236.022.0129

GC VOA (Continued)

Prep Batch: 8059 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-19	PH06	Total/NA	Solid	5035	
890-1269-20	PH07	Total/NA	Solid	5035	
MB 880-8059/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8059/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8059/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1269-1 MS	PH03	Total/NA	Solid	5035	
890-1269-1 MSD	PH03	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 8113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-1	PH03	Total/NA	Solid	8015NM Prep	
890-1269-2	FS18	Total/NA	Solid	8015NM Prep	
890-1269-3	FS19	Total/NA	Solid	8015NM Prep	
890-1269-4	FS20	Total/NA	Solid	8015NM Prep	
890-1269-5	FS21	Total/NA	Solid	8015NM Prep	
890-1269-6	FS22	Total/NA	Solid	8015NM Prep	
890-1269-7	FS23	Total/NA	Solid	8015NM Prep	
890-1269-8	FS24	Total/NA	Solid	8015NM Prep	
890-1269-9	FS25	Total/NA	Solid	8015NM Prep	
890-1269-10	FS26	Total/NA	Solid	8015NM Prep	
890-1269-11	FS29	Total/NA	Solid	8015NM Prep	
890-1269-12	FS30	Total/NA	Solid	8015NM Prep	
890-1269-13	FS31	Total/NA	Solid	8015NM Prep	
890-1269-14	FS33	Total/NA	Solid	8015NM Prep	
890-1269-15	FS34	Total/NA	Solid	8015NM Prep	
890-1269-16	FS35	Total/NA	Solid	8015NM Prep	
890-1269-17	FS36	Total/NA	Solid	8015NM Prep	
890-1269-18	PH05	Total/NA	Solid	8015NM Prep	
890-1269-19	PH06	Total/NA	Solid	8015NM Prep	
890-1269-20	PH07	Total/NA	Solid	8015NM Prep	
MB 880-8113/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8113/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8113/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1269-1 MS	PH03	Total/NA	Solid	8015NM Prep	
890-1269-1 MSD	PH03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-1	PH03	Total/NA	Solid	8015B NM	8113
890-1269-2	FS18	Total/NA	Solid	8015B NM	8113
890-1269-3	FS19	Total/NA	Solid	8015B NM	8113
890-1269-4	FS20	Total/NA	Solid	8015B NM	8113
890-1269-5	FS21	Total/NA	Solid	8015B NM	8113
890-1269-6	FS22	Total/NA	Solid	8015B NM	8113
890-1269-7	FS23	Total/NA	Solid	8015B NM	8113
890-1269-8	FS24	Total/NA	Solid	8015B NM	8113
890-1269-9	FS25	Total/NA	Solid	8015B NM	8113
890-1269-10	FS26	Total/NA	Solid	8015B NM	8113
890-1269-11	FS29	Total/NA	Solid	8015B NM	8113

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 8175 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-12	FS30	Total/NA	Solid	8015B NM	8113
890-1269-13	FS31	Total/NA	Solid	8015B NM	8113
890-1269-14	FS33	Total/NA	Solid	8015B NM	8113
890-1269-15	FS34	Total/NA	Solid	8015B NM	8113
890-1269-16	FS35	Total/NA	Solid	8015B NM	8113
890-1269-17	FS36	Total/NA	Solid	8015B NM	8113
890-1269-18	PH05	Total/NA	Solid	8015B NM	8113
890-1269-19	PH06	Total/NA	Solid	8015B NM	8113
890-1269-20	PH07	Total/NA	Solid	8015B NM	8113
MB 880-8113/1-A	Method Blank	Total/NA	Solid	8015B NM	8113
LCS 880-8113/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8113
LCSD 880-8113/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8113
890-1269-1 MS	PH03	Total/NA	Solid	8015B NM	8113
890-1269-1 MSD	PH03	Total/NA	Solid	8015B NM	8113

HPLC/IC

Leach Batch: 8123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-1	PH03	Soluble	Solid	DI Leach	
890-1269-2	FS18	Soluble	Solid	DI Leach	
890-1269-3	FS19	Soluble	Solid	DI Leach	
890-1269-4	FS20	Soluble	Solid	DI Leach	
890-1269-5	FS21	Soluble	Solid	DI Leach	
MB 880-8123/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8123/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8123/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1269-3 MS	FS19	Soluble	Solid	DI Leach	
890-1269-3 MSD	FS19	Soluble	Solid	DI Leach	

Leach Batch: 8124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-6	FS22	Soluble	Solid	DI Leach	
890-1269-7	FS23	Soluble	Solid	DI Leach	
890-1269-8	FS24	Soluble	Solid	DI Leach	
890-1269-9	FS25	Soluble	Solid	DI Leach	
890-1269-10	FS26	Soluble	Solid	DI Leach	
890-1269-11	FS29	Soluble	Solid	DI Leach	
890-1269-12	FS30	Soluble	Solid	DI Leach	
890-1269-13	FS31	Soluble	Solid	DI Leach	
890-1269-14	FS33	Soluble	Solid	DI Leach	
890-1269-15	FS34	Soluble	Solid	DI Leach	
890-1269-16	FS35	Soluble	Solid	DI Leach	
890-1269-17	FS36	Soluble	Solid	DI Leach	
890-1269-18	PH05	Soluble	Solid	DI Leach	
890-1269-19	PH06	Soluble	Solid	DI Leach	
890-1269-20	PH07	Soluble	Solid	DI Leach	
MB 880-8124/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8124/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8124/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1269-6 MS	FS22	Soluble	Solid	DI Leach	

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
 SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 8124 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-6 MSD	FS22	Soluble	Solid	DI Leach	
890-1269-16 MS	FS35	Soluble	Solid	DI Leach	
890-1269-16 MSD	FS35	Soluble	Solid	DI Leach	

Analysis Batch: 8272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-1	PH03	Soluble	Solid	300.0	8123
890-1269-2	FS18	Soluble	Solid	300.0	8123
890-1269-3	FS19	Soluble	Solid	300.0	8123
890-1269-4	FS20	Soluble	Solid	300.0	8123
890-1269-5	FS21	Soluble	Solid	300.0	8123
MB 880-8123/1-A	Method Blank	Soluble	Solid	300.0	8123
LCS 880-8123/2-A	Lab Control Sample	Soluble	Solid	300.0	8123
LCSD 880-8123/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8123
890-1269-3 MS	FS19	Soluble	Solid	300.0	8123
890-1269-3 MSD	FS19	Soluble	Solid	300.0	8123

Analysis Batch: 8274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1269-6	FS22	Soluble	Solid	300.0	8124
890-1269-7	FS23	Soluble	Solid	300.0	8124
890-1269-8	FS24	Soluble	Solid	300.0	8124
890-1269-9	FS25	Soluble	Solid	300.0	8124
890-1269-10	FS26	Soluble	Solid	300.0	8124
890-1269-11	FS29	Soluble	Solid	300.0	8124
890-1269-12	FS30	Soluble	Solid	300.0	8124
890-1269-13	FS31	Soluble	Solid	300.0	8124
890-1269-14	FS33	Soluble	Solid	300.0	8124
890-1269-15	FS34	Soluble	Solid	300.0	8124
890-1269-16	FS35	Soluble	Solid	300.0	8124
890-1269-17	FS36	Soluble	Solid	300.0	8124
890-1269-18	PH05	Soluble	Solid	300.0	8124
890-1269-19	PH06	Soluble	Solid	300.0	8124
890-1269-20	PH07	Soluble	Solid	300.0	8124
MB 880-8124/1-A	Method Blank	Soluble	Solid	300.0	8124
LCS 880-8124/2-A	Lab Control Sample	Soluble	Solid	300.0	8124
LCSD 880-8124/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8124
890-1269-6 MS	FS22	Soluble	Solid	300.0	8124
890-1269-6 MSD	FS22	Soluble	Solid	300.0	8124
890-1269-16 MS	FS35	Soluble	Solid	300.0	8124
890-1269-16 MSD	FS35	Soluble	Solid	300.0	8124

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: PH03

Lab Sample ID: 890-1269-1

Date Collected: 09/16/21 09:04

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 08:49	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 12:06	AJ	XEN MID
Soluble	Leach	DI Leach			8123	09/20/21 12:11	CH	XEN MID
Soluble	Analysis	300.0		1	8272	09/23/21 11:28	CH	XEN MID

Client Sample ID: FS18

Lab Sample ID: 890-1269-2

Date Collected: 09/16/21 11:01

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 09:10	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 13:08	AJ	XEN MID
Soluble	Leach	DI Leach			8123	09/20/21 12:11	CH	XEN MID
Soluble	Analysis	300.0		1	8272	09/23/21 11:34	CH	XEN MID

Client Sample ID: FS19

Lab Sample ID: 890-1269-3

Date Collected: 09/16/21 11:03

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 09:30	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 13:28	AJ	XEN MID
Soluble	Leach	DI Leach			8123	09/20/21 12:11	CH	XEN MID
Soluble	Analysis	300.0		1	8272	09/23/21 11:40	CH	XEN MID

Client Sample ID: FS20

Lab Sample ID: 890-1269-4

Date Collected: 09/16/21 11:06

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 09:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			8123	09/20/21 12:11	CH	XEN MID
Soluble	Analysis	300.0		1	8272	09/23/21 11:57	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS21

Lab Sample ID: 890-1269-5

Date Collected: 09/16/21 11:08

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 10:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 14:10	AJ	XEN MID
Soluble	Leach	DI Leach			8123	09/20/21 12:11	CH	XEN MID
Soluble	Analysis	300.0		1	8272	09/23/21 12:02	CH	XEN MID

Client Sample ID: FS22

Lab Sample ID: 890-1269-6

Date Collected: 09/16/21 11:10

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 10:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 14:30	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 15:02	CH	XEN MID

Client Sample ID: FS23

Lab Sample ID: 890-1269-7

Date Collected: 09/16/21 11:13

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 10:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 15:22	CH	XEN MID

Client Sample ID: FS24

Lab Sample ID: 890-1269-8

Date Collected: 09/16/21 12:20

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 11:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 15:12	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:00	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS25

Lab Sample ID: 890-1269-9

Date Collected: 09/16/21 12:23

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 11:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 15:33	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:06	CH	XEN MID

Client Sample ID: FS26

Lab Sample ID: 890-1269-10

Date Collected: 09/16/21 12:25

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 11:53	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 15:54	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:11	CH	XEN MID

Client Sample ID: FS29

Lab Sample ID: 890-1269-11

Date Collected: 09/16/21 12:49

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 13:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 16:35	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:28	CH	XEN MID

Client Sample ID: FS30

Lab Sample ID: 890-1269-12

Date Collected: 09/16/21 12:53

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 13:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 16:56	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:34	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS31

Lab Sample ID: 890-1269-13

Date Collected: 09/16/21 12:55

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 14:05	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 17:17	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:39	CH	XEN MID

Client Sample ID: FS33

Lab Sample ID: 890-1269-14

Date Collected: 09/16/21 13:03

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 14:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 17:37	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:45	CH	XEN MID

Client Sample ID: FS34

Lab Sample ID: 890-1269-15

Date Collected: 09/16/21 13:27

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 14:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 17:58	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:51	CH	XEN MID

Client Sample ID: FS35

Lab Sample ID: 890-1269-16

Date Collected: 09/16/21 13:29

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 15:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 18:19	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 16:56	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Client Sample ID: FS36

Lab Sample ID: 890-1269-17

Date Collected: 09/16/21 13:32

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 15:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 18:39	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 17:13	CH	XEN MID

Client Sample ID: PH05

Lab Sample ID: 890-1269-18

Date Collected: 09/16/21 14:01

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 15:47	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 19:00	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 17:19	CH	XEN MID

Client Sample ID: PH06

Lab Sample ID: 890-1269-19

Date Collected: 09/16/21 14:03

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 16:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 19:20	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 17:36	CH	XEN MID

Client Sample ID: PH07

Lab Sample ID: 890-1269-20

Date Collected: 09/16/21 14:46

Matrix: Solid

Date Received: 09/17/21 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8059	09/18/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	8017	09/19/21 16:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			8113	09/20/21 11:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8175	09/21/21 19:40	AJ	XEN MID
Soluble	Leach	DI Leach			8124	09/20/21 12:15	CH	XEN MID
Soluble	Analysis	300.0		1	8274	09/23/21 17:41	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

- 1
- 2
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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1269-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1269-1	PH03	Solid	09/16/21 09:04	09/17/21 09:01	1.0
890-1269-2	FS18	Solid	09/16/21 11:01	09/17/21 09:01	1.0
890-1269-3	FS19	Solid	09/16/21 11:03	09/17/21 09:01	1.0
890-1269-4	FS20	Solid	09/16/21 11:06	09/17/21 09:01	1.0
890-1269-5	FS21	Solid	09/16/21 11:08	09/17/21 09:01	1.0
890-1269-6	FS22	Solid	09/16/21 11:10	09/17/21 09:01	1.0
890-1269-7	FS23	Solid	09/16/21 11:13	09/17/21 09:01	1.0
890-1269-8	FS24	Solid	09/16/21 12:20	09/17/21 09:01	1.0
890-1269-9	FS25	Solid	09/16/21 12:23	09/17/21 09:01	1.0
890-1269-10	FS26	Solid	09/16/21 12:25	09/17/21 09:01	1.0
890-1269-11	FS29	Solid	09/16/21 12:49	09/17/21 09:01	1.0
890-1269-12	FS30	Solid	09/16/21 12:53	09/17/21 09:01	1.0
890-1269-13	FS31	Solid	09/16/21 12:55	09/17/21 09:01	1.0
890-1269-14	FS33	Solid	09/16/21 13:03	09/17/21 09:01	1.0
890-1269-15	FS34	Solid	09/16/21 13:27	09/17/21 09:01	1.0
890-1269-16	FS35	Solid	09/16/21 13:29	09/17/21 09:01	1.0
890-1269-17	FS36	Solid	09/16/21 13:32	09/17/21 09:01	1.0
890-1269-18	PH05	Solid	09/16/21 14:01	09/17/21 09:01	2.0
890-1269-19	PH06	Solid	09/16/21 14:03	09/17/21 09:01	2.0
890-1269-20	PH07	Solid	09/16/21 14:46	09/17/21 09:01	2.0

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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 (480-555-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Chain of Custody

Work Order No: _____

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Trownfields <input type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>
State of Project:
Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: <input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	PLV 25 RD 9014	Turn Around	
Project Number:	31408336 023, 0129	Routine	<input checked="" type="checkbox"/>
P.O. Number:	5011 6/1/21	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	0.8/0.6	Thermometer ID		
Received Inact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:		
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Containers:		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Sample Comments
Dt03	S	9-16-21	0904	8 1.0'	1	X	X	X	discrete segments
FS18				1.0					
FS19									
FS20									
FS21									
FS22									
FS23									
FS24									
FS25									
FS26									

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SIO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metel(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631/245.117470-17471-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
		9/17/21 9:01			



Chain of Custody

Work Order No: _____

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
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com

Page 2 of 2

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program: <input type="checkbox"/> UST/ <input type="checkbox"/> PST <input type="checkbox"/> RP <input type="checkbox"/> Groundfields <input type="checkbox"/> RC <input type="checkbox"/> Perfund <input type="checkbox"/>
State of Project:
Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PT/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: <input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	PLU JS RD 901H	Turn Around	
Project Number:	31463336.000.0109	Routine	<input checked="" type="checkbox"/>
P.O. Number:	SP.11 6/11/21	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	08/6.6	Thermometer ID		
Received Inact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:		
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Sample Comments
F509	S	9-16-21	1249	1.0	X	X	X		caput
F530			1253						
F531			1255						
F533			1303						
F534			1327						
F535			1329						
F536			1332						
P105			1401	2.0					discont
P106			1403						
P107			1406						

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SIO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631/245.117470.17471.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.

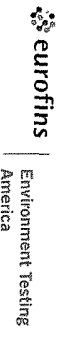
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9/17/21 9:02			

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)	Sampler	Lab PM	Carrier Tracking No(s)	COC No.
Client Contact:	Phone	Kramer Jessica		890-411 1
Shipping/Receiving Company:		E-Mail: jessica.kramer@eurofinsnet.com	State of Origin: New Mexico	Page: 1 of 3
Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Page 1 of 3
Address: 1211 W. Florida Ave	Due Date Requested: 9/20/2021			Job #: 890-1269-1
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: PLU 25 BD 901H	Project #: 89000004			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)			Perform MS/MSD (Yes or No)			Total Number of containers	Special Instructions/Note:
					8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6035FP_Calc BTEX					
PH03 (890-1269-1)	9/16/21	09 04		Solid	X	X	X				1	
FS18 (890-1269-2)	9/16/21	11 01		Solid	X	X	X				1	
FS19 (890-1269-3)	9/16/21	11 03		Solid	X	X	X				1	
FS20 (890-1269-4)	9/16/21	11 06		Solid	X	X	X				1	
FS21 (890-1269-5)	9/16/21	11 08		Solid	X	X	X				1	
FS22 (890-1269-6)	9/16/21	11 10		Solid	X	X	X				1	
FS23 (890-1269-7)	9/16/21	11 13		Solid	X	X	X				1	
FS24 (890-1269-8)	9/16/21	12 20		Solid	X	X	X				1	
FS25 (890-1269-9)	9/16/21	12 23		Solid	X	X	X				1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco 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/est/mark being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

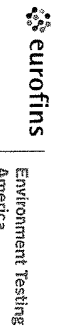
Empty Kit Relinquished by	Date	Time	Method of Shipment:
Relinquished by: <i>OCG</i>	9/17/21		
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Received by:	Date/Time
		Cooler Temperature(s) °C and Other Remarks:	



Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)

Client Contact: Shipping/Receiving	Phone:	Lab P/M: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-4112
Company: Eurofins Xenco	E-Mail: Jessica.Kramer@eurofinsnet.com	Accreditations Required (See note): NELAP - Louisiana NELAP - Texas	State of Origin: New Mexico	Page: Page 2 of 3
Address: 1211 W Florida Ave	Due Date Requested: 9/20/2021			Job #: 890-1269-1
City: Midland	TAT Requested (days):	Analysis Requested		
State Zip: TX 79701	PO #:			
Phone: 432-704-5440(Tel)	WO #:			
Email:	Project #: 89000004			
Project Name: PLU 29 BD 901H	SSOW#:			
Site:				

Sample Identification - Client ID (Lab ID)

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note
FS26 (890-1269-10)	9/16/21	12:25	Mountain	Solid	X	X	1	
FS29 (890-1269-11)	9/16/21	12:49	Mountain	Solid	X	X	1	
FS30 (890-1269-12)	9/16/21	12:53	Mountain	Solid	X	X	1	
FS31 (890-1269-13)	9/16/21	12:55	Mountain	Solid	X	X	1	
FS33 (890-1269-14)	9/16/21	13:03	Mountain	Solid	X	X	1	
FS34 (890-1269-15)	9/16/21	13:27	Mountain	Solid	X	X	1	
FS35 (890-1269-16)	9/16/21	13:29	Mountain	Solid	X	X	1	
FS36 (890-1269-17)	9/16/21	13:32	Mountain	Solid	X	X	1	
PH05 (890-1269-18)	9/16/21	14:01	Mountain	Solid	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyze & 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 analysts/analyst/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC Laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Unconfirmed 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: *Due City 9.17.21* Date/Time: _____ Company: _____ Received by: *[Signature]* Date/Time: *9/16/21 11:00* Company: *Xenco*

Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____

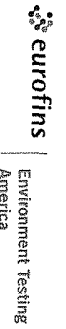
Custody Seals Intact Yes No Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks _____



Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Shipping/Receiving		Phone	Kramer Jessica	New Mexico	890-4113
Company: Eurofins Xenco		E-Mail	Jessica.kramer@eurofins.com	Accreditations Required (See note): NELAP - Louisiana NELAP - Texas	Page 3 of 3
Address: 1211 W Florida Ave		Due Date Requested	9/20/2021	Job #: 890-1269-1	
City: Midland		TAT Requested (days):		Preservation Codes	
State, Zip: TX, 79701		PC #		A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NH4SO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA M - Hexane N - None O - Asn602 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Phone: 432-704-5440(Tel)		WO #		Other:	
Email		Project #	89000004		
Project Name: PLU 25 BD 901H		SSOW#			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=water/sol, B=Tissue, A=Air)
PH06 (890-1269-19)	9/16/21	14 03	Mountain		Solid
PH07 (890-1269-20)	9/16/21	14 46	Mountain		Solid
				Field Filtered Sample (Yes or No)	
				Perform MS/MSD (Yes or No)	
				8016MOD_NM/8016NM_S_Prep Full TPH	
				300_ORGFM_28D/DI_LEACH Chloride	
				8021B/6036FP_Calc BTEX	
				Total Number of containers	
				Special Instructions/Note	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyze & 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/testing/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Unconfirmed

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: *Cee Cury 9.17.21* Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____ Custody Seal No _____

Cooler Temperature(s) °C and Other Remarks

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1269-1

SDG Number: 31403236.022.0129

Login Number: 1269

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1269-1

SDG Number: 31403236.022.0129

Login Number: 1269

List Number: 2

Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland

List Creation: 09/18/21 01:39 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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1287-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/28/2021 8:49:26 AM

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

LINKS

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results through
TotalAccess

Have a Question?



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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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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1287-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Job ID: 890-1287-1

Laboratory: Eurofins Xenco, Carlsbad**Narrative****Job Narrative
890-1287-1****Receipt**

The samples were received on 9/20/2021 12:49 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 3.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8263 and analytical batch 880-8262 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: FS28 (890-1287-1) and (890-1285-A-2-E). 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 880-8268 and analytical batch 880-8326 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 880-8360 and analytical batch 880-8365 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 sample was outside control limits: FS28 (890-1287-1). 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 880-8230 and analytical batch 880-8271 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-8255 and analytical batch 880-8391 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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS28

Lab Sample ID: 890-1287-1

Date Collected: 09/17/21 09:35

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/22/21 13:16	09/24/21 09:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	09/22/21 13:16	09/24/21 09:12	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 09:12	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		09/22/21 13:48	09/23/21 21:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 21:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/22/21 13:48	09/23/21 21:19	1
o-Terphenyl	131	S1+	70 - 130	09/22/21 13:48	09/23/21 21:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		4.95	mg/Kg			09/25/21 21:48	1

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		09/22/21 13:16	09/24/21 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	09/22/21 13:16	09/24/21 09:32	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 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	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

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)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			09/22/21 13:48	09/23/21 22:22	1
o-Terphenyl	124		70 - 130			09/22/21 13:48	09/23/21 22:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.3		5.04	mg/Kg			09/25/21 21:54	1

Client Sample ID: PH08

Lab Sample ID: 890-1287-3

Date Collected: 09/17/21 10:26

Matrix: Solid

Date Received: 09/20/21 12:49

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		09/22/21 13:16	09/24/21 09:52	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			09/22/21 13:16	09/24/21 09:52	1
1,4-Difluorobenzene (Surr)	79		70 - 130			09/22/21 13:16	09/24/21 09:52	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	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			09/22/21 13:48	09/23/21 22:43	1
o-Terphenyl	123		70 - 130			09/22/21 13:48	09/23/21 22:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	587		4.97	mg/Kg			09/25/21 22:01	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08A

Lab Sample ID: 890-1287-4

Date Collected: 09/17/21 10:30

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/22/21 13:16	09/24/21 10:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	09/22/21 13:16	09/24/21 10:13	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 13:16	09/24/21 10:13	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		09/22/21 13:48	09/23/21 23:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 23:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/22/21 13:48	09/23/21 23:04	1
o-Terphenyl	123		70 - 130	09/22/21 13:48	09/23/21 23:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	802		4.99	mg/Kg			09/25/21 22:07	1

Client Sample ID: PH08B

Lab Sample ID: 890-1287-5

Date Collected: 09/17/21 10:36

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/22/21 13:16	09/24/21 10:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/22/21 13:16	09/24/21 10:33	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 13:16	09/24/21 10:33	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		09/22/21 13:48	09/23/21 23:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 23:26	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08B

Lab Sample ID: 890-1287-5

Date Collected: 09/17/21 10:36

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

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)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 23:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			09/22/21 13:48	09/23/21 23:26	1
o-Terphenyl	120		70 - 130			09/22/21 13:48	09/23/21 23:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	600		4.98	mg/Kg			09/25/21 22:13	1

Client Sample ID: FS38

Lab Sample ID: 890-1287-6

Date Collected: 09/17/21 16:31

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.286		0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:54	1
Toluene	4.07		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Ethylbenzene	2.23		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
m-Xylene & p-Xylene	15.1		0.795	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
o-Xylene	3.37		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Xylenes, Total	18.5		0.795	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	438	S1+	70 - 130			09/22/21 13:16	09/24/21 10:54	1
1,4-Difluorobenzene (Surr)	71		70 - 130			09/22/21 13:16	09/24/21 10:54	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	263		49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Diesel Range Organics (Over C10-C28)	289		49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130			09/22/21 08:56	09/23/21 04:36	1
o-Terphenyl	129		70 - 130			09/22/21 08:56	09/23/21 04:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		4.95	mg/Kg			09/25/21 22:19	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00402		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Toluene	0.0379		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Ethylbenzene	0.0140		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
m-Xylene & p-Xylene	0.0254		0.00397	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
o-Xylene	0.0505		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Xylenes, Total	0.0759		0.00397	mg/Kg		09/22/21 13:16	09/24/21 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/22/21 13:16	09/24/21 14:27	1
1,4-Difluorobenzene (Surr)	105		70 - 130	09/22/21 13:16	09/24/21 14:27	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	142		50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1
Diesel Range Organics (Over C10-C28)	255		50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/22/21 08:56	09/23/21 04:58	1
o-Terphenyl	126		70 - 130	09/22/21 08:56	09/23/21 04:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2030		49.7	mg/Kg			09/23/21 09:13	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-6375-A-1-A MS	Matrix Spike	90	98
880-6375-A-1-B MSD	Matrix Spike Duplicate	97	97
880-6426-A-1-B MS	Matrix Spike	196 S1+	103
880-6426-A-1-C MSD	Matrix Spike Duplicate	108	84
890-1285-A-2-C MS	Matrix Spike	123	64 S1-
890-1285-A-2-D MSD	Matrix Spike Duplicate	123	81
890-1287-1	FS28	134 S1+	78
890-1287-2	FS37	127	78
890-1287-3	PH08	125	79
890-1287-4	PH08A	130	79
890-1287-5	PH08B	125	79
890-1287-6	FS38	438 S1+	71
890-1287-7	FS39	73	105
LCS 880-8263/1-A	Lab Control Sample	128	71
LCS 880-8268/1-A	Lab Control Sample	98	89
LCS 880-8360/1-A	Lab Control Sample	112	80
LCSD 880-8263/2-A	Lab Control Sample Dup	129	79
LCSD 880-8268/2-A	Lab Control Sample Dup	98	91
LCSD 880-8360/2-A	Lab Control Sample Dup	111	87
MB 880-8141/5-A	Method Blank	109	101
MB 880-8209/5-A	Method Blank	109	79
MB 880-8263/5-A	Method Blank	101	78
MB 880-8268/5-A	Method Blank	114	113
MB 880-8359/5-A	Method Blank	103	79
MB 880-8360/5-A	Method Blank	121	77

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-6278-A-141-G MS	Matrix Spike	100	100
880-6278-A-141-H MSD	Matrix Spike Duplicate	102	96
890-1287-1	FS28	115	131 S1+
890-1287-1 MS	FS28	104	107
890-1287-1 MSD	FS28	104	105
890-1287-2	FS37	111	124
890-1287-3	PH08	111	123
890-1287-4	PH08A	110	123
890-1287-5	PH08B	107	120
890-1287-6	FS38	117	129
890-1287-7	FS39	116	126
LCS 880-8242/2-A	Lab Control Sample	126	123
LCS 880-8266/2-A	Lab Control Sample	121	118
LCSD 880-8242/3-A	Lab Control Sample Dup	110	108

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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)
LCSD 880-8266/3-A	Lab Control Sample Dup	116	113
MB 880-8242/1-A	Method Blank	108	123
MB 880-8266/1-A	Method Blank	108	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8141/5-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8141

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/20/21 14:00	09/23/21 18:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/20/21 14:00	09/23/21 18:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/20/21 14:00	09/23/21 18:44	1

Lab Sample ID: MB 880-8209/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8209

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:00	09/23/21 16:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/22/21 09:00	09/23/21 16:32	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 09:00	09/23/21 16:32	1

Lab Sample ID: MB 880-8263/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8263

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 13:16	09/24/21 03:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/22/21 13:16	09/24/21 03:24	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 03:24	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8263/1-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	0.100	0.09072		mg/Kg		91	70 - 130	
Toluene	0.100	0.09667		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.1013		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	0.200	0.2132		mg/Kg		107	70 - 130	
o-Xylene	0.100	0.1075		mg/Kg		108	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	71		70 - 130

Lab Sample ID: LCSD 880-8263/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
Benzene	0.100	0.08034		mg/Kg		80	70 - 130	12	35	
Toluene	0.100	0.08706		mg/Kg		87	70 - 130	10	35	
Ethylbenzene	0.100	0.09732		mg/Kg		97	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	4	35	
o-Xylene	0.100	0.1036		mg/Kg		104	70 - 130	4	35	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: 890-1285-A-2-C MS
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	<0.00199	U F2 F1	0.100	0.03895	F1	mg/Kg		39	70 - 130	
Toluene	<0.00199	U F2 F1	0.100	0.04917	F1	mg/Kg		49	70 - 130	
Ethylbenzene	<0.00199	U F1	0.100	0.05776	F1	mg/Kg		58	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1141	F1	mg/Kg		57	70 - 130	
o-Xylene	<0.00199	U F1	0.100	0.05958	F1	mg/Kg		60	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130

Lab Sample ID: 890-1285-A-2-D MSD
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8263

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	0.07229	F2	mg/Kg		72	70 - 130	60	35	
Toluene	<0.00199	U F2 F1	0.0998	0.07795	F2	mg/Kg		78	70 - 130	45	35	
Ethylbenzene	<0.00199	U F1	0.0998	0.08024		mg/Kg		80	70 - 130	33	35	

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1285-A-2-D MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 8262

Prep Batch: 8263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1664	F2	mg/Kg		83	70 - 130	37	35
o-Xylene	<0.00199	U F1	0.0998	0.08481		mg/Kg		85	70 - 130	35	35
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	123		70 - 130								
1,4-Difluorobenzene (Surr)	81		70 - 130								

Lab Sample ID: MB 880-8268/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 8326

Prep Batch: 8268

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Surrogate	%Recovery	MB Qualifier	MB Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130			09/22/21 15:05	09/24/21 10:55	1
1,4-Difluorobenzene (Surr)	113		70 - 130			09/22/21 15:05	09/24/21 10:55	1

Lab Sample ID: LCS 880-8268/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 8326

Prep Batch: 8268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07044		mg/Kg		70	70 - 130
Toluene	0.100	0.08333		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.09829		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1777		mg/Kg		89	70 - 130
o-Xylene	0.100	0.09271		mg/Kg		93	70 - 130
Surrogate	%Recovery	LCS Qualifier	LCS Limits				
4-Bromofluorobenzene (Surr)	98		70 - 130				
1,4-Difluorobenzene (Surr)	89		70 - 130				

Lab Sample ID: LCSD 880-8268/2-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 8326

Prep Batch: 8268

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07104		mg/Kg		71	70 - 130	1	35
Toluene	0.100	0.08251		mg/Kg		83	70 - 130	1	35
Ethylbenzene	0.100	0.09969		mg/Kg		100	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1815		mg/Kg		91	70 - 130	2	35
o-Xylene	0.100	0.09559		mg/Kg		96	70 - 130	3	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 880-6375-A-1-A MS
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00202	U	0.0998	0.08671		mg/Kg		87	70 - 130
Toluene	<0.00202	U	0.0998	0.07545		mg/Kg		76	70 - 130
Ethylbenzene	<0.00202	U	0.0998	0.08106		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1428		mg/Kg		72	70 - 130
o-Xylene	<0.00202	U	0.0998	0.07488		mg/Kg		75	70 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-6375-A-1-B MSD
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
Benzene	<0.00202	U	0.0994	0.07503		mg/Kg		75	70 - 130	14	35
Toluene	<0.00202	U	0.0994	0.07068		mg/Kg		71	70 - 130	7	35
Ethylbenzene	<0.00202	U	0.0994	0.07188		mg/Kg		72	70 - 130	12	35
m-Xylene & p-Xylene	<0.00403	U F1	0.199	0.1315	F1	mg/Kg		66	70 - 130	8	35
o-Xylene	<0.00202	U	0.0994	0.07058		mg/Kg		71	70 - 130	6	35

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

Lab Sample ID: MB 880-8359/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8359

Analyte	MB	MB	RL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier								
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1

Surrogate	MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	103		70 - 130	09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/24/21 10:53	09/24/21 17:49	09/24/21 17:49	09/24/21 17:49	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8360/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8360

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:59	09/25/21 04:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/24/21 10:59	09/25/21 04:46	1
1,4-Difluorobenzene (Surr)	77		70 - 130	09/24/21 10:59	09/25/21 04:46	1

Lab Sample ID: LCS 880-8360/1-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09531		mg/Kg		95	70 - 130
Toluene	0.100	0.09060		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09115		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1868		mg/Kg		93	70 - 130
o-Xylene	0.100	0.1028		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: LCSD 880-8360/2-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09129		mg/Kg		91	70 - 130	4	35
Toluene	0.100	0.08698		mg/Kg		87	70 - 130	4	35
Ethylbenzene	0.100	0.08691		mg/Kg		87	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	4	35
o-Xylene	0.100	0.09233		mg/Kg		92	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: 880-6426-A-1-B MS
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.0998	0.04055	F1	mg/Kg		41	70 - 130
Toluene	<0.00201	U F1 F2	0.0998	0.03671	F1	mg/Kg		37	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: 880-6426-A-1-B MS
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00201	U F1 F2	0.0998	0.02546	F1	mg/Kg		25	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.07498	F1	mg/Kg		36	70 - 130
o-Xylene	0.00203	F1 F2	0.0998	0.06457	F1	mg/Kg		63	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	196	S1+	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-6426-A-1-C MSD
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Benzene	<0.00201	U F1	0.100	0.03576	F1	mg/Kg		36	70 - 130	13	35	
Toluene	<0.00201	U F1 F2	0.100	0.02150	F1 F2	mg/Kg		21	70 - 130	52	35	
Ethylbenzene	<0.00201	U F1 F2	0.100	0.01547	F1 F2	mg/Kg		15	70 - 130	49	35	
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.03313	F1 F2	mg/Kg		15	70 - 130	77	35	
o-Xylene	0.00203	F1 F2	0.100	0.01785	F1 F2	mg/Kg		16	70 - 130	113	35	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

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

Lab Sample ID: MB 880-8242/1-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8242

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	108		70 - 130	09/22/21 08:56	09/22/21 20:08	1
o-Terphenyl	123		70 - 130	09/22/21 08:56	09/22/21 20:08	1

Lab Sample ID: LCS 880-8242/2-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1013		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1278		mg/Kg		128	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8242/2-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8242

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	126		70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: LCSD 880-8242/3-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1021		mg/Kg		102	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	1000	1141		mg/Kg		114	70 - 130	11	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	110		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 880-6278-A-141-G MS
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	792.0		mg/Kg		77	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1042		mg/Kg		105	70 - 130	

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

Lab Sample ID: 880-6278-A-141-H MSD
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	939.9		mg/Kg		92	70 - 130	17	20	
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1016		mg/Kg		102	70 - 130	3	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	102		70 - 130
o-Terphenyl	96		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8266/1-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8266

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			09/22/21 13:48	09/23/21 20:15	1
o-Terphenyl	124		70 - 130			09/22/21 13:48	09/23/21 20:15	1

Lab Sample ID: LCS 880-8266/2-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	1064	mg/Kg		106	70 - 130	
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	121		70 - 130				
o-Terphenyl	118		70 - 130				

Lab Sample ID: LCSD 880-8266/3-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	996.8	mg/Kg			100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1019	mg/Kg			102	70 - 130	4	20
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	116		70 - 130						
o-Terphenyl	113		70 - 130						

Lab Sample ID: 890-1287-1 MS
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	<49.8	U	997	904.3	mg/Kg		91	70 - 130	

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1287-1 MS
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	104		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-1287-1 MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	915.0		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	906.3		mg/Kg		91	70 - 130	0	20

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	104		70 - 130
o-Terphenyl	105		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8230/1-A
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			09/23/21 07:16	1

Lab Sample ID: LCS 880-8230/2-A
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Chloride	250	261.5		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-8230/3-A
Matrix: Solid
Analysis Batch: 8271

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	
		Result	Qualifier				Limits	RPD	Limit
Chloride	250	262.2		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 880-6344-A-21-B MS
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Chloride	3500	F1	1240	4902	F1	mg/Kg		113	90 - 110

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-6344-A-21-C MSD
Matrix: Solid
Analysis Batch: 8271

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	3500	F1	1240	4922	F1	mg/Kg		114	90 - 110	0	20

Lab Sample ID: MB 880-8255/1-A
Matrix: Solid
Analysis Batch: 8391

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			09/25/21 19:13	1

Lab Sample ID: LCS 880-8255/2-A
Matrix: Solid
Analysis Batch: 8391

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	268.0		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-8255/3-A
Matrix: Solid
Analysis Batch: 8391

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	268.2		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-6300-A-1-C MS
Matrix: Solid
Analysis Batch: 8391

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	2660	F1	1240	4255	F1	mg/Kg		128	90 - 110

Lab Sample ID: 880-6300-A-1-D MSD
Matrix: Solid
Analysis Batch: 8391

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	2660	F1	1240	4182	F1	mg/Kg		122	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8141/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8209/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 8262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8021B	8263
890-1287-2	FS37	Total/NA	Solid	8021B	8263
890-1287-3	PH08	Total/NA	Solid	8021B	8263
890-1287-4	PH08A	Total/NA	Solid	8021B	8263
890-1287-5	PH08B	Total/NA	Solid	8021B	8263
890-1287-6	FS38	Total/NA	Solid	8021B	8263
MB 880-8209/5-A	Method Blank	Total/NA	Solid	8021B	8209
MB 880-8263/5-A	Method Blank	Total/NA	Solid	8021B	8263
LCS 880-8263/1-A	Lab Control Sample	Total/NA	Solid	8021B	8263
LCSD 880-8263/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8263
890-1285-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	8263
890-1285-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8263

Prep Batch: 8263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	5035	
890-1287-2	FS37	Total/NA	Solid	5035	
890-1287-3	PH08	Total/NA	Solid	5035	
890-1287-4	PH08A	Total/NA	Solid	5035	
890-1287-5	PH08B	Total/NA	Solid	5035	
890-1287-6	FS38	Total/NA	Solid	5035	
890-1287-7	FS39	Total/NA	Solid	5035	
MB 880-8263/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8263/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8263/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1285-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
890-1285-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 8268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8268/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8268/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8268/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6375-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-6375-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Total/NA	Solid	8021B	8263
MB 880-8141/5-A	Method Blank	Total/NA	Solid	8021B	8141
MB 880-8268/5-A	Method Blank	Total/NA	Solid	8021B	8268
LCS 880-8268/1-A	Lab Control Sample	Total/NA	Solid	8021B	8268
LCSD 880-8268/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8268

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

GC VOA (Continued)

Analysis Batch: 8326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6375-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	8268
880-6375-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8268

Prep Batch: 8359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8359/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	5035	
MB 880-8360/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8360/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8360/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6426-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-6426-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8021B	8360
MB 880-8359/5-A	Method Blank	Total/NA	Solid	8021B	8359
MB 880-8360/5-A	Method Blank	Total/NA	Solid	8021B	8360
LCS 880-8360/1-A	Lab Control Sample	Total/NA	Solid	8021B	8360
LCSD 880-8360/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8360
880-6426-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	8360
880-6426-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8360

GC Semi VOA

Analysis Batch: 8238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8015B NM	8242
890-1287-7	FS39	Total/NA	Solid	8015B NM	8242
MB 880-8242/1-A	Method Blank	Total/NA	Solid	8015B NM	8242
LCS 880-8242/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8242
LCSD 880-8242/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8242
880-6278-A-141-G MS	Matrix Spike	Total/NA	Solid	8015B NM	8242
880-6278-A-141-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8242

Prep Batch: 8242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8015NM Prep	
890-1287-7	FS39	Total/NA	Solid	8015NM Prep	
MB 880-8242/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8242/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8242/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6278-A-141-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6278-A-141-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Prep Batch: 8266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-2	FS37	Total/NA	Solid	8015NM Prep	
890-1287-3	PH08	Total/NA	Solid	8015NM Prep	
890-1287-4	PH08A	Total/NA	Solid	8015NM Prep	
890-1287-5	PH08B	Total/NA	Solid	8015NM Prep	
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1287-1 MS	FS28	Total/NA	Solid	8015NM Prep	
890-1287-1 MSD	FS28	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015B NM	8266
890-1287-2	FS37	Total/NA	Solid	8015B NM	8266
890-1287-3	PH08	Total/NA	Solid	8015B NM	8266
890-1287-4	PH08A	Total/NA	Solid	8015B NM	8266
890-1287-5	PH08B	Total/NA	Solid	8015B NM	8266
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015B NM	8266
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8266
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8266
890-1287-1 MS	FS28	Total/NA	Solid	8015B NM	8266
890-1287-1 MSD	FS28	Total/NA	Solid	8015B NM	8266

HPLC/IC

Leach Batch: 8230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Soluble	Solid	DI Leach	
MB 880-8230/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8230/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8230/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6344-A-21-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6344-A-21-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 8255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Soluble	Solid	DI Leach	
890-1287-2	FS37	Soluble	Solid	DI Leach	
890-1287-3	PH08	Soluble	Solid	DI Leach	
890-1287-4	PH08A	Soluble	Solid	DI Leach	
890-1287-5	PH08B	Soluble	Solid	DI Leach	
890-1287-6	FS38	Soluble	Solid	DI Leach	
MB 880-8255/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8255/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8255/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6300-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6300-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 8271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Soluble	Solid	300.0	8230

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Analysis Batch: 8271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8230/1-A	Method Blank	Soluble	Solid	300.0	8230
LCS 880-8230/2-A	Lab Control Sample	Soluble	Solid	300.0	8230
LCSD 880-8230/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8230
880-6344-A-21-B MS	Matrix Spike	Soluble	Solid	300.0	8230
880-6344-A-21-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8230

Analysis Batch: 8391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Soluble	Solid	300.0	8255
890-1287-2	FS37	Soluble	Solid	300.0	8255
890-1287-3	PH08	Soluble	Solid	300.0	8255
890-1287-4	PH08A	Soluble	Solid	300.0	8255
890-1287-5	PH08B	Soluble	Solid	300.0	8255
890-1287-6	FS38	Soluble	Solid	300.0	8255
MB 880-8255/1-A	Method Blank	Soluble	Solid	300.0	8255
LCS 880-8255/2-A	Lab Control Sample	Soluble	Solid	300.0	8255
LCSD 880-8255/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8255
880-6300-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	8255
880-6300-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8255

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS28

Lab Sample ID: 890-1287-1

Date Collected: 09/17/21 09:35

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:12	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 21:19	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 21:48	CH	XEN MID

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:32	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 22:22	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 21:54	CH	XEN MID

Client Sample ID: PH08

Lab Sample ID: 890-1287-3

Date Collected: 09/17/21 10:26

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:52	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 22:43	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:01	CH	XEN MID

Client Sample ID: PH08A

Lab Sample ID: 890-1287-4

Date Collected: 09/17/21 10:30

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:13	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 23:04	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:07	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08B

Lab Sample ID: 890-1287-5

Date Collected: 09/17/21 10:36

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:33	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 23:26	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:13	CH	XEN MID

Client Sample ID: FS38

Lab Sample ID: 890-1287-6

Date Collected: 09/17/21 16:31

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:54	MR	XEN MID
Total/NA	Prep	5035			8360	09/24/21 12:30	MR	XEN MID
Total/NA	Analysis	8021B		200	8365	09/25/21 11:58	MR	XEN MID
Total/NA	Prep	8015NM Prep			8242	09/22/21 08:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8238	09/23/21 04:36	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:19	CH	XEN MID

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8326	09/24/21 14:27	MR	XEN MID
Total/NA	Prep	8015NM Prep			8242	09/22/21 08:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8238	09/23/21 04:58	AJ	XEN MID
Soluble	Leach	DI Leach			8230	09/21/21 19:07	SC	XEN MID
Soluble	Analysis	300.0		10	8271	09/23/21 09:13	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

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

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1287-1	FS28	Solid	09/17/21 09:35	09/20/21 12:49	1.5
890-1287-2	FS37	Solid	09/17/21 09:39	09/20/21 12:49	2.0
890-1287-3	PH08	Solid	09/17/21 10:26	09/20/21 12:49	0.5
890-1287-4	PH08A	Solid	09/17/21 10:30	09/20/21 12:49	1.0
890-1287-5	PH08B	Solid	09/17/21 10:36	09/20/21 12:49	2.0
890-1287-6	FS38	Solid	09/17/21 16:31	09/20/21 12:49	1.0
890-1287-7	FS39	Solid	09/17/21 16:34	09/20/21 12:49	1.0

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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:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Memrod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	Jeremy.Hill@wsp.com, Dan.Moir@wsp.com

Program:	UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Ironfields	<input type="checkbox"/> RC	<input type="checkbox"/> perfund
State of Project:					
Reporting Level:	Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> PT/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Deliverables:	EDD	<input type="checkbox"/> ADAPT	<input type="checkbox"/> Other:		

Project Name:	PLU 25 BD 9014	Turn Around	
Project Number:	31403036 003. 0119	Routine	<input checked="" type="checkbox"/>
P.O. Number:	Spill 6/1/11	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Temperature (°C):	3.8 / 3.0	Thermometer ID				
Received In tact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Correction Factor:			-0.2
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Total Containers:			
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Work Order Notes
FS29	S	9-17-11	0935	1.5	1	X	X	X	In
FS 37	S	9-17-11	0939	2.0	1	X	X	X	NAPP 0116 546 260
P1408	S	9-17-11	1036	0.5	1	X	X	X	cc
P1408 A	S	9-17-11	1036	1.0	1	X	X	X	1666 51601
P1408 B	S	9-17-11	1036	2.0	1	X	X	X	App
FS38	S	9-17-11	1631	1.0	1	X	X	X	30-015-45863
FS39	S	9-17-11	1634	1.0	1	X	X	X	TAT starts the day received by the lab, if received by 4:30pm
									Sample Comments
									Capit
									Capit
									Discont
									Capit
									Capit

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 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
		9/20/21 1330			9.20.21 1249

Eurofins Xenco, Carlshad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Kramer Jessica	Carrier Tracking No(s)	COG No:	890-419 1
Client Contact:		Phone:	E-Mail:	Jessica.kramer@eurofinsnet.com	State of Origin:	Page	Page 1 of 1
Shipping/Receiving		Eurofins Xenco		Accreditations Required (See note) NELAP - Louisiana NELAP - Texas		Job #	890-1287-1
Address:		1211 W Florida Ave		Due Date Requested		9/24/2021	
City		Midland		TAT Requested (days):			
State/Zip		TX, 79701		PO #			
Phone:		432-704-5440(Tel)		W/O #			
Email				Project #:		89000004	
Project Name		PLU 25 BD 901H		SSCOW#:			
Site				Field Filtered Sample (Yes or No)		<input checked="" type="checkbox"/>	
				Perform MS/MSD (Yes or No)		<input checked="" type="checkbox"/>	
				8015MOD_NM/8015NM_S_Prep (MOD) Full TPH			
				300_ORGFM_28D/DI_LEACH Chloride			
				8021B/6036FP_Calc (MOD) BTEX			
				Total Number of containers		<input checked="" type="checkbox"/>	
				Special Instructions/Note:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab, B=Issue As-Is)	Matrix (Wet/dry, Swab/dip, Overwash/dip, B=Issue As-Is)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc (MOD) BTEX	Total Number of containers	Special Instructions/Note:
FS28 (890-1287-1)	9/17/21	09 35	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	
FS37 (890-1287-2)	9/17/21	09 39	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	
PH08 (890-1287-3)	9/17/21	10 26	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	
PH08A (890-1287-4)	9/17/21	10 30	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	
PH08B (890-1287-5)	9/17/21	10 36	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	
FS38 (890-1287-6)	9/17/21	16 31	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	
FS39 (890-1287-7)	9/17/21	16 34	Mountain	Solid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & 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/methods being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested I II III IV Other (specify) _____
 Primary Deliverable Rank 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Relinquished by:	Date/Time:	Company:	Received By:	Date/Time:	Company:
Joe Culp	9.20.21		[Signature]	9/21/21 11:15	ERTCO
Relinquished by:	Date/Time:	Company:	Received By:	Date/Time:	Company:

Cooler Temperature(s) °C and Other Remarks:

Custody Seals Intact: Yes No Custody Seal No

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1287-1

SDG Number: 31403236.022.0129

Login Number: 1287

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1287-1

SDG Number: 31403236.022.0129

Login Number: 1287

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/21/21 11:36 AM

Creator: Lowe, Katie

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

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Environment Testing
America

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1287-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H
Revision: 1

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

Attn: Dan Moir

Authorized for release by:
10/15/2021 4:23:39 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: PLU 25 BD 901H

Laboratory Job ID: 890-1287-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Job ID: 890-1287-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1287-1

Receipt

The samples were received on 9/20/2021 12:49 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 3.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8263 and analytical batch 880-8262 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: FS28 (890-1287-1) and (890-1285-A-2-E). 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 880-8268 and analytical batch 880-8326 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 880-8360 and analytical batch 880-8365 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 sample was outside control limits: FS28 (890-1287-1). 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 880-8230 and analytical batch 880-8271 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-8255 and analytical batch 880-8391 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.

Job ID: 890-1287-2

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1287-2

Receipt

The samples were received on 9/20/2021 12:49 PM. Unless otherwise noted below, the samples arrived in good condition, and, where



Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Job ID: 890-1287-2 (Continued)

Laboratory: Eurofins Xenco, Carlsbad (Continued)

required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°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.

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS28

Lab Sample ID: 890-1287-1

Date Collected: 09/17/21 09:35

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/22/21 13:16	09/24/21 09:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	09/22/21 13:16	09/24/21 09:12	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 09:12	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 21:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 21:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/22/21 13:48	09/23/21 21:19	1
o-Terphenyl	131	S1+	70 - 130	09/22/21 13:48	09/23/21 21:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		4.95	mg/Kg			09/25/21 21:48	1

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		09/22/21 13:16	09/24/21 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	09/22/21 13:16	09/24/21 09:32	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 09:32	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 22:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	09/22/21 13:48	09/23/21 22:22	1
o-Terphenyl	124		70 - 130	09/22/21 13:48	09/23/21 22:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.3		5.04	mg/Kg			09/25/21 21:54	1

Client Sample ID: PH08

Lab Sample ID: 890-1287-3

Date Collected: 09/17/21 10:26

Matrix: Solid

Date Received: 09/20/21 12:49

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		09/22/21 13:16	09/24/21 09:52	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/22/21 13:16	09/24/21 09:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/22/21 13:16	09/24/21 09:52	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 13:16	09/24/21 09:52	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			10/07/21 12:59	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			10/06/21 11:21	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08

Lab Sample ID: 890-1287-3

Date Collected: 09/17/21 10:26

Matrix: Solid

Date Received: 09/20/21 12:49

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		09/22/21 13:48	09/23/21 22:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			09/22/21 13:48	09/23/21 22:43	1
o-Terphenyl	123		70 - 130			09/22/21 13:48	09/23/21 22:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	587		4.97	mg/Kg			09/25/21 22:01	1

Client Sample ID: PH08A

Lab Sample ID: 890-1287-4

Date Collected: 09/17/21 10:30

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			09/22/21 13:16	09/24/21 10:13	1
1,4-Difluorobenzene (Surr)	79		70 - 130			09/22/21 13:16	09/24/21 10:13	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 23:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 23:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 23:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			09/22/21 13:48	09/23/21 23:04	1
o-Terphenyl	123		70 - 130			09/22/21 13:48	09/23/21 23:04	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08A

Date Collected: 09/17/21 10:30

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Lab Sample ID: 890-1287-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	802		4.99	mg/Kg			09/25/21 22:07	1

Client Sample ID: PH08B

Date Collected: 09/17/21 10:36

Date Received: 09/20/21 12:49

Sample Depth: 2.0

Lab Sample ID: 890-1287-5

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		09/22/21 13:16	09/24/21 10:33	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/22/21 13:16	09/24/21 10:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/22/21 13:16	09/24/21 10:33	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 13:16	09/24/21 10:33	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 23:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 23:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 23:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/22/21 13:48	09/23/21 23:26	1
o-Terphenyl	120		70 - 130	09/22/21 13:48	09/23/21 23:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	600		4.98	mg/Kg			09/25/21 22:13	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS38

Lab Sample ID: 890-1287-6

Date Collected: 09/17/21 16:31

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.286		0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:54	1
Toluene	4.07		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Ethylbenzene	2.23		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
m-Xylene & p-Xylene	15.1		0.795	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
o-Xylene	3.37		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Xylenes, Total	18.5		0.795	mg/Kg		09/24/21 12:30	09/25/21 11:58	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	438	S1+	70 - 130	09/22/21 13:16	09/24/21 10:54	1
1,4-Difluorobenzene (Surr)	71		70 - 130	09/22/21 13:16	09/24/21 10:54	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	25.1		0.795	mg/Kg			10/07/21 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	552		49.8	mg/Kg			10/06/21 11:21	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	263		49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Diesel Range Organics (Over C10-C28)	289		49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	09/22/21 08:56	09/23/21 04:36	1
o-Terphenyl	129		70 - 130	09/22/21 08:56	09/23/21 04:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		4.95	mg/Kg			09/25/21 22:19	1

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00402		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Toluene	0.0379		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Ethylbenzene	0.0140		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
m-Xylene & p-Xylene	0.0254		0.00397	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
o-Xylene	0.0505		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Xylenes, Total	0.0759		0.00397	mg/Kg		09/22/21 13:16	09/24/21 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/22/21 13:16	09/24/21 14:27	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	09/22/21 13:16	09/24/21 14:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.132		0.00397	mg/Kg			10/07/21 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	397		50.0	mg/Kg			10/06/21 11:21	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	142		50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1
Diesel Range Organics (Over C10-C28)	255		50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/22/21 08:56	09/23/21 04:58	1
o-Terphenyl	126		70 - 130	09/22/21 08:56	09/23/21 04:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2030		49.7	mg/Kg			09/23/21 09:13	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-1287-1	FS28	134 S1+	78
890-1287-2	FS37	127	78
890-1287-3	PH08	125	79
890-1287-4	PH08A	130	79
890-1287-5	PH08B	125	79
890-1287-6	FS38	438 S1+	71
890-1287-7	FS39	73	105
LCS 880-8263/1-A	Lab Control Sample	128	71
LCS 880-8268/1-A	Lab Control Sample	98	89
LCS 880-8360/1-A	Lab Control Sample	112	80
LCSD 880-8263/2-A	Lab Control Sample Dup	129	79
LCSD 880-8268/2-A	Lab Control Sample Dup	98	91
LCSD 880-8360/2-A	Lab Control Sample Dup	111	87
MB 880-8141/5-A	Method Blank	109	101
MB 880-8209/5-A	Method Blank	109	79
MB 880-8263/5-A	Method Blank	101	78
MB 880-8268/5-A	Method Blank	114	113
MB 880-8359/5-A	Method Blank	103	79
MB 880-8360/5-A	Method Blank	121	77

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	OTPH1
		(70-130)	(70-130)
890-1287-1	FS28	115	131 S1+
890-1287-1 MS	FS28	104	107
890-1287-1 MSD	FS28	104	105
890-1287-2	FS37	111	124
890-1287-3	PH08	111	123
890-1287-4	PH08A	110	123
890-1287-5	PH08B	107	120
890-1287-6	FS38	117	129
890-1287-7	FS39	116	126
LCS 880-8242/2-A	Lab Control Sample	126	123
LCS 880-8266/2-A	Lab Control Sample	121	118
LCSD 880-8242/3-A	Lab Control Sample Dup	110	108
LCSD 880-8266/3-A	Lab Control Sample Dup	116	113
MB 880-8242/1-A	Method Blank	108	123
MB 880-8266/1-A	Method Blank	108	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8141/5-A
Matrix: Solid
Analysis Batch: 8326Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8141

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/20/21 14:00	09/23/21 18:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/20/21 14:00	09/23/21 18:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/20/21 14:00	09/23/21 18:44	1

Lab Sample ID: MB 880-8209/5-A
Matrix: Solid
Analysis Batch: 8262Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8209

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:00	09/23/21 16:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/22/21 09:00	09/23/21 16:32	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 09:00	09/23/21 16:32	1

Lab Sample ID: MB 880-8263/5-A
Matrix: Solid
Analysis Batch: 8262Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8263

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 13:16	09/24/21 03:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/22/21 13:16	09/24/21 03:24	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 03:24	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8263/1-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09072		mg/Kg		91	70 - 130
Toluene	0.100	0.09667		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1013		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2132		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1075		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	71		70 - 130

Lab Sample ID: LCSD 880-8263/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08034		mg/Kg		80	70 - 130	12	35
Toluene	0.100	0.08706		mg/Kg		87	70 - 130	10	35
Ethylbenzene	0.100	0.09732		mg/Kg		97	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	4	35
o-Xylene	0.100	0.1036		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: MB 880-8268/5-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8268

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 15:05	09/24/21 10:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/22/21 15:05	09/24/21 10:55	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/22/21 15:05	09/24/21 10:55	1

Lab Sample ID: LCS 880-8268/1-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07044		mg/Kg		70	70 - 130
Toluene	0.100	0.08333		mg/Kg		83	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8268/1-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.09829		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1777		mg/Kg		89	70 - 130
o-Xylene	0.100	0.09271		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-8268/2-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07104		mg/Kg		71	70 - 130	1	35
Toluene	0.100	0.08251		mg/Kg		83	70 - 130	1	35
Ethylbenzene	0.100	0.09969		mg/Kg		100	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1815		mg/Kg		91	70 - 130	2	35
o-Xylene	0.100	0.09559		mg/Kg		96	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-8359/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8359

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/24/21 10:53	09/24/21 17:49	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/24/21 10:53	09/24/21 17:49	1

Lab Sample ID: MB 880-8360/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8360

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:59	09/25/21 04:46	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8360/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8360

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:59	09/25/21 04:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/24/21 10:59	09/25/21 04:46	1
1,4-Difluorobenzene (Surr)	77		70 - 130	09/24/21 10:59	09/25/21 04:46	1

Lab Sample ID: LCS 880-8360/1-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09531		mg/Kg		95	70 - 130
Toluene	0.100	0.09060		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09115		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1868		mg/Kg		93	70 - 130
o-Xylene	0.100	0.1028		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: LCSD 880-8360/2-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09129		mg/Kg		91	70 - 130	4	35
Toluene	0.100	0.08698		mg/Kg		87	70 - 130	4	35
Ethylbenzene	0.100	0.08691		mg/Kg		87	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	4	35
o-Xylene	0.100	0.09233		mg/Kg		92	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-8242/1-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8242

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		09/22/21 08:56	09/22/21 20:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/22/21 08:56	09/22/21 20:08	1
o-Terphenyl	123		70 - 130	09/22/21 08:56	09/22/21 20:08	1

Lab Sample ID: LCS 880-8242/2-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1013		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1278		mg/Kg		128	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: LCSD 880-8242/3-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1021		mg/Kg		102	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1141		mg/Kg		114	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: MB 880-8266/1-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8266

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		09/22/21 13:48	09/23/21 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/22/21 13:48	09/23/21 20:15	1
o-Terphenyl	124		70 - 130	09/22/21 13:48	09/23/21 20:15	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8266/2-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	972.2		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1064		mg/Kg		106	70 - 130
		LCS	LCS				
Surrogate		%Recovery	Qualifier	Limits			
1-Chlorooctane		121		70 - 130			
o-Terphenyl		118		70 - 130			

Lab Sample ID: LCSD 880-8266/3-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	996.8		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1019		mg/Kg		102	70 - 130	4	20
		LCSD	LCSD						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		116		70 - 130					
o-Terphenyl		113		70 - 130					

Lab Sample ID: 890-1287-1 MS
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

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	997	935.5		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	904.3		mg/Kg		91	70 - 130
		MS	MS						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		104		70 - 130					
o-Terphenyl		107		70 - 130					

Lab Sample ID: 890-1287-1 MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

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	999	915.0		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	906.3		mg/Kg		91	70 - 130	0	20
		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		104		70 - 130							

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1287-1 MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

Surrogate	%Recovery	MSD MSD Qualifier	Limits
<i>o</i> -Terphenyl	105		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8230/1-A
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB MB Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			09/23/21 07:16	1

Lab Sample ID: LCS 880-8230/2-A
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS LCS Result Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	261.5	mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-8230/3-A
Matrix: Solid
Analysis Batch: 8271

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

Analyte	Spike Added	LCSD LCSD Result Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	262.2	mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-8255/1-A
Matrix: Solid
Analysis Batch: 8391

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB MB Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			09/25/21 19:13	1

Lab Sample ID: LCS 880-8255/2-A
Matrix: Solid
Analysis Batch: 8391

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS LCS Result Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	268.0	mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-8255/3-A
Matrix: Solid
Analysis Batch: 8391

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

Analyte	Spike Added	LCSD LCSD Result Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	268.2	mg/Kg		107	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8141/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8209/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 8262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8021B	8263
890-1287-2	FS37	Total/NA	Solid	8021B	8263
890-1287-3	PH08	Total/NA	Solid	8021B	8263
890-1287-4	PH08A	Total/NA	Solid	8021B	8263
890-1287-5	PH08B	Total/NA	Solid	8021B	8263
890-1287-6	FS38	Total/NA	Solid	8021B	8263
MB 880-8209/5-A	Method Blank	Total/NA	Solid	8021B	8209
MB 880-8263/5-A	Method Blank	Total/NA	Solid	8021B	8263
LCS 880-8263/1-A	Lab Control Sample	Total/NA	Solid	8021B	8263
LCSD 880-8263/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8263

Prep Batch: 8263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	5035	
890-1287-2	FS37	Total/NA	Solid	5035	
890-1287-3	PH08	Total/NA	Solid	5035	
890-1287-4	PH08A	Total/NA	Solid	5035	
890-1287-5	PH08B	Total/NA	Solid	5035	
890-1287-6	FS38	Total/NA	Solid	5035	
890-1287-7	FS39	Total/NA	Solid	5035	
MB 880-8263/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8263/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8263/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 8268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8268/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8268/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8268/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 8326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Total/NA	Solid	8021B	8263
MB 880-8141/5-A	Method Blank	Total/NA	Solid	8021B	8141
MB 880-8268/5-A	Method Blank	Total/NA	Solid	8021B	8268
LCS 880-8268/1-A	Lab Control Sample	Total/NA	Solid	8021B	8268
LCSD 880-8268/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8268

Prep Batch: 8359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8359/5-A	Method Blank	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	5035	
MB 880-8360/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8360/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8360/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 8365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8021B	8360
MB 880-8359/5-A	Method Blank	Total/NA	Solid	8021B	8359
MB 880-8360/5-A	Method Blank	Total/NA	Solid	8021B	8360
LCS 880-8360/1-A	Lab Control Sample	Total/NA	Solid	8021B	8360
LCSD 880-8360/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8360

Analysis Batch: 9064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	Total BTEX	
890-1287-2	FS37	Total/NA	Solid	Total BTEX	
890-1287-3	PH08	Total/NA	Solid	Total BTEX	
890-1287-4	PH08A	Total/NA	Solid	Total BTEX	
890-1287-5	PH08B	Total/NA	Solid	Total BTEX	
890-1287-6	FS38	Total/NA	Solid	Total BTEX	
890-1287-7	FS39	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 8238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8015B NM	8242
890-1287-7	FS39	Total/NA	Solid	8015B NM	8242
MB 880-8242/1-A	Method Blank	Total/NA	Solid	8015B NM	8242
LCS 880-8242/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8242
LCSD 880-8242/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8242

Prep Batch: 8242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8015NM Prep	
890-1287-7	FS39	Total/NA	Solid	8015NM Prep	
MB 880-8242/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8242/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8242/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 8266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015NM Prep	
890-1287-2	FS37	Total/NA	Solid	8015NM Prep	
890-1287-3	PH08	Total/NA	Solid	8015NM Prep	
890-1287-4	PH08A	Total/NA	Solid	8015NM Prep	
890-1287-5	PH08B	Total/NA	Solid	8015NM Prep	
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Prep Batch: 8266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1 MS	FS28	Total/NA	Solid	8015NM Prep	
890-1287-1 MSD	FS28	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015B NM	8266
890-1287-2	FS37	Total/NA	Solid	8015B NM	8266
890-1287-3	PH08	Total/NA	Solid	8015B NM	8266
890-1287-4	PH08A	Total/NA	Solid	8015B NM	8266
890-1287-5	PH08B	Total/NA	Solid	8015B NM	8266
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015B NM	8266
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8266
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8266
890-1287-1 MS	FS28	Total/NA	Solid	8015B NM	8266
890-1287-1 MSD	FS28	Total/NA	Solid	8015B NM	8266

Analysis Batch: 8973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015 NM	
890-1287-2	FS37	Total/NA	Solid	8015 NM	
890-1287-3	PH08	Total/NA	Solid	8015 NM	
890-1287-4	PH08A	Total/NA	Solid	8015 NM	
890-1287-5	PH08B	Total/NA	Solid	8015 NM	
890-1287-6	FS38	Total/NA	Solid	8015 NM	
890-1287-7	FS39	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 8230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Soluble	Solid	DI Leach	
MB 880-8230/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8230/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8230/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 8255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Soluble	Solid	DI Leach	
890-1287-2	FS37	Soluble	Solid	DI Leach	
890-1287-3	PH08	Soluble	Solid	DI Leach	
890-1287-4	PH08A	Soluble	Solid	DI Leach	
890-1287-5	PH08B	Soluble	Solid	DI Leach	
890-1287-6	FS38	Soluble	Solid	DI Leach	
MB 880-8255/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8255/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8255/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 8271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Soluble	Solid	300.0	8230
MB 880-8230/1-A	Method Blank	Soluble	Solid	300.0	8230

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
 SDG: 31403236.022.0129

HPLC/IC (Continued)

Analysis Batch: 8271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-8230/2-A	Lab Control Sample	Soluble	Solid	300.0	8230
LCSD 880-8230/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8230

Analysis Batch: 8391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Soluble	Solid	300.0	8255
890-1287-2	FS37	Soluble	Solid	300.0	8255
890-1287-3	PH08	Soluble	Solid	300.0	8255
890-1287-4	PH08A	Soluble	Solid	300.0	8255
890-1287-5	PH08B	Soluble	Solid	300.0	8255
890-1287-6	FS38	Soluble	Solid	300.0	8255
MB 880-8255/1-A	Method Blank	Soluble	Solid	300.0	8255
LCS 880-8255/2-A	Lab Control Sample	Soluble	Solid	300.0	8255
LCSD 880-8255/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8255

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS28
Date Collected: 09/17/21 09:35
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 21:19	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 21:48	CH	XEN MID

Client Sample ID: FS37
Date Collected: 09/17/21 09:39
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 22:22	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 21:54	CH	XEN MID

Client Sample ID: PH08
Date Collected: 09/17/21 10:26
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 22:43	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:01	CH	XEN MID

Client Sample ID: PH08A
Date Collected: 09/17/21 10:30
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08A
Date Collected: 09/17/21 10:30
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 23:04	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:07	CH	XEN MID

Client Sample ID: PH08B
Date Collected: 09/17/21 10:36
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 23:26	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:13	CH	XEN MID

Client Sample ID: FS38
Date Collected: 09/17/21 16:31
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:54	MR	XEN MID
Total/NA	Prep	5035			8360	09/24/21 12:30	MR	XEN MID
Total/NA	Analysis	8021B		200	8365	09/25/21 11:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8242	09/22/21 08:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8238	09/23/21 04:36	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:19	CH	XEN MID

Client Sample ID: FS39
Date Collected: 09/17/21 16:34
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8326	09/24/21 14:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			8242	09/22/21 08:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8238	09/23/21 04:58	AJ	XEN MID
Soluble	Leach	DI Leach			8230	09/21/21 19:07	SC	XEN MID
Soluble	Analysis	300.0		10	8271	09/23/21 09:13	CH	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

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

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Method Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
 SDG: 31403236.022.0129

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1287-1	FS28	Solid	09/17/21 09:35	09/20/21 12:49	1.5
890-1287-2	FS37	Solid	09/17/21 09:39	09/20/21 12:49	2.0
890-1287-3	PH08	Solid	09/17/21 10:26	09/20/21 12:49	0.5
890-1287-4	PH08A	Solid	09/17/21 10:30	09/20/21 12:49	1.0
890-1287-5	PH08B	Solid	09/17/21 10:36	09/20/21 12:49	2.0
890-1287-6	FS38	Solid	09/17/21 16:31	09/20/21 12:49	1.0
890-1287-7	FS39	Solid	09/17/21 16:34	09/20/21 12:49	1.0

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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: Dan Moir
Company Name: WSP USA
Address: 3300 North A Street
City, State ZIP: Midland, TX 79705
Phone: (432) 236-3849
Bill to: (if different) Kyle Litrell
Company Name: XTO Energy
Address: 522 W. Memrod St.
City, State ZIP: Carlsbad, NM 88220
Email: jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program: UST/PST RP Brownfields RC \$perfund
State of Project: _____
Reporting Level: Level II Level III P/UST RP Level IV
Deliverables: EDD ADAPT Other: _____

Project Name: PLU 25 BD 9014 Turn Around
Project Number: 31403036 003. 0119 Routine R
P.O. Number: Spill 6/1/11 Rush:
Sampler's Name: Jeremy Hill Due Date:
SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No
Temperature (°C): 3.8 / 3.0 Thermometer ID: TMM-007
Received In tact: Yes No Correction Factor: -0.2
Cooler Custody Seals: Yes No N/A Total Containers:
Sample Custody Seals: Yes No N/A



ANALYSIS REQUEST
Work Order Notes
Zn
NAPP 0116 546 260
CC
16666 51601
APP1
30-015-45863
TAT starts the day received 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
FS29	S	9-17-21	0935	1.5	1	X	X	X	Capit Capit
FS37	S	9-17-21	0939	2.0	1	X	X	X	Capit Discont
P108	S	9-17-21	1036	0.5	1	X	X	X	Capit
P108A	S	9-17-21	1036	1.0	1	X	X	X	Capit
P108B	S	9-17-21	1036	2.0	1	X	X	X	Capit
FS38	S	9-17-21	1631	1.0	1	X	X	X	Capit
FS39	S	9-17-21	1634	1.0	1	X	X	X	Capit

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 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
[Signature]	[Signature]	9/20/21 1330	[Signature]	[Signature]	9.20.21 1249
[Signature]	[Signature]		[Signature]	[Signature]	
[Signature]	[Signature]		[Signature]	[Signature]	
[Signature]	[Signature]		[Signature]	[Signature]	



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

Chain of Custody
Work Order No: _____
www.xenco.com Page 1 of 1

Project Manager: Dan Moir
Company Name: WSP USA
Address: 3300 North A Street
City, State ZIP: Midland, TX 79705
Phone: (432) 236-3849
Bill to: (if different) Kyle Litrell
Company Name: XTO Energy
Address: 522 W. Memrod St.
City, State ZIP: Carlsbad, NM 88220
Email: jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program: UST/PST RP Brownfields RC \$perfund
State of Project: Reporting Level II Level III P/UST RP Level IV
Deliverables: EDD ADAPT Other: _____

Project Name: PLU 25 BD 9014 Turn Around
Project Number: 31403036 003. 0119 Routine R
P.O. Number: Spill 6/1/11 Rush:
Sampler's Name: Jeremy Hill Due Date:
SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No
Temperature (°C): 3.8 / 3.0 Thermometer ID: TMM-007
Received In tact: Yes No Correction Factor: -0.2
Cooler Custody Seals: Yes No N/A Total Containers:
Sample Custody Seals: Yes No N/A



ANALYSIS REQUEST
Work Order Notes
Zn
NAPP 0116 546 260
CC
16666 51601
APP1
30-015-45863
TAT starts the day received 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
FS29	S	9-17-21	0935	1.5	1	X	X	X	Capit Capit
FS37	S	9-17-21	0939	2.0	1	X	X	X	Capit Discont
P1408	S	9-17-21	1036	0.5	1	X	X	X	Capit
P1408A	S	9-17-21	1036	1.0	1	X	X	X	Capit
P1408B	S	9-17-21	1036	2.0	1	X	X	X	Capit
FS38	S	9-17-21	1631	1.0	1	X	X	X	Capit
FS39	S	9-17-21	1634	1.0	1	X	X	X	Capit

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 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
		9/20/21 1330			9.20.21 1249

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Eurofins Xenco, Carlshad
 1089 N Canal St
 Carlshad NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



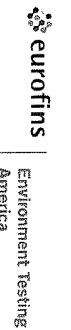
eurofins Environment Testing America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Kramer Jessica		Carrier Tracking No(s)	COC No:		
Shipping/Receiving		Phone:	E-Mail	jessica.kramer@eurofinsnet.com		State of Origin:	890-419 1		
Company		Eurofins Xenco		Accreditations Required (See note)		Page	Page 1 of 1		
Address:		Due Date Requested	1211 W Florida Ave		NELAP - Louisiana NELAP - Texas		Job #	890-1287-1	
City		TAT Requested (days):	Midland		Analysis Requested				
State Zip		PO #	TX, 79701						
Phone		WO #	432-704-5440(Tel)						
Email		Project #:	PLU 25 BD 901H						
Project Name		SSCOW#:	PLU 25 BD 901H		Total Number of containers			Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab, B=Issue As-Is)	Matrix (Wet/dry, Swab/dip, On-wash/dip, B=Issue As-Is)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
FS28 (890-1287-1)		9/17/21	09 35	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
FS37 (890-1287-2)		9/17/21	09 39	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
PH08 (890-1287-3)		9/17/21	10 26	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
PH08A (890-1287-4)		9/17/21	10 30	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
PH08B (890-1287-5)		9/17/21	10 36	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
FS38 (890-1287-6)		9/17/21	16 31	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
FS39 (890-1287-7)		9/17/21	16 34	Mountain	Solid	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.									
Possible Hazard Identification									
Unconfirmed									
Deliverable Requested I II III IV Other (specify)		Primary Deliverable Rank 2							
Empty Kit Relinquished by		Date	Time						
Relinquished by		Date/Time	Company						
Relinquished by		Date/Time	Company						
Custody Seals Intact:		Custody Seal No							
A Yes A No									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
Return To Client		Disposal By Lab		Archive For		Months			
Special Instructions/QC Requirements									
Method of Shipment:		Date/Time	Received By	Date/Time	Company				
Relinquished by		Date/Time	Company						
Relinquished by		Date/Time	Company						
Cooler Temperature(s) °C and Other Remarks:									

Eurofins Xenco, Carlshad

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM	Kramer Jessica	Carrier Tracking No(s)	COC No:			
Client Contact:		Phone:	E-Mail:	Jessica.kramer@eurofinsnet.com	State of Origin:	890-419 1			
Shipping/Receiving		Eurofins Xenco		Accreditations Required (See note)	Page 1 of 1	Job #			
Address:		Due Date Requested	NELAP - Louisiana NELAP - Texas		890-1287-1				
1211 W Florida Ave		9/24/2021	Analysis Requested						
City: Midland		TAT Requested (days):							
State Zip: TX, 79701		PO #:							
Phone: 432-704-5440(Tel)		W/O #:							
Email:		Project #:							
Project Name: PLU 25 BD 901H		SSCOW#:							
Site:									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab, B=Issue As-Is)	Matrix (W=Water, S=Soil, O=Oil, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
FS28 (890-1287-1)	9/17/21	09 35	Mountain	Solid		X	X	X	
FS37 (890-1287-2)	9/17/21	09 39	Mountain	Solid		X	X	X	
PH08 (890-1287-3)	9/17/21	10 26	Mountain	Solid		X	X	X	
PH08A (890-1287-4)	9/17/21	10 30	Mountain	Solid		X	X	X	
PH08B (890-1287-5)	9/17/21	10 36	Mountain	Solid		X	X	X	
FS38 (890-1287-6)	9/17/21	16 31	Mountain	Solid		X	X	X	
FS39 (890-1287-7)	9/17/21	16 34	Mountain	Solid		X	X	X	
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>									
Possible Hazard Identification									
Unconfirmed									
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2									
Empty Kit Relinquished by									
Relinquished by: Joe Culp 9.20.21									
Relinquished by: Date/Time: Company: Received by: Date/Time: Company: Method of Shipment: Date/Time: Company:									
Custody Seals Intact: Custody Seal No									
Cooler Temperature(s) °C and Other Remarks:									

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1287-1
SDG Number: 31403236.022.0129

Login Number: 1287
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1287-1
SDG Number: 31403236.022.0129

Login Number: 1287
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland
List Creation: 09/21/21 11:36 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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Walker, Crystal, EMNRD

From: Wells, Shelly, EMNRD
Sent: Friday, August 2, 2024 1:10 PM
To: Walker, Crystal, EMNRD
Cc: Bratcher, Michael, EMNRD
Subject: FW: [EXTERNAL] XTO - Variance Deferral Addendum Request - Poker Lake Unit 25 Brushy Draw 901H - Incident Number NAPP2116546260
Attachments: Photographic Log_Poker Lake Unit 25 Brushy Draw 901H_Incident Number NAPP2116546260.pdf; PokerLakeUnit25BrushyDraw901H.Figure5.5.6.2022.v4a.pdf

From: Romero, Alan <alan.romero1@exxonmobil.com>
Sent: Friday, August 2, 2024 12:27 PM
To: Garcia, Amanda <amanda.garcia@exxonmobil.com>; Ruth, Amy <amy.ruth@exxonmobil.com>; Brown, Colton S <colton.s.brown@exxonmobil.com>; Byrd, David /C <david.byrd@exxonmobil.com>; Dirx, Kaylan <kaylan.dirx@exxonmobil.com>; Holland, Bryce D <bryce.d.holland@exxonmobil.com>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Retz, Kent /C <kent.retz@exxonmobil.com>; Smith, Kailee /C <kailee.smith@exxonmobil.com>
Cc: blm_nm_cfo_spill BLM (blm_nm_cfo_spill@blm.gov) <blm_nm_cfo_spill@blm.gov>
Subject: [EXTERNAL] XTO - Variance Deferral Addendum Request - Poker Lake Unit 25 Brushy Draw 901H - Incident Number NAPP2116546260

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

Good Afternoon,

XTO is requesting a variance for the submitted deferral of remediation request submitted on 08/02/2024 per NMAC 19.15.29.12.C.(2). Between September 2021 and February 2022, excavation and delineation activities were completed at the Poker lake Unit 25 Brushy Draw 901H (Incident Number NAPP2116546260) site for remediation purposes resulting from a crude oil and produced water released that occurred on the facility pad, near active pipelines. Excavation activities were completed in two separate extents on the facility pad. All confirmation soil samples collected were in compliance with the site Closure Criteria except for FS40A through FS45A located within the eastern excavation extent, which exceeded in TPH and/or TPH-GRO/TPH-DRO concentrations. Excavation of impacted soil in this area was excavated to the maximum extent possible due to the presence of 11 active subsurface pipelines located at approximately 5 feet bgs. This includes six 4-inch high-pressure gas lines, three 2-inch high-pressure gas lines, and two 2-inch fiber optic lines. XTO safety policy restricts soil disturbing activities to a 2-foot radius of any on-site production equipment or active pipelines. This XTO safety policy is established to protect workers and reduce the likelihood of compromising the foundation of production equipment and pipelines. Disturbing soils underlying any of the high-pressure lines could allow a pipeline to become unstable and potentially causing an additionally release and also causes for imminent threat to the safety of all onsite personnel. This policy was enforced where impacted soil was identified within 2 feet of the active subsurface pipelines near floor soil samples FS40A through FS45A. To address the hydrocarbon impacts remaining in place, a 3 percent solution of Micro- Blaze® and freshwater was applied to the impacted area to promote degradation of the hydrocarbons. In order to define the vertical and lateral extent of the identified impacted area, delineation activities were conducted. Potholes PH09, PH10, and PH15

though PH24 were advanced to depths ranging from 2 feet to 21 feet bgs. Laboratory analytical results from potholes PH15 through PH18 indicated TPH and/or TPH-GRO/TPH-DRO concentrations exceeded Closure Criteria at depths ranging from 4 feet to 16 feet bgs. Based on laboratory analytical results, the lateral extent of the impacted soil was successfully defined. Vertical delineation could only be achieved though by deducing the extent of impacts using data from multiple potholes. Pothole PH15 was located just east of the pipeline corridor and pothole PH17 just west of the pipeline corridor. Pothole PH18 was completed above the pipelines. Pothole PH15 was taken as deep as possible utilizing a trackhoe, but to go any deeper would require benching or sloping at depth for heavy equipment access, which is not feasible due to the subsurface lithology (indurated caliche and the underlying competent sandstones) and the pipelines listed above. Potholes PH17 and PH18 were completed utilizing a hydrovac as the use of any mechanical equipment would have compromised the safety of personnel onsite and possibly resulted in an additional release. Advancement of PH17 below 6 feet bgs and PH18 below 4 feet bgs was not possible with because the hydrovac would not make progress through the competent caliche formation. Hand augering could not be completed due to the subsurface lithology as described above and also depicted in the photographic log attached. Utilization of a core drill, Geoprobe®, or drilling rig would not allow the location of the delineation samples to be completed any closer to the pipeline corridor or in between the pipelines. As such, additional delineation was completed as near to the impacted soil as possible for potholes PH20, PH22, and PH24. Samples from PH16, collected within the proposed deferred area, provides vertical delineation as near to the pipelines as possible. While soil samples collected from the terminal depths of PH15, PH17, and PH18 do not provide complete vertical delineation, the soil sampling data taken together provide information to estimate vertical delineation and rule out significant vertical impact.

XTO requests to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. Based on initial response efforts, all remedial efforts listed above, the above-mentioned bioremediation effort applied to the impacted area, regional groundwater depth being confirmed to be greater than 100 feet bgs, the site located in a low karst designated area, and no nearby sensitive site receptors, XTO believes deferment will not result in imminent risk to human health, the environment, or groundwater. The impacted soil remaining in place is limited to the area immediately beneath and adjacent to the subsurface pipelines, and no saturated soil remains in-place. XTO requests a variance to utilize the delineation soil samples collected as close as possible to confirm delineation of the impacted soil. Figure 5 showing the deferral area and delineation laboratory analytical results and a photographic log including all efforts listed above are attached.

Please let us know if you have any questions.

Respectfully,

Alan Romero

Environmental/Regulatory Advisor

Permian Business Unit – New Mexico Delaware Basin

ExxonMobil Upstream Oil & Gas Company Unconventional

3104 East Greene Street

Carlsbad, New Mexico 88220

Direct: (575) 988-3383

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Environment Testing
America

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1287-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H
Revision: 1

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

Attn: Dan Moir

Authorized for release by:
10/15/2021 4:23:39 PM

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



LINKS

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results through
Total Access

Have a Question?



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: PLU 25 BD 901H

Laboratory Job ID: 890-1287-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Job ID: 890-1287-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1287-1

Receipt

The samples were received on 9/20/2021 12:49 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 3.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8263 and analytical batch 880-8262 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: FS28 (890-1287-1) and (890-1285-A-2-E). 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 880-8268 and analytical batch 880-8326 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 880-8360 and analytical batch 880-8365 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 sample was outside control limits: FS28 (890-1287-1). 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 880-8230 and analytical batch 880-8271 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-8255 and analytical batch 880-8391 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.

Job ID: 890-1287-2

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1287-2

Receipt

The samples were received on 9/20/2021 12:49 PM. Unless otherwise noted below, the samples arrived in good condition, and, where



Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Job ID: 890-1287-2 (Continued)

Laboratory: Eurofins Xenco, Carlsbad (Continued)

required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°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.

- 1
- 2
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- 14

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS28

Lab Sample ID: 890-1287-1

Date Collected: 09/17/21 09:35

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/22/21 13:16	09/24/21 09:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/22/21 13:16	09/24/21 09:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	09/22/21 13:16	09/24/21 09:12	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 09:12	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 21:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 21:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/22/21 13:48	09/23/21 21:19	1
o-Terphenyl	131	S1+	70 - 130	09/22/21 13:48	09/23/21 21:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		4.95	mg/Kg			09/25/21 21:48	1

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:32	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		09/22/21 13:16	09/24/21 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	09/22/21 13:16	09/24/21 09:32	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS37

Lab Sample ID: 890-1287-2

Date Collected: 09/17/21 09:39

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 2.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 09:32	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 22:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 22:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	09/22/21 13:48	09/23/21 22:22	1
o-Terphenyl	124		70 - 130	09/22/21 13:48	09/23/21 22:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.3		5.04	mg/Kg			09/25/21 21:54	1

Client Sample ID: PH08

Lab Sample ID: 890-1287-3

Date Collected: 09/17/21 10:26

Matrix: Solid

Date Received: 09/20/21 12:49

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		09/22/21 13:16	09/24/21 09:52	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/22/21 13:16	09/24/21 09:52	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/22/21 13:16	09/24/21 09:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/22/21 13:16	09/24/21 09:52	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 13:16	09/24/21 09:52	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			10/07/21 12:59	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			10/06/21 11:21	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08

Lab Sample ID: 890-1287-3

Date Collected: 09/17/21 10:26

Matrix: Solid

Date Received: 09/20/21 12:49

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		09/22/21 13:48	09/23/21 22:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 22:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			09/22/21 13:48	09/23/21 22:43	1
o-Terphenyl	123		70 - 130			09/22/21 13:48	09/23/21 22:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	587		4.97	mg/Kg			09/25/21 22:01	1

Client Sample ID: PH08A

Lab Sample ID: 890-1287-4

Date Collected: 09/17/21 10:30

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/22/21 13:16	09/24/21 10:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			09/22/21 13:16	09/24/21 10:13	1
1,4-Difluorobenzene (Surr)	79		70 - 130			09/22/21 13:16	09/24/21 10:13	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 23:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 23:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/22/21 13:48	09/23/21 23:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			09/22/21 13:48	09/23/21 23:04	1
o-Terphenyl	123		70 - 130			09/22/21 13:48	09/23/21 23:04	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08A
Date Collected: 09/17/21 10:30
Date Received: 09/20/21 12:49
Sample Depth: 1.0

Lab Sample ID: 890-1287-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	802		4.99	mg/Kg			09/25/21 22:07	1

Client Sample ID: PH08B
Date Collected: 09/17/21 10:36
Date Received: 09/20/21 12:49
Sample Depth: 2.0

Lab Sample ID: 890-1287-5
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		09/22/21 13:16	09/24/21 10:33	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/22/21 13:16	09/24/21 10:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			09/22/21 13:16	09/24/21 10:33	1
1,4-Difluorobenzene (Surr)	79		70 - 130			09/22/21 13:16	09/24/21 10:33	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			10/07/21 12:59	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			10/06/21 11:21	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		09/22/21 13:48	09/23/21 23:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 23:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/23/21 23:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			09/22/21 13:48	09/23/21 23:26	1
o-Terphenyl	120		70 - 130			09/22/21 13:48	09/23/21 23:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	600		4.98	mg/Kg			09/25/21 22:13	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS38

Lab Sample ID: 890-1287-6

Date Collected: 09/17/21 16:31

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.286		0.00199	mg/Kg		09/22/21 13:16	09/24/21 10:54	1
Toluene	4.07		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Ethylbenzene	2.23		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
m-Xylene & p-Xylene	15.1		0.795	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
o-Xylene	3.37		0.398	mg/Kg		09/24/21 12:30	09/25/21 11:58	200
Xylenes, Total	18.5		0.795	mg/Kg		09/24/21 12:30	09/25/21 11:58	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	438	S1+	70 - 130	09/22/21 13:16	09/24/21 10:54	1
1,4-Difluorobenzene (Surr)	71		70 - 130	09/22/21 13:16	09/24/21 10:54	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	25.1		0.795	mg/Kg			10/07/21 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	552		49.8	mg/Kg			10/06/21 11:21	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	263		49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Diesel Range Organics (Over C10-C28)	289		49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 08:56	09/23/21 04:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	09/22/21 08:56	09/23/21 04:36	1
o-Terphenyl	129		70 - 130	09/22/21 08:56	09/23/21 04:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		4.95	mg/Kg			09/25/21 22:19	1

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00402		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Toluene	0.0379		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Ethylbenzene	0.0140		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
m-Xylene & p-Xylene	0.0254		0.00397	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
o-Xylene	0.0505		0.00198	mg/Kg		09/22/21 13:16	09/24/21 14:27	1
Xylenes, Total	0.0759		0.00397	mg/Kg		09/22/21 13:16	09/24/21 14:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/22/21 13:16	09/24/21 14:27	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Sample Depth: 1.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	09/22/21 13:16	09/24/21 14:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.132		0.00397	mg/Kg			10/07/21 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	397		50.0	mg/Kg			10/06/21 11:21	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	142		50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1
Diesel Range Organics (Over C10-C28)	255		50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/23/21 04:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	09/22/21 08:56	09/23/21 04:58	1
o-Terphenyl	126		70 - 130	09/22/21 08:56	09/23/21 04:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2030		49.7	mg/Kg			09/23/21 09:13	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-1287-1	FS28	134 S1+	78
890-1287-2	FS37	127	78
890-1287-3	PH08	125	79
890-1287-4	PH08A	130	79
890-1287-5	PH08B	125	79
890-1287-6	FS38	438 S1+	71
890-1287-7	FS39	73	105
LCS 880-8263/1-A	Lab Control Sample	128	71
LCS 880-8268/1-A	Lab Control Sample	98	89
LCS 880-8360/1-A	Lab Control Sample	112	80
LCSD 880-8263/2-A	Lab Control Sample Dup	129	79
LCSD 880-8268/2-A	Lab Control Sample Dup	98	91
LCSD 880-8360/2-A	Lab Control Sample Dup	111	87
MB 880-8141/5-A	Method Blank	109	101
MB 880-8209/5-A	Method Blank	109	79
MB 880-8263/5-A	Method Blank	101	78
MB 880-8268/5-A	Method Blank	114	113
MB 880-8359/5-A	Method Blank	103	79
MB 880-8360/5-A	Method Blank	121	77

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	OTPH1
		(70-130)	(70-130)
890-1287-1	FS28	115	131 S1+
890-1287-1 MS	FS28	104	107
890-1287-1 MSD	FS28	104	105
890-1287-2	FS37	111	124
890-1287-3	PH08	111	123
890-1287-4	PH08A	110	123
890-1287-5	PH08B	107	120
890-1287-6	FS38	117	129
890-1287-7	FS39	116	126
LCS 880-8242/2-A	Lab Control Sample	126	123
LCS 880-8266/2-A	Lab Control Sample	121	118
LCSD 880-8242/3-A	Lab Control Sample Dup	110	108
LCSD 880-8266/3-A	Lab Control Sample Dup	116	113
MB 880-8242/1-A	Method Blank	108	123
MB 880-8266/1-A	Method Blank	108	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8141/5-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8141

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/20/21 14:00	09/23/21 18:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/20/21 14:00	09/23/21 18:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/20/21 14:00	09/23/21 18:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/20/21 14:00	09/23/21 18:44	1

Lab Sample ID: MB 880-8209/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8209

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:00	09/23/21 16:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:00	09/23/21 16:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/22/21 09:00	09/23/21 16:32	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 09:00	09/23/21 16:32	1

Lab Sample ID: MB 880-8263/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8263

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 13:16	09/24/21 03:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 13:16	09/24/21 03:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/22/21 13:16	09/24/21 03:24	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/22/21 13:16	09/24/21 03:24	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8263/1-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09072		mg/Kg		91	70 - 130
Toluene	0.100	0.09667		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1013		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2132		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1075		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	71		70 - 130

Lab Sample ID: LCSD 880-8263/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08034		mg/Kg		80	70 - 130	12	35
Toluene	0.100	0.08706		mg/Kg		87	70 - 130	10	35
Ethylbenzene	0.100	0.09732		mg/Kg		97	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	4	35
o-Xylene	0.100	0.1036		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: MB 880-8268/5-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8268

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 15:05	09/24/21 10:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 15:05	09/24/21 10:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/22/21 15:05	09/24/21 10:55	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/22/21 15:05	09/24/21 10:55	1

Lab Sample ID: LCS 880-8268/1-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07044		mg/Kg		70	70 - 130
Toluene	0.100	0.08333		mg/Kg		83	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8268/1-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.09829		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1777		mg/Kg		89	70 - 130
o-Xylene	0.100	0.09271		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-8268/2-A
Matrix: Solid
Analysis Batch: 8326

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8268

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07104		mg/Kg		71	70 - 130	1	35
Toluene	0.100	0.08251		mg/Kg		83	70 - 130	1	35
Ethylbenzene	0.100	0.09969		mg/Kg		100	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1815		mg/Kg		91	70 - 130	2	35
o-Xylene	0.100	0.09559		mg/Kg		96	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-8359/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8359

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:53	09/24/21 17:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:53	09/24/21 17:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/24/21 10:53	09/24/21 17:49	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/24/21 10:53	09/24/21 17:49	1

Lab Sample ID: MB 880-8360/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8360

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/24/21 10:59	09/25/21 04:46	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8360/5-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8360

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/24/21 10:59	09/25/21 04:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/24/21 10:59	09/25/21 04:46	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	121		70 - 130	09/24/21 10:59	09/25/21 04:46	1
1,4-Difluorobenzene (Surr)	77		70 - 130	09/24/21 10:59	09/25/21 04:46	1

Lab Sample ID: LCS 880-8360/1-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.09060		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09115		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1868		mg/Kg		93	70 - 130
o-Xylene	0.100	0.1028		mg/Kg		103	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: LCSD 880-8360/2-A
Matrix: Solid
Analysis Batch: 8365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8360

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Benzene	0.100	0.09129		mg/Kg		91	70 - 130	4	35
Toluene	0.100	0.08698		mg/Kg		87	70 - 130	4	35
Ethylbenzene	0.100	0.08691		mg/Kg		87	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130	4	35
o-Xylene	0.100	0.09233		mg/Kg		92	70 - 130	11	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-8242/1-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8242

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 08:56	09/22/21 20:08	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/22/21 08:56	09/22/21 20:08	1
o-Terphenyl	123		70 - 130	09/22/21 08:56	09/22/21 20:08	1

Lab Sample ID: LCS 880-8242/2-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1013		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1278		mg/Kg		128	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: LCSD 880-8242/3-A
Matrix: Solid
Analysis Batch: 8238

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1021		mg/Kg		102	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1141		mg/Kg		114	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: MB 880-8266/1-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8266

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		09/22/21 13:48	09/23/21 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/22/21 13:48	09/23/21 20:15	1
o-Terphenyl	124		70 - 130	09/22/21 13:48	09/23/21 20:15	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8266/2-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	972.2		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1064		mg/Kg		106	70 - 130
		LCS	LCS				
Surrogate		%Recovery	Qualifier	Limits			
1-Chlorooctane		121		70 - 130			
o-Terphenyl		118		70 - 130			

Lab Sample ID: LCSD 880-8266/3-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	996.8		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1019		mg/Kg		102	70 - 130	4	20
		LCSD	LCSD						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		116		70 - 130					
o-Terphenyl		113		70 - 130					

Lab Sample ID: 890-1287-1 MS
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

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	997	935.5		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	904.3		mg/Kg		91	70 - 130
		MS	MS						
Surrogate		%Recovery	Qualifier	Limits					
1-Chlorooctane		104		70 - 130					
o-Terphenyl		107		70 - 130					

Lab Sample ID: 890-1287-1 MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

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	999	915.0		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	906.3		mg/Kg		91	70 - 130	0	20
		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		104		70 - 130							

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1287-1 MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: FS28
Prep Type: Total/NA
Prep Batch: 8266

Surrogate	%Recovery	MSD MSD Qualifier	Limits
<i>o</i> -Terphenyl	105		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8230/1-A
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB MB Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			09/23/21 07:16	1

Lab Sample ID: LCS 880-8230/2-A
Matrix: Solid
Analysis Batch: 8271

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS LCS Result Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	261.5	mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-8230/3-A
Matrix: Solid
Analysis Batch: 8271

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

Analyte	Spike Added	LCSD LCSD Result Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	262.2	mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-8255/1-A
Matrix: Solid
Analysis Batch: 8391

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB MB Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			09/25/21 19:13	1

Lab Sample ID: LCS 880-8255/2-A
Matrix: Solid
Analysis Batch: 8391

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS LCS Result Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	268.0	mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-8255/3-A
Matrix: Solid
Analysis Batch: 8391

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

Analyte	Spike Added	LCSD LCSD Result Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	268.2	mg/Kg		107	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8141/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8209/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 8262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8021B	8263
890-1287-2	FS37	Total/NA	Solid	8021B	8263
890-1287-3	PH08	Total/NA	Solid	8021B	8263
890-1287-4	PH08A	Total/NA	Solid	8021B	8263
890-1287-5	PH08B	Total/NA	Solid	8021B	8263
890-1287-6	FS38	Total/NA	Solid	8021B	8263
MB 880-8209/5-A	Method Blank	Total/NA	Solid	8021B	8209
MB 880-8263/5-A	Method Blank	Total/NA	Solid	8021B	8263
LCS 880-8263/1-A	Lab Control Sample	Total/NA	Solid	8021B	8263
LCSD 880-8263/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8263

Prep Batch: 8263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	5035	
890-1287-2	FS37	Total/NA	Solid	5035	
890-1287-3	PH08	Total/NA	Solid	5035	
890-1287-4	PH08A	Total/NA	Solid	5035	
890-1287-5	PH08B	Total/NA	Solid	5035	
890-1287-6	FS38	Total/NA	Solid	5035	
890-1287-7	FS39	Total/NA	Solid	5035	
MB 880-8263/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8263/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8263/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 8268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8268/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8268/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8268/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 8326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Total/NA	Solid	8021B	8263
MB 880-8141/5-A	Method Blank	Total/NA	Solid	8021B	8141
MB 880-8268/5-A	Method Blank	Total/NA	Solid	8021B	8268
LCS 880-8268/1-A	Lab Control Sample	Total/NA	Solid	8021B	8268
LCSD 880-8268/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8268

Prep Batch: 8359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8359/5-A	Method Blank	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	5035	
MB 880-8360/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8360/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8360/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 8365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8021B	8360
MB 880-8359/5-A	Method Blank	Total/NA	Solid	8021B	8359
MB 880-8360/5-A	Method Blank	Total/NA	Solid	8021B	8360
LCS 880-8360/1-A	Lab Control Sample	Total/NA	Solid	8021B	8360
LCSD 880-8360/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8360

Analysis Batch: 9064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	Total BTEX	
890-1287-2	FS37	Total/NA	Solid	Total BTEX	
890-1287-3	PH08	Total/NA	Solid	Total BTEX	
890-1287-4	PH08A	Total/NA	Solid	Total BTEX	
890-1287-5	PH08B	Total/NA	Solid	Total BTEX	
890-1287-6	FS38	Total/NA	Solid	Total BTEX	
890-1287-7	FS39	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 8238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8015B NM	8242
890-1287-7	FS39	Total/NA	Solid	8015B NM	8242
MB 880-8242/1-A	Method Blank	Total/NA	Solid	8015B NM	8242
LCS 880-8242/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8242
LCSD 880-8242/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8242

Prep Batch: 8242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-6	FS38	Total/NA	Solid	8015NM Prep	
890-1287-7	FS39	Total/NA	Solid	8015NM Prep	
MB 880-8242/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8242/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8242/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 8266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015NM Prep	
890-1287-2	FS37	Total/NA	Solid	8015NM Prep	
890-1287-3	PH08	Total/NA	Solid	8015NM Prep	
890-1287-4	PH08A	Total/NA	Solid	8015NM Prep	
890-1287-5	PH08B	Total/NA	Solid	8015NM Prep	
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901HJob ID: 890-1287-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Prep Batch: 8266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1 MS	FS28	Total/NA	Solid	8015NM Prep	
890-1287-1 MSD	FS28	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015B NM	8266
890-1287-2	FS37	Total/NA	Solid	8015B NM	8266
890-1287-3	PH08	Total/NA	Solid	8015B NM	8266
890-1287-4	PH08A	Total/NA	Solid	8015B NM	8266
890-1287-5	PH08B	Total/NA	Solid	8015B NM	8266
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015B NM	8266
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8266
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8266
890-1287-1 MS	FS28	Total/NA	Solid	8015B NM	8266
890-1287-1 MSD	FS28	Total/NA	Solid	8015B NM	8266

Analysis Batch: 8973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Total/NA	Solid	8015 NM	
890-1287-2	FS37	Total/NA	Solid	8015 NM	
890-1287-3	PH08	Total/NA	Solid	8015 NM	
890-1287-4	PH08A	Total/NA	Solid	8015 NM	
890-1287-5	PH08B	Total/NA	Solid	8015 NM	
890-1287-6	FS38	Total/NA	Solid	8015 NM	
890-1287-7	FS39	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 8230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Soluble	Solid	DI Leach	
MB 880-8230/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8230/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8230/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 8255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Soluble	Solid	DI Leach	
890-1287-2	FS37	Soluble	Solid	DI Leach	
890-1287-3	PH08	Soluble	Solid	DI Leach	
890-1287-4	PH08A	Soluble	Solid	DI Leach	
890-1287-5	PH08B	Soluble	Solid	DI Leach	
890-1287-6	FS38	Soluble	Solid	DI Leach	
MB 880-8255/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8255/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8255/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 8271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-7	FS39	Soluble	Solid	300.0	8230
MB 880-8230/1-A	Method Blank	Soluble	Solid	300.0	8230

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Analysis Batch: 8271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-8230/2-A	Lab Control Sample	Soluble	Solid	300.0	8230
LCSD 880-8230/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8230

Analysis Batch: 8391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1287-1	FS28	Soluble	Solid	300.0	8255
890-1287-2	FS37	Soluble	Solid	300.0	8255
890-1287-3	PH08	Soluble	Solid	300.0	8255
890-1287-4	PH08A	Soluble	Solid	300.0	8255
890-1287-5	PH08B	Soluble	Solid	300.0	8255
890-1287-6	FS38	Soluble	Solid	300.0	8255
MB 880-8255/1-A	Method Blank	Soluble	Solid	300.0	8255
LCS 880-8255/2-A	Lab Control Sample	Soluble	Solid	300.0	8255
LCSD 880-8255/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8255

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS28
Date Collected: 09/17/21 09:35
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 21:19	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 21:48	CH	XEN MID

Client Sample ID: FS37
Date Collected: 09/17/21 09:39
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 22:22	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 21:54	CH	XEN MID

Client Sample ID: PH08
Date Collected: 09/17/21 10:26
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 09:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 22:43	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:01	CH	XEN MID

Client Sample ID: PH08A
Date Collected: 09/17/21 10:30
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: PH08A
Date Collected: 09/17/21 10:30
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 23:04	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:07	CH	XEN MID

Client Sample ID: PH08B
Date Collected: 09/17/21 10:36
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/23/21 23:26	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:13	CH	XEN MID

Client Sample ID: FS38
Date Collected: 09/17/21 16:31
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/24/21 10:54	MR	XEN MID
Total/NA	Prep	5035			8360	09/24/21 12:30	MR	XEN MID
Total/NA	Analysis	8021B		200	8365	09/25/21 11:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8242	09/22/21 08:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8238	09/23/21 04:36	AJ	XEN MID
Soluble	Leach	DI Leach			8255	09/22/21 10:00	CH	XEN MID
Soluble	Analysis	300.0		1	8391	09/25/21 22:19	CH	XEN MID

Client Sample ID: FS39
Date Collected: 09/17/21 16:34
Date Received: 09/20/21 12:49

Lab Sample ID: 890-1287-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8263	09/22/21 13:16	KL	XEN MID
Total/NA	Analysis	8021B		1	8326	09/24/21 14:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9064	10/07/21 12:59	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8973	10/06/21 11:21	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Client Sample ID: FS39

Lab Sample ID: 890-1287-7

Date Collected: 09/17/21 16:34

Matrix: Solid

Date Received: 09/20/21 12:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			8242	09/22/21 08:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8238	09/23/21 04:58	AJ	XEN MID
Soluble	Leach	DI Leach			8230	09/21/21 19:07	SC	XEN MID
Soluble	Analysis	300.0		10	8271	09/23/21 09:13	CH	XEN MID

Laboratory References:

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

- 1
- 2
- 3
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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

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

- 1
- 2
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Method Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
 SDG: 31403236.022.0129

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1287-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1287-1	FS28	Solid	09/17/21 09:35	09/20/21 12:49	1.5
890-1287-2	FS37	Solid	09/17/21 09:39	09/20/21 12:49	2.0
890-1287-3	PH08	Solid	09/17/21 10:26	09/20/21 12:49	0.5
890-1287-4	PH08A	Solid	09/17/21 10:30	09/20/21 12:49	1.0
890-1287-5	PH08B	Solid	09/17/21 10:36	09/20/21 12:49	2.0
890-1287-6	FS38	Solid	09/17/21 16:31	09/20/21 12:49	1.0
890-1287-7	FS39	Solid	09/17/21 16:34	09/20/21 12:49	1.0

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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

Chain of Custody

Work Order No: _____

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Memrod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	Jeremy.Hill@wsp.com, Dan.Moir@wsp.com

Program: <input checked="" type="checkbox"/> UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Ironfields	<input type="checkbox"/> RC	<input type="checkbox"/> \$perfund
State of Project:				
Reporting Level: <input type="checkbox"/> Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> PT/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Deliverables: <input type="checkbox"/> EDD	<input type="checkbox"/> ADAPT	Other: _____		

Project Name:	PLU 25 BD 9014	Turn Around	
Project Number:	31403036003.0109	Routine	<input checked="" type="checkbox"/>
P.O. Number:	Spill 6/1/19	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Temperature (°C):	3.8 / 3.0	Thermometer ID	TMM-007
Received In tact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:	
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			Sample Comments
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	
FS29	S	9-17-21	0935	1.5	X	X	X	
FS37	S		0939	2.0	X	X	X	
P108	S		1036	0.5	X	X	X	
P108A	S		1036	1.0	X	X	X	
P108B	S		1036	2.0	X	X	X	
FS38	S		1631	1.0	X	X	X	
FS39	S		1634	1.0	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 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
		9/20/21 1330			9.20.21 1249



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: Dan Moir
Company Name: WSP USA
Address: 3300 North A Street
City, State ZIP: Midland, TX 79705
Phone: (432) 236-3849
Bill to: (if different) Kyle Litrell
Company Name: XTO Energy
Address: 622 W. Memrod St.
City, State ZIP: Carlsbad, NM 88220
Email: jeremy.hill@wsp.com, Dan.Moir@wsp.com

Program: UST/PST RP Ironfields RC \$ perfund
State of Project: _____
Reporting Level: Level II Level III ST/UST RP Level IV
Deliverables: EDD ADAPT Other: _____

Project Name: PLU 25 BD 9014 Turn Around
Project Number: 31403036 003. 01D9 Routine
P.O. Number: Spill 6/1/11 Rush:
Sampler's Name: Jeremy Hill Due Date:
SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No
Temperature (°C): 3.8 / 3.0 Thermometer ID: TMM-007
Received In tact: Yes No Correction Factor: -0.2
Cooler Custody Seals: Yes No N/A Total Containers:
Sample Custody Seals: Yes No N/A



ANALYSIS REQUEST
Work Order Notes
Zn
NAPP 0116 526 260
EC
16666 51601
APP1
30-015-45863
TAT starts the day received by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			Sample Comments
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	
FS29	S	9-17-21	0935	1.5	1	X	X	
FS37			0939	2.0	1	X	X	Capit
P1408			1036	0.5	1	X	X	Capit
P1408A			1036	1.0	1	X	X	Discont
P1408B			1036	2.0	1	X	X	
FS38			1631	1.0	1	X	X	Capit
FS39			1634	1.0	1	X	X	Capit

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
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: 9.20.21 1249



Chain of Custody

Eurofins Xenco, Carlshad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Kramer Jessica	Carrier Tracking No(s)	COC No:
Client Contact:		Phone:	E-Mail:	Jessica.kramer@eurofinsnet.com	State of Origin:	890-419 1
Shipping/Receiving		Eurofins Xenco		Accreditations Required (See note)	Page 1 of 1	Page 1 of 1
Address:		Due Date Requested	NELAP - Louisiana NELAP - Texas		Job #	890-1287-1
1211 W Florida Ave		9/24/2021	TAT Requested (days):			
City: Midland		Analysis Requested				
State Zip: TX, 79701		8015MOD_NM/8015NM_S_Prep (MOD) Full TPH				
Phone: 432-704-5440(Tel)		300_ORGFM_28D/DI_LEACH Chloride				
Email: W/O #:		8021B/6036FP_Calc (MOD) BTEX				
Project Name: PLU 25 BD 901H		Field Filtered Sample (Yes or No)				
Site: SSCOW#:		Perform MS/MSD (Yes or No)				
		8015MOD_NM/8015NM_S_Prep (MOD) Full TPH				
		300_ORGFM_28D/DI_LEACH Chloride				
		8021B/6036FP_Calc (MOD) BTEX				
		Total Number of containers				
		Special Instructions/Note:				
		Preservation Codes				
		A HCL M - Hexane				
		B NaOH N None				
		C Zn Acetate O AsH2O2				
		D Nitric Acid P NaCO3S				
		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 EDTA Z other (specify)				
		Other:				

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab, B=Issue As-Is)	Matrix (Wet/dry, Swab/dip, On-wash/dip, B=Issue As-Is)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
FS28 (890-1287-1)	9/17/21	09 35	Mountain	Solid	X	X	X	
FS37 (890-1287-2)	9/17/21	09 39	Mountain	Solid	X	X	X	
PH08 (890-1287-3)	9/17/21	10 26	Mountain	Solid	X	X	X	
PH08A (890-1287-4)	9/17/21	10 30	Mountain	Solid	X	X	X	
PH08B (890-1287-5)	9/17/21	10 36	Mountain	Solid	X	X	X	
FS38 (890-1287-6)	9/17/21	16 31	Mountain	Solid	X	X	X	
FS39 (890-1287-7)	9/17/21	16 34	Mountain	Solid	X	X	X	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Unconfirmed

Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2

Empty Kit Relinquished by _____ Date _____ Time _____ Method of Shipment: _____

Relinquished by: *Joe Culp* 9.20.21 Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks: _____

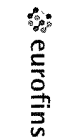
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Eurofins Xenco, Carlshad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Kramer Jessica		Carrier Tracking No(s)	COC No:		
Shipping/Receiving		Phone:	E-Mail	jessica.kramer@eurofinsnet.com		State of Origin:	890-419 1		
Company		Eurofins Xenco		Accreditations Required (See note)		Page	Page 1 of 1		
Address:		Due Date Requested	NELAP - Louisiana		NELAP - Texas		Job #		
1211 W Florida Ave		9/24/2021	NELAP - Louisiana		NELAP - Texas		890-1287-1		
City		TAT Requested (days):	Analysis Requested						
Midland									
State Zip									
TX, 79701									
Phone		PO #							
432-704-5440(Tel)		W/O #							
Email		Project #							
		89000004							
Project Name		SSCOW#							
PLU 25 BD 901H									
Site									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab, B=Issue As-Is)	Matrix (Wet/dry, Swab/dip, On-wash/dip, B=Issue As-Is)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
FS28 (890-1287-1)		9/17/21	09 35	Mountain	Solid	X	X	X	
FS37 (890-1287-2)		9/17/21	09 39	Mountain	Solid	X	X	X	
PH08 (890-1287-3)		9/17/21	10 26	Mountain	Solid	X	X	X	
PH08A (890-1287-4)		9/17/21	10 30	Mountain	Solid	X	X	X	
PH08B (890-1287-5)		9/17/21	10 36	Mountain	Solid	X	X	X	
FS38 (890-1287-6)		9/17/21	16 31	Mountain	Solid	X	X	X	
FS39 (890-1287-7)		9/17/21	16 34	Mountain	Solid	X	X	X	
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>									
Possible Hazard Identification									
Unconfirmed									
Deliverable Requested I II III IV Other (specify)									
Primary Deliverable Rank 2									
Empty Kit Relinquished by									
Relinquished by									
Date/Time									
Company									
Relinquished by									
Date/Time									
Company									
Custody Seals Intact: Custody Seal No									
Cooler Temperature(s) °C and Other Remarks.									

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1287-1
SDG Number: 31403236.022.0129

Login Number: 1287
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1287-1
SDG Number: 31403236.022.0129

Login Number: 1287
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland
List Creation: 09/21/21 11:36 AM

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

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1289-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/30/2021 7:53:24 PM

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



LINKS

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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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Client: WSP USA Inc.
Project/Site: PLU BD 901H

Laboratory Job ID: 890-1289-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

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
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Job ID: 890-1289-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1289-1

Receipt

The samples were received on 9/21/2021 9:54 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 880-8243 and analytical batch 880-8299 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 sample was outside control limits: (890-1287-A-1-E). 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.

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Client Sample ID: PH10

Lab Sample ID: 890-1289-1

Date Collected: 09/20/21 15:50

Matrix: Solid

Date Received: 09/21/21 09:54

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	mg/Kg		09/22/21 08:59	09/23/21 11:28	1
Toluene	<0.00200	U F1	0.00200	mg/Kg		09/22/21 08:59	09/23/21 11:28	1
Ethylbenzene	<0.00200	U F1	0.00200	mg/Kg		09/22/21 08:59	09/23/21 11:28	1
m-Xylene & p-Xylene	<0.00400	U F1 F2	0.00400	mg/Kg		09/22/21 08:59	09/23/21 11:28	1
o-Xylene	<0.00200	U F1	0.00200	mg/Kg		09/22/21 08:59	09/23/21 11:28	1
Xylenes, Total	<0.00400	U F1	0.00400	mg/Kg		09/22/21 08:59	09/23/21 11:28	1
Total BTEX	<0.00200	U F1	0.00200	mg/Kg		09/22/21 08:59	09/23/21 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	09/22/21 08:59	09/23/21 11:28	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/22/21 08:59	09/23/21 11:28	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	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/24/21 04:01	1
Diesel Range Organics (Over C10-C28)	1070		49.8	mg/Kg		09/22/21 13:48	09/24/21 04:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/24/21 04:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/22/21 13:48	09/24/21 04:01	1
o-Terphenyl	122		70 - 130	09/22/21 13:48	09/24/21 04:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1160		4.99	mg/Kg			09/29/21 09:30	1

Client Sample ID: PH10A

Lab Sample ID: 890-1289-2

Date Collected: 09/20/21 15:55

Matrix: Solid

Date Received: 09/21/21 09:54

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/22/21 09:44	09/23/21 11:48	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/22/21 09:44	09/23/21 11:48	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/22/21 09:44	09/23/21 11:48	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/22/21 09:44	09/23/21 11:48	1
o-Xylene	0.0314		0.00202	mg/Kg		09/22/21 09:44	09/23/21 11:48	1
Xylenes, Total	0.0314		0.00404	mg/Kg		09/22/21 09:44	09/23/21 11:48	1
Total BTEX	0.0314		0.00202	mg/Kg		09/22/21 09:44	09/23/21 11:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	09/22/21 09:44	09/23/21 11:48	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/22/21 09:44	09/23/21 11:48	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		09/22/21 13:48	09/24/21 04:22	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Client Sample ID: PH10A

Lab Sample ID: 890-1289-2

Date Collected: 09/20/21 15:55

Matrix: Solid

Date Received: 09/21/21 09:54

Sample Depth: 1

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)	234		50.0	mg/Kg		09/22/21 13:48	09/24/21 04:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/24/21 04:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			09/22/21 13:48	09/24/21 04:22	1
o-Terphenyl	129		70 - 130			09/22/21 13:48	09/24/21 04:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	358		4.96	mg/Kg			09/29/21 09:38	1

Client Sample ID: PH10B

Lab Sample ID: 890-1289-3

Date Collected: 09/20/21 16:00

Matrix: Solid

Date Received: 09/21/21 09:54

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			09/22/21 09:44	09/23/21 12:09	1
1,4-Difluorobenzene (Surr)	88		70 - 130			09/22/21 09:44	09/23/21 12:09	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		09/22/21 13:48	09/24/21 04:43	1
Diesel Range Organics (Over C10-C28)	557		49.8	mg/Kg		09/22/21 13:48	09/24/21 04:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 13:48	09/24/21 04:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			09/22/21 13:48	09/24/21 04:43	1
o-Terphenyl	126		70 - 130			09/22/21 13:48	09/24/21 04:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	458		4.98	mg/Kg			09/29/21 09:46	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-6345-A-8-C MS	Matrix Spike	125	82
880-6345-A-8-D MSD	Matrix Spike Duplicate	130	83
890-1289-1	PH10	132 S1+	76
890-1289-1 MS	PH10	122	82
890-1289-1 MSD	PH10	130	80
890-1289-2	PH10A	131 S1+	79
890-1289-3	PH10B	115	88
LCS 880-8198/1-A	Lab Control Sample	114	86
LCS 880-8243/1-A	Lab Control Sample	125	76
LCSD 880-8198/2-A	Lab Control Sample Dup	122	72
LCSD 880-8243/2-A	Lab Control Sample Dup	123	100
MB 880-8142/5-A	Method Blank	107	76
MB 880-8198/5-A	Method Blank	119	82
MB 880-8243/5-A	Method Blank	108	71

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1287-A-1-F MS	Matrix Spike	104	107
890-1287-A-1-G MSD	Matrix Spike Duplicate	104	105
890-1289-1	PH10	110	122
890-1289-2	PH10A	115	129
890-1289-3	PH10B	114	126
LCS 880-8266/2-A	Lab Control Sample	121	118
LCSD 880-8266/3-A	Lab Control Sample Dup	116	113
MB 880-8266/1-A	Method Blank	108	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8142/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8142

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			09/22/21 09:45	09/22/21 16:03	1
1,4-Difluorobenzene (Surr)	76		70 - 130			09/22/21 09:45	09/22/21 16:03	1

Lab Sample ID: MB 880-8198/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8198

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			09/22/21 09:44	09/23/21 02:55	1
1,4-Difluorobenzene (Surr)	82		70 - 130			09/22/21 09:44	09/23/21 02:55	1

Lab Sample ID: LCS 880-8198/1-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.08505		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08810		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1844		mg/Kg		92	70 - 130
o-Xylene	0.100	0.09718		mg/Kg		97	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	114		70 - 130				
1,4-Difluorobenzene (Surr)	86		70 - 130				

Lab Sample ID: LCSD 880-8198/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Benzene	0.100	0.08359		mg/Kg		84	70 - 130	0	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8198/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.08817		mg/Kg		88	70 - 130	4	35
Ethylbenzene	0.100	0.09335		mg/Kg		93	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1969		mg/Kg		98	70 - 130	7	35
o-Xylene	0.100	0.1016		mg/Kg		102	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	72		70 - 130

Lab Sample ID: 880-6345-A-8-C MS
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.100	0.05090	F1	mg/Kg		51	70 - 130
Toluene	<0.00198	U F1	0.100	0.03736	F1	mg/Kg		37	70 - 130
Ethylbenzene	<0.00198	U F1	0.100	0.04601	F1	mg/Kg		46	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.09039	F1	mg/Kg		45	70 - 130
o-Xylene	<0.00198	U F1	0.100	0.05994	F1	mg/Kg		60	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

Lab Sample ID: 880-6345-A-8-D MSD
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8198

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	0.05894	F1	mg/Kg		59	70 - 130	15	35
Toluene	<0.00198	U F1	0.100	0.03865	F1	mg/Kg		39	70 - 130	3	35
Ethylbenzene	<0.00198	U F1	0.100	0.05040	F1	mg/Kg		50	70 - 130	9	35
m-Xylene & p-Xylene	<0.00396	U F1	0.200	0.09513	F1	mg/Kg		48	70 - 130	5	35
o-Xylene	<0.00198	U F1	0.100	0.07027		mg/Kg		70	70 - 130	16	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	130		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: MB 880-8243/5-A
Matrix: Solid
Analysis Batch: 8299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8243

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 08:59	09/23/21 12:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 08:59	09/23/21 12:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 08:59	09/23/21 12:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 08:59	09/23/21 12:09	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8243/5-A
Matrix: Solid
Analysis Batch: 8299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8243

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 08:59	09/23/21 12:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 08:59	09/23/21 12:09	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		09/22/21 08:59	09/23/21 12:09	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	108		70 - 130	09/22/21 08:59	09/23/21 12:09	1
1,4-Difluorobenzene (Surr)	71		70 - 130	09/22/21 08:59	09/23/21 12:09	1

Lab Sample ID: LCS 880-8243/1-A
Matrix: Solid
Analysis Batch: 8299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8243

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.08174		mg/Kg		82	70 - 130
Toluene	0.100	0.1089		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1095		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2051		mg/Kg		103	70 - 130
o-Xylene	0.100	0.09630		mg/Kg		96	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: LCSD 880-8243/2-A
Matrix: Solid
Analysis Batch: 8299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8243

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.07326		mg/Kg		73	70 - 130	11	35
Toluene	0.100	0.1012		mg/Kg		101	70 - 130	7	35
Ethylbenzene	0.100	0.1052		mg/Kg		105	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1915		mg/Kg		96	70 - 130	7	35
o-Xylene	0.100	0.09459		mg/Kg		95	70 - 130	2	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1289-1 MS
Matrix: Solid
Analysis Batch: 8299

Client Sample ID: PH10
Prep Type: Total/NA
Prep Batch: 8243

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Benzene	<0.00200	U F1	0.101	0.03731	F1	mg/Kg		36	70 - 130
Toluene	<0.00200	U F1	0.101	0.05155	F1	mg/Kg		51	70 - 130
Ethylbenzene	<0.00200	U F1	0.101	0.05240	F1	mg/Kg		52	70 - 130
m-Xylene & p-Xylene	<0.00400	U F1	0.202	0.06347	F1	mg/Kg		31	70 - 130
o-Xylene	<0.00200	U F1	0.101	0.04696	F1	mg/Kg		46	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

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

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

Lab Sample ID: 890-1289-1 MSD
Matrix: Solid
Analysis Batch: 8299

Client Sample ID: PH10
Prep Type: Total/NA
Prep Batch: 8243

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Benzene	<0.00200	U F1	0.101	0.03211	F1	mg/Kg		32	70 - 130	15	35	
Toluene	<0.00200	U F1	0.101	0.04330	F1	mg/Kg		43	70 - 130	17	35	
Ethylbenzene	<0.00200	U F1	0.101	0.04349	F1	mg/Kg		43	70 - 130	19	35	
m-Xylene & p-Xylene	<0.00400	U F1 F2	0.201	0.04392	F1 F2	mg/Kg		22	70 - 130	36	35	
o-Xylene	<0.00200	U F1	0.101	0.04119	F1	mg/Kg		41	70 - 130	13	35	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	130		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

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

Lab Sample ID: MB 880-8266/1-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8266

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	108		70 - 130	09/22/21 13:48	09/23/21 20:15	1
o-Terphenyl	124		70 - 130	09/22/21 13:48	09/23/21 20:15	1

Lab Sample ID: LCS 880-8266/2-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	1000	972.2		mg/Kg		97	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1064		mg/Kg		106	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	121		70 - 130
o-Terphenyl	118		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8266/3-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	996.8		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1019		mg/Kg		102	70 - 130	4	20
Surrogate		LCSD %Recovery	LCSD Qualifier						Limits
1-Chlorooctane		116							70 - 130
o-Terphenyl		113							70 - 130

Lab Sample ID: 890-1287-A-1-F MS
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	935.5		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	997	904.3		mg/Kg		91	70 - 130		
Surrogate		MS %Recovery	MS Qualifier								Limits
1-Chlorooctane		104									70 - 130
o-Terphenyl		107									70 - 130

Lab Sample ID: 890-1287-A-1-G MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	915.0		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	906.3		mg/Kg		91	70 - 130	0	20
Surrogate		MSD %Recovery	MSD Qualifier								Limits
1-Chlorooctane		104									70 - 130
o-Terphenyl		105									70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8315/1-A
Matrix: Solid
Analysis Batch: 8513

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			09/29/21 08:42	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-8315/2-A
Matrix: Solid
Analysis Batch: 8513

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	256.1		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-8315/3-A
Matrix: Solid
Analysis Batch: 8513

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	253.8		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 890-1279-A-1-F MS
Matrix: Solid
Analysis Batch: 8513

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	1310	F1	1250	2613		mg/Kg		104	90 - 110

Lab Sample ID: 890-1279-A-1-G MSD
Matrix: Solid
Analysis Batch: 8513

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	1310	F1	1250	2691	F1	mg/Kg		111	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8142/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-2	PH10A	Total/NA	Solid	5035	
890-1289-3	PH10B	Total/NA	Solid	5035	
MB 880-8198/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8198/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8198/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6345-A-8-C MS	Matrix Spike	Total/NA	Solid	5035	
880-6345-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 8243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Total/NA	Solid	5035	
MB 880-8243/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8243/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8243/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1289-1 MS	PH10	Total/NA	Solid	5035	
890-1289-1 MSD	PH10	Total/NA	Solid	5035	

Analysis Batch: 8262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Total/NA	Solid	8021B	8243
890-1289-2	PH10A	Total/NA	Solid	8021B	8198
890-1289-3	PH10B	Total/NA	Solid	8021B	8198
MB 880-8142/5-A	Method Blank	Total/NA	Solid	8021B	8142
MB 880-8198/5-A	Method Blank	Total/NA	Solid	8021B	8198
LCS 880-8198/1-A	Lab Control Sample	Total/NA	Solid	8021B	8198
LCSD 880-8198/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8198
880-6345-A-8-C MS	Matrix Spike	Total/NA	Solid	8021B	8198
880-6345-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8198

Analysis Batch: 8299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Total/NA	Solid	8021B	8243
MB 880-8243/5-A	Method Blank	Total/NA	Solid	8021B	8243
LCS 880-8243/1-A	Lab Control Sample	Total/NA	Solid	8021B	8243
LCSD 880-8243/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8243
890-1289-1 MS	PH10	Total/NA	Solid	8021B	8243
890-1289-1 MSD	PH10	Total/NA	Solid	8021B	8243

GC Semi VOA

Prep Batch: 8266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Total/NA	Solid	8015NM Prep	
890-1289-2	PH10A	Total/NA	Solid	8015NM Prep	
890-1289-3	PH10B	Total/NA	Solid	8015NM Prep	
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU BD 901H

Job ID: 890-1289-1
 SDG: 31403236.022.0129

GC Semi VOA (Continued)

Prep Batch: 8266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1287-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1287-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Total/NA	Solid	8015B NM	8266
890-1289-2	PH10A	Total/NA	Solid	8015B NM	8266
890-1289-3	PH10B	Total/NA	Solid	8015B NM	8266
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015B NM	8266
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8266
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8266
890-1287-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	8266
890-1287-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8266

HPLC/IC

Leach Batch: 8315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Soluble	Solid	DI Leach	
890-1289-2	PH10A	Soluble	Solid	DI Leach	
890-1289-3	PH10B	Soluble	Solid	DI Leach	
MB 880-8315/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8315/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8315/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1279-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1279-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 8513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1289-1	PH10	Soluble	Solid	300.0	8315
890-1289-2	PH10A	Soluble	Solid	300.0	8315
890-1289-3	PH10B	Soluble	Solid	300.0	8315
MB 880-8315/1-A	Method Blank	Soluble	Solid	300.0	8315
LCS 880-8315/2-A	Lab Control Sample	Soluble	Solid	300.0	8315
LCSD 880-8315/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8315
890-1279-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	8315
890-1279-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8315

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Client Sample ID: PH10

Lab Sample ID: 890-1289-1

Date Collected: 09/20/21 15:50

Matrix: Solid

Date Received: 09/21/21 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8243	09/22/21 08:59	KL	XEN MID
Total/NA	Analysis	8021B		1	8299	09/23/21 12:31	MR	XEN MID
Total/NA	Prep	5035			8243	09/22/21 08:59	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/23/21 11:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/24/21 04:01	AJ	XEN MID
Soluble	Leach	DI Leach			8315	09/27/21 11:00	SC	XEN MID
Soluble	Analysis	300.0		1	8513	09/29/21 09:30	CH	XEN MID

Client Sample ID: PH10A

Lab Sample ID: 890-1289-2

Date Collected: 09/20/21 15:55

Matrix: Solid

Date Received: 09/21/21 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8198	09/22/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/23/21 11:48	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/24/21 04:22	AJ	XEN MID
Soluble	Leach	DI Leach			8315	09/27/21 11:00	SC	XEN MID
Soluble	Analysis	300.0		1	8513	09/29/21 09:38	CH	XEN MID

Client Sample ID: PH10B

Lab Sample ID: 890-1289-3

Date Collected: 09/20/21 16:00

Matrix: Solid

Date Received: 09/21/21 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8198	09/22/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/23/21 12:09	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/24/21 04:43	AJ	XEN MID
Soluble	Leach	DI Leach			8315	09/27/21 11:00	SC	XEN MID
Soluble	Analysis	300.0		1	8513	09/29/21 09:46	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8021B	5035	Solid	Total BTEX

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1289-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1289-1	PH10	Solid	09/20/21 15:50	09/21/21 09:54	0.5
890-1289-2	PH10A	Solid	09/20/21 15:55	09/21/21 09:54	1
890-1289-3	PH10B	Solid	09/20/21 16:00	09/21/21 09:54	2

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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

Chain of Custody

Work Order No: _____

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Project Manager:	Dan Moir	Bill to: (if different):	Adrian Baker
Company Name:	WSP Permian office	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:	Elliott.Lee@wsp.com, Kater.Jennings@wsp.com

Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> Spentfund <input type="checkbox"/>	
State of Project: _____	
Reporting Level: I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/>	Reporting Level: I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/>
Deliverables: EDD <input type="checkbox"/>	ADAPT <input type="checkbox"/> Other: _____

Project Name:	PLU BD 901H	Turn Around	<input checked="" type="checkbox"/>
Project Number:	31403236.022.0129	Routine	<input type="checkbox"/>
P.O. Number:		Rush:	<input type="checkbox"/>
Sampler's Name:	Elliott Lee	Due Date:	

SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	18.1.6	Thermometer ID: JMW-037
Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor: -0.2
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Containers: _____
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	



890-1289 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
PH10	S	9/20/2021	15:50	0.5'	1	X	X	X	Discrete
PH10A	S	9/20/2021	15:55	1'	1	X	X	X	Discrete
PH10B	S	9/20/2021	16:00	2'	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 Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 246-1 / 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
<i>[Signature]</i>	<i>[Signature]</i>	9-21-21 0954			

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No.					
Client Contact	Phone		Kramer Jessica		890-422-1					
Shipping/Receiving			E-Mail	State of Origin	Page: 1 of 1					
Company			Jessica.kramer@eurofins.com	New Mexico	Page 1 of 1					
Eurofins Xenco			Accreditations Required (See note):	NE LAP - Louisiana NE LAP - Texas	Job #					
Address	1211 W Florida Ave	Due Date Requested	9/27/2021		890-1289-1					
City	Midland	TAT Requested (days):								
State Zip	TX, 79701									
Phone	432-704-5440(Tel)	PO #								
Email		WO #								
Project Name	PLU BD 901H	Project #	89000004							
Site		SSOW#								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (G=comp, B=triss, A=AD)	Matrix (Liquid, Solid, Overhead)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
PH10 (890-1289-1)		9/20/21	15 50	Mountain	Solid	X	X	X		
PH10A (890-1289-2)		9/20/21	15 55	Mountain	Solid	X	X	X		
PH10B (890-1289-3)		9/20/21	16 00	Mountain	Solid	X	X	X		
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyze & 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 analyst/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>										
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested I, II, III, IV, Other (specify)					Special Instructions/QC Requirements					
Primary Deliverable Rank 2										
Empty Kit Relinquished by:		Date	Time		Method of Shipment:					
Relinquished by:		Date/Time			Received by:		Date/Time			
Relinquished by:		Date/Time			Received by:		Date/Time			
Relinquished by:		Date/Time			Received by:		Date/Time			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks:						

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1289-1

SDG Number: 31403236.022.0129

Login Number: 1289

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1289-1

SDG Number: 31403236.022.0129

Login Number: 1289

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/22/21 11:15 AM

Creator: Copeland, Tatiana

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	2.3 / 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1290-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU BD 901H

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

Attn: Dan Moir

Authorized for release by:
9/30/2021 7:52:57 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.

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Client: WSP USA Inc.
Project/Site: PLU BD 901H

Laboratory Job ID: 890-1290-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Job ID: 890-1290-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1290-1

Receipt

The samples were received on 9/21/2021 9:54 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: Surrogate recovery for the following sample was outside control limits: PH09 (890-1290-1). 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: Surrogate recovery for the following sample was outside control limits: (890-1287-A-1-E). 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 880-8284 and analytical batch 880-8340 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

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.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Client Sample ID: PH09

Lab Sample ID: 890-1290-1

Date Collected: 09/20/21 15:20

Matrix: Solid

Date Received: 09/21/21 09:54

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		09/22/21 09:44	09/23/21 12:29	1
Toluene	0.00576		0.00199	mg/Kg		09/22/21 09:44	09/23/21 12:29	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/22/21 09:44	09/23/21 12:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/22/21 09:44	09/23/21 12:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/22/21 09:44	09/23/21 12:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/22/21 09:44	09/23/21 12:29	1
Total BTEX	0.00576		0.00199	mg/Kg		09/22/21 09:44	09/23/21 12:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	146	S1+	70 - 130			09/22/21 09:44	09/23/21 12:29	1
1,4-Difluorobenzene (Surr)	78		70 - 130			09/22/21 09:44	09/23/21 12:29	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	<49.8	U *1	49.8	mg/Kg		09/22/21 16:43	09/24/21 17:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/22/21 16:43	09/24/21 17:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/22/21 16:43	09/24/21 17:29	1
Total TPH	<49.8	U	49.8	mg/Kg		09/22/21 16:43	09/24/21 17:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			09/22/21 16:43	09/24/21 17:29	1
o-Terphenyl	128		70 - 130			09/22/21 16:43	09/24/21 17:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		5.05	mg/Kg			09/29/21 09:54	1

Client Sample ID: PH09A

Lab Sample ID: 890-1290-2

Date Collected: 09/20/21 15:30

Matrix: Solid

Date Received: 09/21/21 09:54

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 12:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130			09/22/21 09:44	09/23/21 12:50	1
1,4-Difluorobenzene (Surr)	74		70 - 130			09/22/21 09:44	09/23/21 12:50	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Client Sample ID: PH09A

Lab Sample ID: 890-1290-2

Date Collected: 09/20/21 15:30

Matrix: Solid

Date Received: 09/21/21 09:54

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	<50.0	U *1	50.0	mg/Kg		09/22/21 16:43	09/24/21 17:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 17:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 17:51	1
Total TPH	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	09/22/21 16:43	09/24/21 17:51	1
o-Terphenyl	109		70 - 130	09/22/21 16:43	09/24/21 17:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		5.00	mg/Kg			09/30/21 14:23	1

Client Sample ID: PH09B

Lab Sample ID: 890-1290-3

Date Collected: 09/20/21 15:35

Matrix: Solid

Date Received: 09/21/21 09:54

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/22/21 09:44	09/23/21 13:10	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/22/21 09:44	09/23/21 13:10	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/22/21 09:44	09/23/21 13:10	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/22/21 09:44	09/23/21 13:10	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/22/21 09:44	09/23/21 13:10	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/22/21 09:44	09/23/21 13:10	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		09/22/21 09:44	09/23/21 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/22/21 09:44	09/23/21 13:10	1
1,4-Difluorobenzene (Surr)	75		70 - 130	09/22/21 09:44	09/23/21 13:10	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		09/22/21 13:48	09/24/21 05:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/24/21 05:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/24/21 05:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/22/21 13:48	09/24/21 05:05	1
o-Terphenyl	116		70 - 130	09/22/21 13:48	09/24/21 05:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.8		4.99	mg/Kg			09/30/21 14:46	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU BD 901H

Job ID: 890-1290-1
 SDG: 31403236.022.0129

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)
880-6345-A-8-C MS	Matrix Spike	125	82
880-6345-A-8-D MSD	Matrix Spike Duplicate	130	83
890-1290-1	PH09	146 S1+	78
890-1290-2	PH09A	114	74
890-1290-3	PH09B	121	75
LCS 880-8198/1-A	Lab Control Sample	114	86
LCSD 880-8198/2-A	Lab Control Sample Dup	122	72
MB 880-8142/5-A	Method Blank	107	76
MB 880-8198/5-A	Method Blank	119	82

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)
880-6376-A-1-B MS	Matrix Spike	86	80
880-6376-A-1-C MSD	Matrix Spike Duplicate	74	71
890-1287-A-1-F MS	Matrix Spike	104	107
890-1287-A-1-G MSD	Matrix Spike Duplicate	104	105
890-1290-1	PH09	111	128
890-1290-2	PH09A	95	109
890-1290-3	PH09B	104	116
LCS 880-8266/2-A	Lab Control Sample	121	118
LCS 880-8284/2-A	Lab Control Sample	112	109
LCSD 880-8266/3-A	Lab Control Sample Dup	116	113
LCSD 880-8284/3-A	Lab Control Sample Dup	96	97
MB 880-8266/1-A	Method Blank	108	124
MB 880-8284/1-A	Method Blank	97	111

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8142/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8142

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:45	09/22/21 16:03	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:45	09/22/21 16:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/22/21 09:45	09/22/21 16:03	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/22/21 09:45	09/22/21 16:03	1

Lab Sample ID: MB 880-8198/5-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8198

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/21 09:44	09/23/21 02:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/21 09:44	09/23/21 02:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	09/22/21 09:44	09/23/21 02:55	1
1,4-Difluorobenzene (Surr)	82		70 - 130	09/22/21 09:44	09/23/21 02:55	1

Lab Sample ID: LCS 880-8198/1-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08388		mg/Kg		84	70 - 130
Toluene	0.100	0.08505		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08810		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1844		mg/Kg		92	70 - 130
o-Xylene	0.100	0.09718		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: LCSD 880-8198/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08359		mg/Kg		84	70 - 130	0	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8198/2-A
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
Toluene	0.100	0.08817		mg/Kg		88	70 - 130	4	35	
Ethylbenzene	0.100	0.09335		mg/Kg		93	70 - 130	6	35	
m-Xylene & p-Xylene	0.200	0.1969		mg/Kg		98	70 - 130	7	35	
o-Xylene	0.100	0.1016		mg/Kg		102	70 - 130	4	35	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	122		70 - 130							
1,4-Difluorobenzene (Surr)	72		70 - 130							

Lab Sample ID: 880-6345-A-8-C MS
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit		
Benzene	<0.00198	U F1	0.100	0.05090	F1	mg/Kg		51	70 - 130	15	35	
Toluene	<0.00198	U F1	0.100	0.03736	F1	mg/Kg		37	70 - 130	3	35	
Ethylbenzene	<0.00198	U F1	0.100	0.04601	F1	mg/Kg		46	70 - 130	9	35	
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.09039	F1	mg/Kg		45	70 - 130	5	35	
o-Xylene	<0.00198	U F1	0.100	0.05994	F1	mg/Kg		60	70 - 130	16	35	
		MS	MS									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	125		70 - 130									
1,4-Difluorobenzene (Surr)	82		70 - 130									

Lab Sample ID: 880-6345-A-8-D MSD
Matrix: Solid
Analysis Batch: 8262

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8198

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	0.05894	F1	mg/Kg		59	70 - 130	15	35	
Toluene	<0.00198	U F1	0.100	0.03865	F1	mg/Kg		39	70 - 130	3	35	
Ethylbenzene	<0.00198	U F1	0.100	0.05040	F1	mg/Kg		50	70 - 130	9	35	
m-Xylene & p-Xylene	<0.00396	U F1	0.200	0.09513	F1	mg/Kg		48	70 - 130	5	35	
o-Xylene	<0.00198	U F1	0.100	0.07027		mg/Kg		70	70 - 130	16	35	
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	130		70 - 130									
1,4-Difluorobenzene (Surr)	83		70 - 130									

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

Lab Sample ID: MB 880-8266/1-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8266

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8266/1-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8266

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 13:48	09/23/21 20:15	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac		
	%Recovery	Qualifier						
1-Chlorooctane	108		70 - 130	09/22/21 13:48	09/23/21 20:15	1		
o-Terphenyl	124		70 - 130	09/22/21 13:48	09/23/21 20:15	1		

Lab Sample ID: LCS 880-8266/2-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	1064		mg/Kg		106	70 - 130
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
1-Chlorooctane	121		70 - 130				
o-Terphenyl	118		70 - 130				

Lab Sample ID: LCSD 880-8266/3-A
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics (Over C10-C28)	1000	1019		mg/Kg		102	70 - 130	4	20
Surrogate	LCSD	LCSD	Limits						
	%Recovery	Qualifier							
1-Chlorooctane	116		70 - 130						
o-Terphenyl	113		70 - 130						

Lab Sample ID: 890-1287-A-1-F MS
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	935.5		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	904.3		mg/Kg		91	70 - 130
Surrogate	MS	MS	Limits						
	%Recovery	Qualifier							
1-Chlorooctane	104		70 - 130						
o-Terphenyl	107		70 - 130						

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1287-A-1-G MSD
Matrix: Solid
Analysis Batch: 8294

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8266

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	915.0		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	906.3		mg/Kg		91	70 - 130	0	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	105		70 - 130								

Lab Sample ID: MB 880-8284/1-A
Matrix: Solid
Analysis Batch: 8340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8284

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 09:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 09:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 09:37	1
Total TPH	<50.0	U	50.0	mg/Kg		09/22/21 16:43	09/24/21 09:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			09/22/21 16:43	09/24/21 09:37	1
o-Terphenyl	111		70 - 130			09/22/21 16:43	09/24/21 09:37	1

Lab Sample ID: LCS 880-8284/2-A
Matrix: Solid
Analysis Batch: 8340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8284

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1077		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1053		mg/Kg		105	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	112		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-8284/3-A
Matrix: Solid
Analysis Batch: 8340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8284

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
		Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	843.4	*1	mg/Kg		84	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	1000	926.8		mg/Kg		93	70 - 130	13	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8284/3-A
Matrix: Solid
Analysis Batch: 8340

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8284

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	96		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 880-6376-A-1-B MS
Matrix: Solid
Analysis Batch: 8340

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8284

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	997	1038		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	876.3		mg/Kg		86	70 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	86		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 880-6376-A-1-C MSD
Matrix: Solid
Analysis Batch: 8340

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8284

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	999	897.6		mg/Kg		90	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	779.7		mg/Kg		76	70 - 130	12	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8315/1-A
Matrix: Solid
Analysis Batch: 8513

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			09/29/21 08:42	1

Lab Sample ID: LCS 880-8315/2-A
Matrix: Solid
Analysis Batch: 8513

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Chloride	250	256.1		mg/Kg		102	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-8315/3-A
Matrix: Solid
Analysis Batch: 8513

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	253.8		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 890-1279-A-1-F MS
Matrix: Solid
Analysis Batch: 8513

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	1310	F1	1250	2613		mg/Kg		104	90 - 110

Lab Sample ID: 890-1279-A-1-G MSD
Matrix: Solid
Analysis Batch: 8513

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	1310	F1	1250	2691	F1	mg/Kg		111	90 - 110	3	20

Lab Sample ID: MB 880-8643/1-A
Matrix: Solid
Analysis Batch: 8645

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			09/30/21 14:01	1

Lab Sample ID: LCS 880-8643/2-A
Matrix: Solid
Analysis Batch: 8645

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	263.3		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-8643/3-A
Matrix: Solid
Analysis Batch: 8645

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	263.5		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-1290-2 MS
Matrix: Solid
Analysis Batch: 8645

Client Sample ID: PH09A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	125		250	388.8		mg/Kg		106	90 - 110

Lab Sample ID: 890-1290-2 MSD
Matrix: Solid
Analysis Batch: 8645

Client Sample ID: PH09A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	125		250	387.8		mg/Kg		105	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8142/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-1	PH09	Total/NA	Solid	5035	
890-1290-2	PH09A	Total/NA	Solid	5035	
890-1290-3	PH09B	Total/NA	Solid	5035	
MB 880-8198/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8198/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8198/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6345-A-8-C MS	Matrix Spike	Total/NA	Solid	5035	
880-6345-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-1	PH09	Total/NA	Solid	8021B	8198
890-1290-2	PH09A	Total/NA	Solid	8021B	8198
890-1290-3	PH09B	Total/NA	Solid	8021B	8198
MB 880-8142/5-A	Method Blank	Total/NA	Solid	8021B	8142
MB 880-8198/5-A	Method Blank	Total/NA	Solid	8021B	8198
LCS 880-8198/1-A	Lab Control Sample	Total/NA	Solid	8021B	8198
LCSD 880-8198/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8198
880-6345-A-8-C MS	Matrix Spike	Total/NA	Solid	8021B	8198
880-6345-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8198

GC Semi VOA

Prep Batch: 8266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-3	PH09B	Total/NA	Solid	8015NM Prep	
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1287-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1287-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-1	PH09	Total/NA	Solid	8015NM Prep	
890-1290-2	PH09A	Total/NA	Solid	8015NM Prep	
MB 880-8284/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8284/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8284/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6376-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6376-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-3	PH09B	Total/NA	Solid	8015B NM	8266
MB 880-8266/1-A	Method Blank	Total/NA	Solid	8015B NM	8266
LCS 880-8266/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8266

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901HJob ID: 890-1290-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 8294 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-8266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8266
890-1287-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	8266
890-1287-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8266

Analysis Batch: 8340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-1	PH09	Total/NA	Solid	8015B NM	8284
890-1290-2	PH09A	Total/NA	Solid	8015B NM	8284
MB 880-8284/1-A	Method Blank	Total/NA	Solid	8015B NM	8284
LCS 880-8284/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8284
LCSD 880-8284/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8284
880-6376-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8284
880-6376-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8284

HPLC/IC

Leach Batch: 8315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-1	PH09	Soluble	Solid	DI Leach	
MB 880-8315/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8315/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8315/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1279-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1279-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 8513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-1	PH09	Soluble	Solid	300.0	8315
MB 880-8315/1-A	Method Blank	Soluble	Solid	300.0	8315
LCS 880-8315/2-A	Lab Control Sample	Soluble	Solid	300.0	8315
LCSD 880-8315/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8315
890-1279-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	8315
890-1279-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8315

Leach Batch: 8643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-2	PH09A	Soluble	Solid	DI Leach	
890-1290-3	PH09B	Soluble	Solid	DI Leach	
MB 880-8643/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8643/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8643/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1290-2 MS	PH09A	Soluble	Solid	DI Leach	
890-1290-2 MSD	PH09A	Soluble	Solid	DI Leach	

Analysis Batch: 8645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-2	PH09A	Soluble	Solid	300.0	8643
890-1290-3	PH09B	Soluble	Solid	300.0	8643
MB 880-8643/1-A	Method Blank	Soluble	Solid	300.0	8643
LCS 880-8643/2-A	Lab Control Sample	Soluble	Solid	300.0	8643
LCSD 880-8643/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8643

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Analysis Batch: 8645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1290-2 MS	PH09A	Soluble	Solid	300.0	8643
890-1290-2 MSD	PH09A	Soluble	Solid	300.0	8643

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

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Client Sample ID: PH09

Lab Sample ID: 890-1290-1

Date Collected: 09/20/21 15:20

Matrix: Solid

Date Received: 09/21/21 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8198	09/22/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/23/21 12:29	MR	XEN MID
Total/NA	Prep	8015NM Prep			8284	09/22/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8340	09/24/21 17:29	AJ	XEN MID
Soluble	Leach	DI Leach			8315	09/27/21 11:00	SC	XEN MID
Soluble	Analysis	300.0		1	8513	09/29/21 09:54	CH	XEN MID

Client Sample ID: PH09A

Lab Sample ID: 890-1290-2

Date Collected: 09/20/21 15:30

Matrix: Solid

Date Received: 09/21/21 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8198	09/22/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/23/21 12:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			8284	09/22/21 16:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8340	09/24/21 17:51	AJ	XEN MID
Soluble	Leach	DI Leach			8643	09/30/21 11:00	CH	XEN MID
Soluble	Analysis	300.0		1	8645	09/30/21 14:23	CH	XEN MID

Client Sample ID: PH09B

Lab Sample ID: 890-1290-3

Date Collected: 09/20/21 15:35

Matrix: Solid

Date Received: 09/21/21 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8198	09/22/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8262	09/23/21 13:10	MR	XEN MID
Total/NA	Prep	8015NM Prep			8266	09/22/21 13:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8294	09/24/21 05:05	AJ	XEN MID
Soluble	Leach	DI Leach			8643	09/30/21 11:00	CH	XEN MID
Soluble	Analysis	300.0		1	8645	09/30/21 14:46	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

- 1
- 2
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Method Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

Laboratory References:

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

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1290-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1290-1	PH09	Solid	09/20/21 15:20	09/21/21 09:54	0.5
890-1290-2	PH09A	Solid	09/20/21 15:30	09/21/21 09:54	1
890-1290-3	PH09B	Solid	09/20/21 15:35	09/21/21 09:54	2

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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)

Chain of Custody

Work Order No: _____

Project Manager: Dan Moir
 Company Name: WSP Permian office
 Address: 3300 North A Street
 City, State ZIP: Midland, TX 79705
 Phone: (432) 236-3849

Bill to: (if different) Adrian Baker
 Company Name: XTO Energy
 Address: 3104 E Green Street
 City, State ZIP: Carlsbad, NM, 88220
 Email: Elliott.Lee@wsp.com, Kaler.Jennings@wsp.com

Program: UST/PST RP Rowfields RC Spentfund
 State of Project: Level II Level III ST/UST RP Level IV
 Deliverables: EDD ADAPT Other: _____

Project Name: PLU BD 901H Turn Around
 Project Number: 31403236.022.0129 Routine Rush:
 P.O. Number: _____ Due Date:
 Sampler's Name: Elliot Lee

ANALYSIS REQUEST

Temp Blank: Yes No Wet Ice: Yes No
 Temperature (°C): 1.8/1.6 Thermometer ID
 Received Intact: Yes No Correction Factor: TWM-001
 Cooler Custody Seals: Yes No N/A Total Containers: -0.2
 Sample Custody Seals: Yes No N/A

890-1290 Chain of Custody

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			Sample Comments
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	
PH09	S	9/20/2021	15:20	0.5'	1	X	X	Discrete
PH09A	S	9/20/2021	15:30	1'	1	X	X	Discrete
PH09B	S	9/20/2021	15:35	2'	1	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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI LU 1634+246-1+7470+7471-Hg

Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: 9-21-21 0954
 Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: _____

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.

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Eurofins Xenco, 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)

Client Contact: **Shipping/Receiving** Phone: _____ Lab PM: **Kramer Jessica**
 E-Mail: **Jessica.Kramer@eurofins.net** State of Origin: **New Mexico**
 Company: **Eurofins Xenco** Accreditations Required (See note): **NELAP - Louisiana, NELAP - Texas**
 Address: **1211 W. Florida Ave** Due Date Requested: **9/27/2021** Job #: **890-422-1**
 City: **Midland** TAT Requested (days): _____ Page: **Page 1 of 1**
 State Zip: **TX, 79701** PO #: _____
 Phone: **432-704-5440(TE)** W/O #: _____
 Email: _____

Project Name: **PLU BD 901H** Project #: **89000004**
 Site: _____ SSOV#: _____

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (In-water, Semi-solid, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
PH09 (890-1290-1)	9/20/21	15 20	Solid	Solid	X	X	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH 300_ORGFM_28D/DI_LEACH Chloride 8021B/5035FP_Calc (MOD) BTEX	1	
PH09A (890-1290-2)	9/20/21	15 30	Solid	Solid	X	X		1	
PH09B (890-1290-3)	9/20/21	15 35	Solid	Solid	X	X		1	

Preservation Codes:
 A. HCL M. Hexane
 B. NaOH N. None
 C. Zn Acetate O. AsnAc2
 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. EDX Z. other (specify)
 Other: _____

Deliverable Requested I, II, III, IV, Other (specify) _____ Primary Deliverable Rank 2
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Empty Kit Relinquished by _____ Date _____ Method of Shipment: _____

Relinquished by: **Chae Culp 9.21.21** Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: Yes No Custody Seal No _____
 Cooler Temperature(s) and other Remarks: **23.98**

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1290-1

SDG Number: 31403236.022.0129

Login Number: 1290

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1290-1

SDG Number: 31403236.022.0129

Login Number: 1290

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/22/21 11:17 AM

Creator: Copeland, Tatiana

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	2.3 / 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1306-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU BD 901H

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

Attn: Tacoma Morrissey

Authorized for release by:
10/5/2021 12:35:48 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.

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Client: WSP USA Inc.
Project/Site: PLU BD 901H

Laboratory Job ID: 890-1306-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Job ID: 890-1306-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-1306-1**

Receipt

The samples were received on 9/24/2021 11:27 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 4.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8507 and analytical batch 880-8502 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 sample was outside control limits: (890-1303-A-14-D MSD). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS40 (890-1306-1), FS41 (890-1306-2) and FS42 (890-1306-3). 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8511 and analytical batch 880-8567 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.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS40

Lab Sample ID: 890-1306-1

Date Collected: 09/23/21 15:00

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/29/21 13:50	09/30/21 16:59	1
Toluene	0.360		0.00199	mg/Kg		09/29/21 13:50	09/30/21 16:59	1
Ethylbenzene	0.0474		0.00199	mg/Kg		09/29/21 13:50	09/30/21 16:59	1
m-Xylene & p-Xylene	0.789		0.00398	mg/Kg		09/29/21 13:50	09/30/21 16:59	1
o-Xylene	2.00		0.101	mg/Kg		10/01/21 09:00	10/01/21 15:23	50
Xylenes, Total	5.50		0.202	mg/Kg		10/01/21 09:00	10/01/21 15:23	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	267	S1+	70 - 130	09/29/21 13:50	09/30/21 16:59	1
1,4-Difluorobenzene (Surr)	85		70 - 130	09/29/21 13:50	09/30/21 16:59	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.20		0.00200	mg/Kg			09/30/21 11:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2470		50.0	mg/Kg			09/30/21 17:32	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	646		49.8	mg/Kg		09/28/21 11:15	09/29/21 11:17	1
Diesel Range Organics (Over C10-C28)	1630	F1	49.8	mg/Kg		09/28/21 11:15	09/29/21 11:17	1
Oil Range Organics (Over C28-C36)	195		49.8	mg/Kg		09/28/21 11:15	09/29/21 11:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	09/28/21 11:15	09/29/21 11:17	1
o-Terphenyl	114		70 - 130	09/28/21 11:15	09/29/21 11:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	376		5.00	mg/Kg			10/01/21 05:44	1

Client Sample ID: FS41

Lab Sample ID: 890-1306-2

Date Collected: 09/23/21 14:35

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/29/21 13:50	09/30/21 17:20	1
Toluene	0.191		0.00202	mg/Kg		09/29/21 13:50	09/30/21 17:20	1
Ethylbenzene	0.264		0.00202	mg/Kg		09/29/21 13:50	09/30/21 17:20	1
m-Xylene & p-Xylene	0.465		0.00403	mg/Kg		09/29/21 13:50	09/30/21 17:20	1
o-Xylene	3.32		0.199	mg/Kg		10/01/21 09:00	10/01/21 15:43	100
Xylenes, Total	5.85		0.398	mg/Kg		10/01/21 09:00	10/01/21 15:43	100

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS41

Lab Sample ID: 890-1306-2

Date Collected: 09/23/21 14:35

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	425	S1+	70 - 130	09/29/21 13:50	09/30/21 17:20	1
1,4-Difluorobenzene (Surr)	79		70 - 130	09/29/21 13:50	09/30/21 17:20	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.920		0.00200	mg/Kg			09/30/21 11:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1740		50.0	mg/Kg			09/30/21 17:32	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	696		50.0	mg/Kg		09/28/21 11:15	09/29/21 12:22	1
Diesel Range Organics (Over C10-C28)	928		50.0	mg/Kg		09/28/21 11:15	09/29/21 12:22	1
Oil Range Organics (Over C28-C36)	118		50.0	mg/Kg		09/28/21 11:15	09/29/21 12:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	09/28/21 11:15	09/29/21 12:22	1
o-Terphenyl	118		70 - 130	09/28/21 11:15	09/29/21 12:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	352		4.98	mg/Kg			10/01/21 10:45	1

Client Sample ID: FS42

Lab Sample ID: 890-1306-3

Date Collected: 09/23/21 15:11

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0469		0.00200	mg/Kg		09/29/21 13:50	09/30/21 17:40	1
Toluene	4.42		0.200	mg/Kg		10/01/21 09:00	10/01/21 16:04	100
Ethylbenzene	3.46		0.200	mg/Kg		10/01/21 09:00	10/01/21 16:04	100
m-Xylene & p-Xylene	16.0		0.401	mg/Kg		10/01/21 09:00	10/01/21 16:04	100
o-Xylene	0.0240		0.00200	mg/Kg		09/29/21 13:50	09/30/21 17:40	1
Xylenes, Total	23.9		0.401	mg/Kg		10/01/21 09:00	10/01/21 16:04	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	297	S1+	70 - 130	09/29/21 13:50	09/30/21 17:40	1
1,4-Difluorobenzene (Surr)	88		70 - 130	09/29/21 13:50	09/30/21 17:40	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0709		0.00200	mg/Kg			09/30/21 11:16	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS42

Lab Sample ID: 890-1306-3

Date Collected: 09/23/21 15:11

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2170		50.0	mg/Kg			09/30/21 17:32	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	968		49.9	mg/Kg		09/28/21 11:15	09/29/21 12:44	1
Diesel Range Organics (Over C10-C28)	1060		49.9	mg/Kg		09/28/21 11:15	09/29/21 12:44	1
Oil Range Organics (Over C28-C36)	137		49.9	mg/Kg		09/28/21 11:15	09/29/21 12:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			09/28/21 11:15	09/29/21 12:44	1
o-Terphenyl	118		70 - 130			09/28/21 11:15	09/29/21 12:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274		4.99	mg/Kg			10/01/21 10:51	1

Client Sample ID: FS43

Lab Sample ID: 890-1306-4

Date Collected: 09/23/21 15:35

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.238		0.00200	mg/Kg		09/29/21 13:50	09/30/21 18:01	1
Toluene	7.55		0.199	mg/Kg		10/01/21 09:00	10/01/21 15:51	100
Ethylbenzene	1.05		0.199	mg/Kg		10/01/21 09:00	10/01/21 15:51	100
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/29/21 13:50	09/30/21 18:01	1
o-Xylene	0.0239		0.00200	mg/Kg		09/29/21 13:50	09/30/21 18:01	1
Xylenes, Total	0.0239		0.00401	mg/Kg		09/29/21 13:50	09/30/21 18:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	312	S1+	70 - 130			09/29/21 13:50	09/30/21 18:01	1
1,4-Difluorobenzene (Surr)	92		70 - 130			09/29/21 13:50	09/30/21 18:01	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.262		0.00200	mg/Kg			09/30/21 11:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1320		50.0	mg/Kg			09/30/21 17:32	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	394		49.9	mg/Kg		09/28/21 11:15	09/29/21 13:06	1
Diesel Range Organics (Over C10-C28)	829		49.9	mg/Kg		09/28/21 11:15	09/29/21 13:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS43

Lab Sample ID: 890-1306-4

Date Collected: 09/23/21 15:35

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

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)	99.4		49.9	mg/Kg		09/28/21 11:15	09/29/21 13:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130			09/28/21 11:15	09/29/21 13:06	1
o-Terphenyl	132	S1+	70 - 130			09/28/21 11:15	09/29/21 13:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	256		5.05	mg/Kg			10/01/21 11:35	1

Client Sample ID: FS44

Lab Sample ID: 890-1306-5

Date Collected: 09/23/21 16:20

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00514		0.00198	mg/Kg		09/29/21 13:50	09/30/21 18:22	1
Toluene	0.574		0.200	mg/Kg		10/01/21 09:00	10/01/21 16:11	100
Ethylbenzene	0.220		0.00198	mg/Kg		09/29/21 13:50	09/30/21 18:22	1
m-Xylene & p-Xylene	10.3		0.400	mg/Kg		10/01/21 09:00	10/01/21 16:11	100
o-Xylene	3.26		0.200	mg/Kg		10/01/21 09:00	10/01/21 16:11	100
Xylenes, Total	13.6		0.400	mg/Kg		10/01/21 09:00	10/01/21 16:11	100
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	304	S1+	70 - 130			09/29/21 13:50	09/30/21 18:22	1
1,4-Difluorobenzene (Surr)	122		70 - 130			09/29/21 13:50	09/30/21 18:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.225		0.00200	mg/Kg			09/30/21 11:16	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			09/30/21 17:32	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	923		49.8	mg/Kg		09/28/21 11:15	09/29/21 13:28	1
Diesel Range Organics (Over C10-C28)	1440		49.8	mg/Kg		09/28/21 11:15	09/29/21 13:28	1
Oil Range Organics (Over C28-C36)	177		49.8	mg/Kg		09/28/21 11:15	09/29/21 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			09/28/21 11:15	09/29/21 13:28	1
o-Terphenyl	115		70 - 130			09/28/21 11:15	09/29/21 13:28	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS44

Lab Sample ID: 890-1306-5

Date Collected: 09/23/21 16:20
Date Received: 09/24/21 11:27
Sample Depth: 2

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	331		4.98	mg/Kg			10/01/21 10:57	1

Client Sample ID: FS45

Lab Sample ID: 890-1306-6

Date Collected: 09/23/21 16:40
Date Received: 09/24/21 11:27
Sample Depth: 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		09/28/21 10:09	09/29/21 08:10	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:10	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:10	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/28/21 10:09	09/29/21 08:10	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:10	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/28/21 10:09	09/29/21 08:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130			09/28/21 10:09	09/29/21 08:10	1
1,4-Difluorobenzene (Surr)	76		70 - 130			09/28/21 10:09	09/29/21 08:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200	mg/Kg			10/05/21 13:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1510		50.0	mg/Kg			09/30/21 17:32	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	374		50.0	mg/Kg		09/28/21 11:15	09/29/21 13:49	1
Diesel Range Organics (Over C10-C28)	1010		50.0	mg/Kg		09/28/21 11:15	09/29/21 13:49	1
Oil Range Organics (Over C28-C36)	130		50.0	mg/Kg		09/28/21 11:15	09/29/21 13:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			09/28/21 11:15	09/29/21 13:49	1
o-Terphenyl	123		70 - 130			09/28/21 11:15	09/29/21 13:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	349		5.00	mg/Kg			10/01/21 11:03	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS46

Lab Sample ID: 890-1306-7

Date Collected: 09/23/21 16:47

Matrix: Solid

Date Received: 09/24/21 11:27

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:31	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:31	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:31	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/28/21 10:09	09/29/21 08:31	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/28/21 10:09	09/29/21 08:31	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/28/21 10:09	09/29/21 08:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	09/28/21 10:09	09/29/21 08:31	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/28/21 10:09	09/29/21 08:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200	mg/Kg			10/05/21 13:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	867		50.0	mg/Kg			09/30/21 17:32	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	164		49.9	mg/Kg		09/28/21 11:15	09/29/21 14:11	1
Diesel Range Organics (Over C10-C28)	634		49.9	mg/Kg		09/28/21 11:15	09/29/21 14:11	1
Oil Range Organics (Over C28-C36)	68.6		49.9	mg/Kg		09/28/21 11:15	09/29/21 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	09/28/21 11:15	09/29/21 14:11	1
o-Terphenyl	125		70 - 130	09/28/21 11:15	09/29/21 14:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	528		5.00	mg/Kg			10/01/21 11:09	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901HJob ID: 890-1306-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1303-A-14-C MS	Matrix Spike	89	95
890-1303-A-14-D MSD	Matrix Spike Duplicate	339 S1+	80
890-1304-A-1-F MS	Matrix Spike	114	86
890-1304-A-1-G MSD	Matrix Spike Duplicate	117	96
890-1306-1	FS40	267 S1+	85
890-1306-2	FS41	425 S1+	79
890-1306-3	FS42	297 S1+	88
890-1306-4	FS43	312 S1+	92
890-1306-5	FS44	304 S1+	122
890-1306-6	FS45	114	76
890-1306-7	FS46	95	92
890-1334-A-1-B MS	Matrix Spike	114	82
890-1334-A-1-C MSD	Matrix Spike Duplicate	111	83
890-1337-A-1-B MS	Matrix Spike	148 S1+	70
890-1337-A-1-C MSD	Matrix Spike Duplicate	96	97
LCS 880-8507/1-A	Lab Control Sample	92	107
LCS 880-8532/1-A	Lab Control Sample	85	103
LCS 880-8648/1-A	Lab Control Sample	109	83
LCS 880-8649/1-A	Lab Control Sample	94	90
LCSD 880-8507/2-A	Lab Control Sample Dup	84	95
LCSD 880-8532/2-A	Lab Control Sample Dup	86	74
LCSD 880-8648/2-A	Lab Control Sample Dup	108	86
LCSD 880-8649/2-A	Lab Control Sample Dup	96	100
MB 880-8465/5-A	Method Blank	105	101
MB 880-8507/5-A	Method Blank	107	106
MB 880-8532/5-A	Method Blank	112	100
MB 880-8648/5-A	Method Blank	119	80
MB 880-8649/5-A	Method Blank	106	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1306-1	FS40	117	114
890-1306-1 MS	FS40	119	104
890-1306-1 MSD	FS40	130	118
890-1306-2	FS41	119	118
890-1306-3	FS42	120	118
890-1306-4	FS43	125	132 S1+
890-1306-5	FS44	120	115
890-1306-6	FS45	118	123
890-1306-7	FS46	114	125
LCS 880-8511/2-A	Lab Control Sample	110	110
LCSD 880-8511/3-A	Lab Control Sample Dup	98	98

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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)
MB 880-8511/1-A	Method Blank	97	105

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8465/5-A
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8465

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/27/21 13:58	09/28/21 13:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/27/21 13:58	09/28/21 13:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/27/21 13:58	09/28/21 13:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/27/21 13:58	09/28/21 13:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/27/21 13:58	09/28/21 13:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/27/21 13:58	09/28/21 13:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/27/21 13:58	09/28/21 13:24	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/27/21 13:58	09/28/21 13:24	1

Lab Sample ID: MB 880-8507/5-A
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8507

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/28/21 10:09	09/29/21 00:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/28/21 10:09	09/29/21 00:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/28/21 10:09	09/29/21 00:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/28/21 10:09	09/29/21 00:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/28/21 10:09	09/29/21 00:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/28/21 10:09	09/29/21 00:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/28/21 10:09	09/29/21 00:29	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/28/21 10:09	09/29/21 00:29	1

Lab Sample ID: LCS 880-8507/1-A
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08247		mg/Kg		82	70 - 130
Toluene	0.100	0.09425		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09269		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1552		mg/Kg		78	70 - 130
o-Xylene	0.100	0.07395		mg/Kg		74	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-8507/2-A
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8507

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08892		mg/Kg		89	70 - 130	8	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8507/2-A
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8507

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
Toluene	0.100	0.08913		mg/Kg		89	70 - 130	6	35	
Ethylbenzene	0.100	0.08011		mg/Kg		80	70 - 130	15	35	
m-Xylene & p-Xylene	0.200	0.1484		mg/Kg		74	70 - 130	4	35	
o-Xylene	0.100	0.07674		mg/Kg		77	70 - 130	4	35	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-1303-A-14-C MS
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
									RPD	Limit
Benzene	<0.00198	U F1	0.0990	0.05358	F1	mg/Kg		54	70 - 130	
Toluene	<0.00198	U F2 F1	0.0990	0.06526	F1	mg/Kg		66	70 - 130	
Ethylbenzene	<0.00198	U F1	0.0990	0.06051	F1	mg/Kg		61	70 - 130	
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.198	0.1099	F1	mg/Kg		56	70 - 130	
o-Xylene	<0.00198	U F1	0.0990	0.04999	F1	mg/Kg		49	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	Limits
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-1303-A-14-D MSD
Matrix: Solid
Analysis Batch: 8502

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8507

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	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35	
Toluene	<0.00198	U F2 F1	0.100	0.1188	F2	mg/Kg		119	70 - 130	58	35	
Ethylbenzene	<0.00198	U F1	0.100	0.05736	F1	mg/Kg		57	70 - 130	5	35	
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.200	0.07299	F2 F1	mg/Kg		36	70 - 130	40	35	
o-Xylene	<0.00198	U F1	0.100	0.06199	F1	mg/Kg		60	70 - 130	21	35	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: MB 880-8532/5-A
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8532

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared		Analyzed		Dil Fac
						Time	Date	Time	Date	
Benzene	<0.00200	U	0.00200	mg/Kg		09/29/21 13:50	09/30/21 12:07			1
Toluene	<0.00200	U	0.00200	mg/Kg		09/29/21 13:50	09/30/21 12:07			1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/29/21 13:50	09/30/21 12:07			1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/29/21 13:50	09/30/21 12:07			1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8532/5-A
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8532

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/29/21 13:50	09/30/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/29/21 13:50	09/30/21 12:07	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	112		70 - 130	09/29/21 13:50	09/30/21 12:07	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/29/21 13:50	09/30/21 12:07	1

Lab Sample ID: LCS 880-8532/1-A
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8532

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.1039		mg/Kg		104	70 - 130
Toluene	0.100	0.09136		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.08360		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1545		mg/Kg		77	70 - 130
o-Xylene	0.100	0.07745		mg/Kg		77	70 - 130

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

Lab Sample ID: LCSD 880-8532/2-A
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8532

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.08821		mg/Kg		88	70 - 130	16	35
Toluene	0.100	0.08147		mg/Kg		81	70 - 130	11	35
Ethylbenzene	0.100	0.08006		mg/Kg		80	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1435		mg/Kg		72	70 - 130	7	35
o-Xylene	0.100	0.07765		mg/Kg		78	70 - 130	0	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	74		70 - 130

Lab Sample ID: 890-1304-A-1-F MS
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8532

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Benzene	<0.00199	U F1 F2	0.101	0.04370	F1	mg/Kg		42	70 - 130
Toluene	0.0168	F1	0.101	0.1497	F1	mg/Kg		132	70 - 130
Ethylbenzene	0.00590		0.101	0.09677		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.0596	F1	0.202	0.3001		mg/Kg		119	70 - 130
o-Xylene	0.0124		0.101	0.1030		mg/Kg		90	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1304-A-1-F MS
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8532

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: 890-1304-A-1-G MSD
Matrix: Solid
Analysis Batch: 8637

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8532

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Benzene	<0.00199	U F1 F2	0.0996	0.07611	F2	mg/Kg		75	70 - 130	54	35	
Toluene	0.0168	F1	0.0996	0.1962	F1	mg/Kg		180	70 - 130	27	35	
Ethylbenzene	0.00590		0.0996	0.1011		mg/Kg		96	70 - 130	4	35	
m-Xylene & p-Xylene	0.0596	F1	0.199	0.3935	F1	mg/Kg		168	70 - 130	27	35	
o-Xylene	0.0124		0.0996	0.1227		mg/Kg		111	70 - 130	17	35	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-8648/5-A
Matrix: Solid
Analysis Batch: 8712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8648

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/01/21 09:00	10/01/21 12:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/01/21 09:00	10/01/21 12:38	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	119		70 - 130	10/01/21 09:00	10/01/21 12:38	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/01/21 09:00	10/01/21 12:38	1

Lab Sample ID: LCS 880-8648/1-A
Matrix: Solid
Analysis Batch: 8712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8648

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Benzene	0.100	0.09315		mg/Kg		93	70 - 130	
Toluene	0.100	0.09599		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09562		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.1978		mg/Kg		99	70 - 130	
o-Xylene	0.100	0.09818		mg/Kg		98	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	109		70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8648/1-A
Matrix: Solid
Analysis Batch: 8712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8648

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: LCSD 880-8648/2-A
Matrix: Solid
Analysis Batch: 8712

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8648

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Benzene	0.100	0.09636		mg/Kg		96	70 - 130	3	35	
Toluene	0.100	0.09539		mg/Kg		95	70 - 130	1	35	
Ethylbenzene	0.100	0.09705		mg/Kg		97	70 - 130	1	35	
m-Xylene & p-Xylene	0.200	0.1977		mg/Kg		99	70 - 130	0	35	
o-Xylene	0.100	0.09881		mg/Kg		99	70 - 130	1	35	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: 890-1334-A-1-B MS
Matrix: Solid
Analysis Batch: 8712

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8648

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Benzene	<0.00200	U	0.101	0.09608		mg/Kg		95	70 - 130	
Toluene	<0.00200	U	0.101	0.09662		mg/Kg		96	70 - 130	
Ethylbenzene	<0.00200	U	0.101	0.09805		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.202	0.2047		mg/Kg		101	70 - 130	
o-Xylene	<0.00200	U	0.101	0.1022		mg/Kg		101	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

Lab Sample ID: 890-1334-A-1-C MSD
Matrix: Solid
Analysis Batch: 8712

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8648

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00200	U	0.100	0.09594		mg/Kg		96	70 - 130	0	35	
Toluene	<0.00200	U	0.100	0.09955		mg/Kg		99	70 - 130	3	35	
Ethylbenzene	<0.00200	U	0.100	0.09976		mg/Kg		99	70 - 130	2	35	
m-Xylene & p-Xylene	<0.00401	U	0.201	0.2085		mg/Kg		104	70 - 130	2	35	
o-Xylene	<0.00200	U	0.100	0.1038		mg/Kg		103	70 - 130	2	35	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-8649/5-A
Matrix: Solid
Analysis Batch: 8713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8649

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/01/21 09:00	10/01/21 12:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/01/21 09:00	10/01/21 12:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/01/21 09:00	10/01/21 12:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	10/01/21 09:00	10/01/21 12:42	1
1,4-Difluorobenzene (Surr)	102		70 - 130	10/01/21 09:00	10/01/21 12:42	1

Lab Sample ID: LCS 880-8649/1-A
Matrix: Solid
Analysis Batch: 8713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08010		mg/Kg		80	70 - 130
Toluene	0.100	0.09485		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09154		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1634		mg/Kg		82	70 - 130
o-Xylene	0.100	0.07737		mg/Kg		77	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-8649/2-A
Matrix: Solid
Analysis Batch: 8713

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8649

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08627		mg/Kg		86	70 - 130	7	35
Toluene	0.100	0.1029		mg/Kg		103	70 - 130	8	35
Ethylbenzene	0.100	0.1034		mg/Kg		103	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1758		mg/Kg		88	70 - 130	7	35
o-Xylene	0.100	0.08378		mg/Kg		84	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1337-A-1-C MSD
Matrix: Solid
Analysis Batch: 8713

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8649

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.05294		mg/Kg					
Toluene	<0.00200	U	0.0998	0.08124		mg/Kg					

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1337-A-1-C MSD
Matrix: Solid
Analysis Batch: 8713

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8649

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00200	U	0.0998	0.08055		mg/Kg					
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1475		mg/Kg					
o-Xylene	<0.00200	U	0.0998	0.06754		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-1337-A-1-B MS
Matrix: Solid
Analysis Batch: 8713

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

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	148	S1+	70 - 130
1,4-Difluorobenzene (Surr)	70		70 - 130

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

Lab Sample ID: MB 880-8511/1-A
Matrix: Solid
Analysis Batch: 8567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8511

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		09/28/21 11:15	09/29/21 10:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/28/21 11:15	09/29/21 10:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/28/21 11:15	09/29/21 10:11	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/28/21 11:15	09/29/21 10:11	1
o-Terphenyl	105		70 - 130	09/28/21 11:15	09/29/21 10:11	1

Lab Sample ID: LCS 880-8511/2-A
Matrix: Solid
Analysis Batch: 8567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8511

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	905.6		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1132		mg/Kg		113	70 - 130

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

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8511/3-A
Matrix: Solid
Analysis Batch: 8567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8511

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	848.1		mg/Kg		85	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)	1000	992.9		mg/Kg		99	70 - 130	13	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	98		70 - 130							
o-Terphenyl	98		70 - 130							

Lab Sample ID: 890-1306-1 MS
Matrix: Solid
Analysis Batch: 8567

Client Sample ID: FS40
Prep Type: Total/NA
Prep Batch: 8511

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	646		997	1561		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	1630	F1	997	2624		mg/Kg		99	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	119		70 - 130								
o-Terphenyl	104		70 - 130								

Lab Sample ID: 890-1306-1 MSD
Matrix: Solid
Analysis Batch: 8567

Client Sample ID: FS40
Prep Type: Total/NA
Prep Batch: 8511

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	646		999	1779		mg/Kg		113	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1630	F1	999	3058	F1	mg/Kg		143	70 - 130	15	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	130		70 - 130								
o-Terphenyl	118		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8455/1-A
Matrix: Solid
Analysis Batch: 8601

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			10/01/21 02:39	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-8455/2-A
Matrix: Solid
Analysis Batch: 8601

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	257.1		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-8455/3-A
Matrix: Solid
Analysis Batch: 8601

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	250.4		mg/Kg		100	90 - 110	3	20

Lab Sample ID: 880-6474-A-104-B MS
Matrix: Solid
Analysis Batch: 8601

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	294		250	544.2		mg/Kg		100	90 - 110

Lab Sample ID: 880-6474-A-104-C MSD
Matrix: Solid
Analysis Batch: 8601

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	294		250	531.8		mg/Kg		95	90 - 110	2	20

Lab Sample ID: MB 880-8456/1-A
Matrix: Solid
Analysis Batch: 8602

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			10/01/21 08:25	1

Lab Sample ID: LCS 880-8456/2-A
Matrix: Solid
Analysis Batch: 8602

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	268.4		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-8456/3-A
Matrix: Solid
Analysis Batch: 8602

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	268.7		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-6474-A-120-B MS
Matrix: Solid
Analysis Batch: 8602

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	197		250	460.6		mg/Kg		106	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-6474-A-120-C MSD
Matrix: Solid
Analysis Batch: 8602

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	197		250	463.4		mg/Kg		107	90 - 110	1	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8465/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 8502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-6	FS45	Total/NA	Solid	8021B	8507
890-1306-7	FS46	Total/NA	Solid	8021B	8507
MB 880-8465/5-A	Method Blank	Total/NA	Solid	8021B	8465
MB 880-8507/5-A	Method Blank	Total/NA	Solid	8021B	8507
LCS 880-8507/1-A	Lab Control Sample	Total/NA	Solid	8021B	8507
LCSD 880-8507/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8507
890-1303-A-14-C MS	Matrix Spike	Total/NA	Solid	8021B	8507
890-1303-A-14-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8507

Prep Batch: 8507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-6	FS45	Total/NA	Solid	5035	
890-1306-7	FS46	Total/NA	Solid	5035	
MB 880-8507/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8507/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8507/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1303-A-14-C MS	Matrix Spike	Total/NA	Solid	5035	
890-1303-A-14-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 8532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	5035	
890-1306-2	FS41	Total/NA	Solid	5035	
890-1306-3	FS42	Total/NA	Solid	5035	
890-1306-4	FS43	Total/NA	Solid	5035	
890-1306-5	FS44	Total/NA	Solid	5035	
MB 880-8532/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8532/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8532/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1304-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-1304-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	8021B	8532
890-1306-2	FS41	Total/NA	Solid	8021B	8532
890-1306-3	FS42	Total/NA	Solid	8021B	8532
890-1306-4	FS43	Total/NA	Solid	8021B	8532
890-1306-5	FS44	Total/NA	Solid	8021B	8532
MB 880-8532/5-A	Method Blank	Total/NA	Solid	8021B	8532
LCS 880-8532/1-A	Lab Control Sample	Total/NA	Solid	8021B	8532
LCSD 880-8532/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8532
890-1304-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	8532
890-1304-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8532

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

GC VOA

Analysis Batch: 8647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	Total BTEX	
890-1306-2	FS41	Total/NA	Solid	Total BTEX	
890-1306-3	FS42	Total/NA	Solid	Total BTEX	
890-1306-4	FS43	Total/NA	Solid	Total BTEX	
890-1306-5	FS44	Total/NA	Solid	Total BTEX	

Prep Batch: 8648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	5035	
890-1306-2	FS41	Total/NA	Solid	5035	
890-1306-3	FS42	Total/NA	Solid	5035	
MB 880-8648/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8648/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8648/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1334-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-1334-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 8649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-4	FS43	Total/NA	Solid	5035	
890-1306-5	FS44	Total/NA	Solid	5035	
MB 880-8649/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8649/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8649/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1337-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	8021B	8648
890-1306-2	FS41	Total/NA	Solid	8021B	8648
890-1306-3	FS42	Total/NA	Solid	8021B	8648
MB 880-8648/5-A	Method Blank	Total/NA	Solid	8021B	8648
LCS 880-8648/1-A	Lab Control Sample	Total/NA	Solid	8021B	8648
LCSD 880-8648/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8648
890-1334-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	8648
890-1334-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8648

Analysis Batch: 8713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-4	FS43	Total/NA	Solid	8021B	8649
890-1306-5	FS44	Total/NA	Solid	8021B	8649
MB 880-8649/5-A	Method Blank	Total/NA	Solid	8021B	8649
LCS 880-8649/1-A	Lab Control Sample	Total/NA	Solid	8021B	8649
LCSD 880-8649/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8649
890-1337-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	
890-1337-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8649

Analysis Batch: 8921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-6	FS45	Total/NA	Solid	Total BTEX	
890-1306-7	FS46	Total/NA	Solid	Total BTEX	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

GC Semi VOA

Prep Batch: 8511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	8015NM Prep	
890-1306-2	FS41	Total/NA	Solid	8015NM Prep	
890-1306-3	FS42	Total/NA	Solid	8015NM Prep	
890-1306-4	FS43	Total/NA	Solid	8015NM Prep	
890-1306-5	FS44	Total/NA	Solid	8015NM Prep	
890-1306-6	FS45	Total/NA	Solid	8015NM Prep	
890-1306-7	FS46	Total/NA	Solid	8015NM Prep	
MB 880-8511/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8511/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8511/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1306-1 MS	FS40	Total/NA	Solid	8015NM Prep	
890-1306-1 MSD	FS40	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	8015B NM	8511
890-1306-2	FS41	Total/NA	Solid	8015B NM	8511
890-1306-3	FS42	Total/NA	Solid	8015B NM	8511
890-1306-4	FS43	Total/NA	Solid	8015B NM	8511
890-1306-5	FS44	Total/NA	Solid	8015B NM	8511
890-1306-6	FS45	Total/NA	Solid	8015B NM	8511
890-1306-7	FS46	Total/NA	Solid	8015B NM	8511
MB 880-8511/1-A	Method Blank	Total/NA	Solid	8015B NM	8511
LCS 880-8511/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8511
LCSD 880-8511/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8511
890-1306-1 MS	FS40	Total/NA	Solid	8015B NM	8511
890-1306-1 MSD	FS40	Total/NA	Solid	8015B NM	8511

Analysis Batch: 8693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Total/NA	Solid	8015 NM	
890-1306-2	FS41	Total/NA	Solid	8015 NM	
890-1306-3	FS42	Total/NA	Solid	8015 NM	
890-1306-4	FS43	Total/NA	Solid	8015 NM	
890-1306-5	FS44	Total/NA	Solid	8015 NM	
890-1306-6	FS45	Total/NA	Solid	8015 NM	
890-1306-7	FS46	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 8455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Soluble	Solid	DI Leach	
MB 880-8455/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8455/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8455/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6474-A-104-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6474-A-104-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

HPLC/IC

Leach Batch: 8456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-2	FS41	Soluble	Solid	DI Leach	
890-1306-3	FS42	Soluble	Solid	DI Leach	
890-1306-4	FS43	Soluble	Solid	DI Leach	
890-1306-5	FS44	Soluble	Solid	DI Leach	
890-1306-6	FS45	Soluble	Solid	DI Leach	
890-1306-7	FS46	Soluble	Solid	DI Leach	
MB 880-8456/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8456/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8456/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6474-A-120-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6474-A-120-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 8601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-1	FS40	Soluble	Solid	300.0	8455
MB 880-8455/1-A	Method Blank	Soluble	Solid	300.0	8455
LCS 880-8455/2-A	Lab Control Sample	Soluble	Solid	300.0	8455
LCSD 880-8455/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8455
880-6474-A-104-B MS	Matrix Spike	Soluble	Solid	300.0	8455
880-6474-A-104-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8455

Analysis Batch: 8602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1306-2	FS41	Soluble	Solid	300.0	8456
890-1306-3	FS42	Soluble	Solid	300.0	8456
890-1306-4	FS43	Soluble	Solid	300.0	8456
890-1306-5	FS44	Soluble	Solid	300.0	8456
890-1306-6	FS45	Soluble	Solid	300.0	8456
890-1306-7	FS46	Soluble	Solid	300.0	8456
MB 880-8456/1-A	Method Blank	Soluble	Solid	300.0	8456
LCS 880-8456/2-A	Lab Control Sample	Soluble	Solid	300.0	8456
LCSD 880-8456/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8456
880-6474-A-120-B MS	Matrix Spike	Soluble	Solid	300.0	8456
880-6474-A-120-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	8456

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS40

Lab Sample ID: 890-1306-1

Date Collected: 09/23/21 15:00

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8532	09/29/21 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	8637	09/30/21 16:59	KL	XEN MID
Total/NA	Prep	5035			8648	10/01/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		50	8712	10/01/21 15:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8647	09/30/21 11:16	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 11:17	AJ	XEN MID
Soluble	Leach	DI Leach			8455	09/27/21 11:55	CH	XEN MID
Soluble	Analysis	300.0		1	8601	10/01/21 05:44	CH	XEN MID

Client Sample ID: FS41

Lab Sample ID: 890-1306-2

Date Collected: 09/23/21 14:35

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8532	09/29/21 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	8637	09/30/21 17:20	KL	XEN MID
Total/NA	Prep	5035			8648	10/01/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		100	8712	10/01/21 15:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8647	09/30/21 11:16	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 12:22	AJ	XEN MID
Soluble	Leach	DI Leach			8456	09/27/21 11:59	CH	XEN MID
Soluble	Analysis	300.0		1	8602	10/01/21 10:45	CH	XEN MID

Client Sample ID: FS42

Lab Sample ID: 890-1306-3

Date Collected: 09/23/21 15:11

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8532	09/29/21 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	8637	09/30/21 17:40	KL	XEN MID
Total/NA	Prep	5035			8648	10/01/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		100	8712	10/01/21 16:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8647	09/30/21 11:16	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 12:44	AJ	XEN MID
Soluble	Leach	DI Leach			8456	09/27/21 11:59	CH	XEN MID
Soluble	Analysis	300.0		1	8602	10/01/21 10:51	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS43

Lab Sample ID: 890-1306-4

Date Collected: 09/23/21 15:35

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8532	09/29/21 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	8637	09/30/21 18:01	KL	XEN MID
Total/NA	Prep	5035			8649	10/01/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		100	8713	10/01/21 15:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8647	09/30/21 11:16	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 13:06	AJ	XEN MID
Soluble	Leach	DI Leach			8456	09/27/21 11:59	CH	XEN MID
Soluble	Analysis	300.0		1	8602	10/01/21 11:35	CH	XEN MID

Client Sample ID: FS44

Lab Sample ID: 890-1306-5

Date Collected: 09/23/21 16:20

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8532	09/29/21 13:50	KL	XEN MID
Total/NA	Analysis	8021B		1	8637	09/30/21 18:22	KL	XEN MID
Total/NA	Prep	5035			8649	10/01/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		100	8713	10/01/21 16:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8647	09/30/21 11:16	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 13:28	AJ	XEN MID
Soluble	Leach	DI Leach			8456	09/27/21 11:59	CH	XEN MID
Soluble	Analysis	300.0		1	8602	10/01/21 10:57	CH	XEN MID

Client Sample ID: FS45

Lab Sample ID: 890-1306-6

Date Collected: 09/23/21 16:40

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8507	09/28/21 10:09	KL	XEN MID
Total/NA	Analysis	8021B		1	8502	09/29/21 08:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8921	10/05/21 13:24	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			8456	09/27/21 11:59	CH	XEN MID
Soluble	Analysis	300.0		1	8602	10/01/21 11:03	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Client Sample ID: FS46

Lab Sample ID: 890-1306-7

Date Collected: 09/23/21 16:47

Matrix: Solid

Date Received: 09/24/21 11:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8507	09/28/21 10:09	KL	XEN MID
Total/NA	Analysis	8021B		1	8502	09/29/21 08:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8921	10/05/21 13:24	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	8693	09/30/21 17:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8511	09/28/21 11:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8567	09/29/21 14:11	AJ	XEN MID
Soluble	Leach	DI Leach			8456	09/27/21 11:59	CH	XEN MID
Soluble	Analysis	300.0		1	8602	10/01/21 11:09	CH	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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

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Method Summary

Client: WSP USA Inc.
 Project/Site: PLU BD 901H

Job ID: 890-1306-1
 SDG: 31403236.022.0129

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: WSP USA Inc.
Project/Site: PLU BD 901H

Job ID: 890-1306-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1306-1	FS40	Solid	09/23/21 15:00	09/24/21 11:27	2
890-1306-2	FS41	Solid	09/23/21 14:35	09/24/21 11:27	2
890-1306-3	FS42	Solid	09/23/21 15:11	09/24/21 11:27	2
890-1306-4	FS43	Solid	09/23/21 15:35	09/24/21 11:27	2
890-1306-5	FS44	Solid	09/23/21 16:20	09/24/21 11:27	2
890-1306-6	FS45	Solid	09/23/21 16:40	09/24/21 11:27	2
890-1306-7	FS46	Solid	09/23/21 16:47	09/24/21 11:27	2

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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)

Chain of Custody

Work Order No: _____

Project Manager:	Dan Moir	Bill to: (if different)	Adrian Baker
Company Name:	WSP Permian office	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:	Elliott.Lee@wsp.com, Kalei.Jennings@wsp.com

Program:	UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RC	<input type="checkbox"/> Pertund
State of Project:					
Reporting Level:	II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Deliverables:	EDD	<input type="checkbox"/>	ADAPT	<input type="checkbox"/>	Other:

Project Name:	PLU BD 901H	Turn Around	
Project Number:	31403236.022.0129	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Rush:	
Sampler's Name:	Elliott Lee	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Temperature (°C):	18/46	Thermometer ID				
Received Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Correction Factor:			10M-053
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Total Containers:			-0.2
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No				



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Work Order Notes
FS40	S	9/23/2021	15:00	2'	1	X	X	X	COMPOSITE
FS41	S	9/23/2021	14:35	2'	1	X	X	X	COMPOSITE
FS42	S	9/23/2021	15:11	2'	1	X	X	X	COMPOSITE
FS43	S	9/23/2021	15:35	2'	1	X	X	X	COMPOSITE
FS44	S	9/23/2021	16:20	2'	1	X	X	X	COMPOSITE
FS45	S	9/23/2021	16:40	2'	1	X	X	X	COMPOSITE
FS46	S	9/23/2021	16:47	2'	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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 4634+245-17470-7471-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 \$250.00 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.

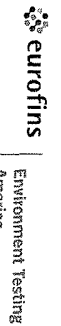
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9-24-21 1123			

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No.
Client Contact: Shipping/Receiving		Phone	Kramer Jessica	890-428-1	890-428-1
Company: Eurofins Xenco		E-Mail	jessica.kramer@eurofins.com	State of Origin	Page 1 of 1
Address: 1211 W Florida Ave.		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		New Mexico	Page 1 of 1
City: Midland		Due Date Requested	Analysis Requested		
State, Zip: TX 79701		9/30/2021	TAT Requested (days):		
Phone: 432-704-5440(Tel)		Field Filtered Sample (Yes or No)			
Email:		Perform MS/MSD (Yes or No)			
Project Name: Zach 17/8 W/IMD FED COM #1H		8016MOD_NM/8016NM_S_Prep Full TPH			
Site: S50W#		300_ORGFM_28D/DI_LEACH Chloride			
Project #:		8021B/6036FP_Calc BTEX			
SSOW#:		Total Number of containers			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Other)
FS40 (890-1306-1)		9/23/21	15:00	Mountain	Solid
FS41 (890-1306-2)		9/23/21	14:35	Mountain	Solid
FS42 (890-1306-3)		9/23/21	15:11	Mountain	Solid
FS43 (890-1306-4)		9/23/21	15:35	Mountain	Solid
FS44 (890-1306-5)		9/23/21	16:20	Mountain	Solid
FS45 (890-1306-6)		9/23/21	16:40	Mountain	Solid
FS46 (890-1306-7)		9/23/21	16:47	Mountain	Solid
<p>Note: Since laboratory accreditations are subject to change, Eurofins Xenco 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/leach/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested I II III IV Other (specify)			Primary Deliverable Rank: 2		
Empty Kit Relinquished by:		Date	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Relinquished by: <i>Cue Chap</i>		9-24-21	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Relinquished by:		Date/Time	Special Instructions/QC Requirements		
Relinquished by:		Date/Time	Method of Shipment:		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No	Received by: <i>[Signature]</i>		
Cooler Temperature(s) °C and Other Remarks: <i>23/28</i>		Date/Time: <i>9-27-21 12:00 PM</i>			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1306-1

SDG Number: 31403236.022.0129

Login Number: 1306

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1306-1

SDG Number: 31403236.022.0129

Login Number: 1306

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 09/27/21 01:57 PM

Creator: Copeland, Tatiana

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	2.3 / 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1625-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
12/6/2021 3:43:15 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.

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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1625-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

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
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.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Job ID: 890-1625-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-1625-1**

Receipt

The samples were received on 11/23/2021 4:24 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 2.4°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS41A (890-1625-1), FS40A (890-1625-3), FS43A (890-1625-4), FS44A (890-1625-5), FS45A (890-1625-6), SW01 (890-1625-7), SW02 (890-1625-8), SW03 (890-1625-9) and (890-1635-A-1-K). 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 880-13728 and analytical batch 880-13715 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: FS45A (890-1625-6). 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 880-13338 and analytical batch 880-14052 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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS41A
Date Collected: 11/23/21 10:42
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00242		0.00201	mg/Kg		12/01/21 08:45	12/01/21 17:01	1
Toluene	0.109		0.00201	mg/Kg		12/01/21 08:45	12/01/21 17:01	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/01/21 08:45	12/01/21 17:01	1
m-Xylene & p-Xylene	0.751		0.00402	mg/Kg		12/01/21 08:45	12/01/21 17:01	1
o-Xylene	0.0288		0.00201	mg/Kg		12/01/21 08:45	12/01/21 17:01	1
Xylenes, Total	0.780		0.00402	mg/Kg		12/01/21 08:45	12/01/21 17:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	242	S1+	70 - 130			12/01/21 08:45	12/01/21 17:01	1
1,4-Difluorobenzene (Surr)	71		70 - 130			12/01/21 08:45	12/01/21 17:01	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.891		0.00402	mg/Kg			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2460		50.0	mg/Kg			12/01/21 20:09	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	350		50.0	mg/Kg		12/02/21 10:17	12/02/21 16:57	1
Diesel Range Organics (Over C10-C28)	2110		50.0	mg/Kg		12/02/21 10:17	12/02/21 16:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/21 10:17	12/02/21 16:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			12/02/21 10:17	12/02/21 16:57	1
o-Terphenyl	101		70 - 130			12/02/21 10:17	12/02/21 16:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.0		5.02	mg/Kg			12/05/21 21:21	1

Client Sample ID: FS42A
Date Collected: 11/23/21 10:50
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		12/01/21 08:45	12/01/21 17:28	1
Toluene	0.0698		0.00202	mg/Kg		12/01/21 08:45	12/01/21 17:28	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		12/01/21 08:45	12/01/21 17:28	1
m-Xylene & p-Xylene	0.667		0.00403	mg/Kg		12/01/21 08:45	12/01/21 17:28	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		12/01/21 08:45	12/01/21 17:28	1
Xylenes, Total	0.667		0.00403	mg/Kg		12/01/21 08:45	12/01/21 17:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			12/01/21 08:45	12/01/21 17:28	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS42A
Date Collected: 11/23/21 10:50
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-2
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	79		70 - 130	12/01/21 08:45	12/01/21 17:28	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.737		0.00403	mg/Kg			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4190		49.9	mg/Kg			12/01/21 20:09	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	1020		49.9	mg/Kg		12/02/21 10:17	12/02/21 17:18	1
Diesel Range Organics (Over C10-C28)	3170		49.9	mg/Kg		12/02/21 10:17	12/02/21 17:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/02/21 10:17	12/02/21 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	12/02/21 10:17	12/02/21 17:18	1
o-Terphenyl	105		70 - 130	12/02/21 10:17	12/02/21 17:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75.8		4.97	mg/Kg			12/05/21 21:30	1

Client Sample ID: FS40A

Lab Sample ID: 890-1625-3

Date Collected: 11/23/21 11:00
Date Received: 11/23/21 16:24
Sample Depth: 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	mg/Kg		12/01/21 08:45	12/01/21 17:54	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/01/21 08:45	12/01/21 17:54	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/01/21 08:45	12/01/21 17:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/01/21 08:45	12/01/21 17:54	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/01/21 08:45	12/01/21 17:54	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/01/21 08:45	12/01/21 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	294	S1+	70 - 130	12/01/21 08:45	12/01/21 17:54	1
1,4-Difluorobenzene (Surr)	102		70 - 130	12/01/21 08:45	12/01/21 17:54	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			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3640		50.0	mg/Kg			12/01/21 20:09	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS40A
Date Collected: 11/23/21 11:00
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	122		50.0	mg/Kg		12/02/21 10:17	12/02/21 17:38	1
Diesel Range Organics (Over C10-C28)	3520		50.0	mg/Kg		12/02/21 10:17	12/02/21 17:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/21 10:17	12/02/21 17:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			12/02/21 10:17	12/02/21 17:38	1
o-Terphenyl	119		70 - 130			12/02/21 10:17	12/02/21 17:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	254		4.95	mg/Kg			12/05/21 21:38	1

Client Sample ID: FS43A
Date Collected: 11/23/21 11:10
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-4
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		12/01/21 08:45	12/01/21 18:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 18:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 18:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/01/21 08:45	12/01/21 18:20	1
o-Xylene	0.00558		0.00200	mg/Kg		12/01/21 08:45	12/01/21 18:20	1
Xylenes, Total	0.00558		0.00400	mg/Kg		12/01/21 08:45	12/01/21 18:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	297	S1+	70 - 130			12/01/21 08:45	12/01/21 18:20	1
1,4-Difluorobenzene (Surr)	145	S1+	70 - 130			12/01/21 08:45	12/01/21 18:20	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00558		0.00400	mg/Kg			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3930		49.8	mg/Kg			12/01/21 20:09	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	281		49.8	mg/Kg		12/02/21 10:17	12/02/21 17:59	1
Diesel Range Organics (Over C10-C28)	3650		49.8	mg/Kg		12/02/21 10:17	12/02/21 17:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/02/21 10:17	12/02/21 17:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			12/02/21 10:17	12/02/21 17:59	1
o-Terphenyl	117		70 - 130			12/02/21 10:17	12/02/21 17:59	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS43A
Date Collected: 11/23/21 11:10
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		4.99	mg/Kg			12/05/21 21:46	1

Client Sample ID: FS44A
Date Collected: 11/23/21 11:15
Date Received: 11/23/21 16:24
Sample Depth: 3

Lab Sample ID: 890-1625-5
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		12/01/21 08:45	12/01/21 20:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/01/21 08:45	12/01/21 20:05	1
o-Xylene	0.0103		0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:05	1
Xylenes, Total	0.0103		0.00400	mg/Kg		12/01/21 08:45	12/01/21 20:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	184	S1+	70 - 130			12/01/21 08:45	12/01/21 20:05	1
1,4-Difluorobenzene (Surr)	74		70 - 130			12/01/21 08:45	12/01/21 20:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0103		0.00400	mg/Kg			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3160		49.9	mg/Kg			12/01/21 20:09	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	119		49.9	mg/Kg		12/02/21 10:17	12/02/21 18:20	1
Diesel Range Organics (Over C10-C28)	3040		49.9	mg/Kg		12/02/21 10:17	12/02/21 18:20	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/02/21 10:17	12/02/21 18:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			12/02/21 10:17	12/02/21 18:20	1
o-Terphenyl	119		70 - 130			12/02/21 10:17	12/02/21 18:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	236		5.00	mg/Kg			12/05/21 21:55	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS45A

Lab Sample ID: 890-1625-6

Date Collected: 11/23/21 11:22

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/01/21 08:45	12/01/21 20:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 20:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/01/21 08:45	12/01/21 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	390	S1+	70 - 130	12/01/21 08:45	12/01/21 20:31	1
1,4-Difluorobenzene (Surr)	74		70 - 130	12/01/21 08:45	12/01/21 20:31	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			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4350		49.9	mg/Kg			12/01/21 20:09	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	352		49.9	mg/Kg		12/02/21 10:17	12/02/21 18:41	1
Diesel Range Organics (Over C10-C28)	4000		49.9	mg/Kg		12/02/21 10:17	12/02/21 18:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/02/21 10:17	12/02/21 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	12/02/21 10:17	12/02/21 18:41	1
o-Terphenyl	105		70 - 130	12/02/21 10:17	12/02/21 18:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143	F1	4.96	mg/Kg			12/05/21 22:03	1

Client Sample ID: SW01

Lab Sample ID: 890-1625-7

Date Collected: 11/23/21 11:30

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 0 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/01/21 08:45	12/01/21 20:57	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/01/21 08:45	12/01/21 20:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/01/21 08:45	12/01/21 20:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		12/01/21 08:45	12/01/21 20:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/01/21 08:45	12/01/21 20:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/01/21 08:45	12/01/21 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	12/01/21 08:45	12/01/21 20:57	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: SW01

Lab Sample ID: 890-1625-7

Date Collected: 11/23/21 11:30

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 0 - 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130	12/01/21 08:45	12/01/21 20:57	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			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	813		50.0	mg/Kg			12/01/21 20:09	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		12/02/21 10:17	12/02/21 19:01	1
Diesel Range Organics (Over C10-C28)	813		50.0	mg/Kg		12/02/21 10:17	12/02/21 19:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/21 10:17	12/02/21 19:01	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	89		70 - 130	12/02/21 10:17	12/02/21 19:01	1		
o-Terphenyl	96		70 - 130	12/02/21 10:17	12/02/21 19:01	1		

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1090		5.04	mg/Kg			12/05/21 22:28	1

Client Sample ID: SW02

Lab Sample ID: 890-1625-8

Date Collected: 11/23/21 11:38

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 0 - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 21:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 21:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 21:24	1
m-Xylene & p-Xylene	0.0598		0.00401	mg/Kg		12/01/21 08:45	12/01/21 21:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 21:24	1
Xylenes, Total	0.0598		0.00401	mg/Kg		12/01/21 08:45	12/01/21 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130	12/01/21 08:45	12/01/21 21:24	1
1,4-Difluorobenzene (Surr)	84		70 - 130	12/01/21 08:45	12/01/21 21:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0598		0.00401	mg/Kg			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2210		50.0	mg/Kg			12/01/21 20:09	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: SW02

Lab Sample ID: 890-1625-8

Date Collected: 11/23/21 11:38

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 0 - 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	72.1		50.0	mg/Kg		12/02/21 10:17	12/02/21 19:22	1
Diesel Range Organics (Over C10-C28)	2140		50.0	mg/Kg		12/02/21 10:17	12/02/21 19:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/21 10:17	12/02/21 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	12/02/21 10:17	12/02/21 19:22	1
o-Terphenyl	108		70 - 130	12/02/21 10:17	12/02/21 19:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	394		4.98	mg/Kg			12/05/21 22:37	1

Client Sample ID: SW03

Lab Sample ID: 890-1625-9

Date Collected: 11/23/21 11:50

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 0 - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		12/01/21 08:45	12/01/21 21:50	1
Toluene	0.0264		0.00202	mg/Kg		12/01/21 08:45	12/01/21 21:50	1
Ethylbenzene	0.0171		0.00202	mg/Kg		12/01/21 08:45	12/01/21 21:50	1
m-Xylene & p-Xylene	0.514		0.00404	mg/Kg		12/01/21 08:45	12/01/21 21:50	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		12/01/21 08:45	12/01/21 21:50	1
Xylenes, Total	0.514		0.00404	mg/Kg		12/01/21 08:45	12/01/21 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	168	S1+	70 - 130	12/01/21 08:45	12/01/21 21:50	1
1,4-Difluorobenzene (Surr)	85		70 - 130	12/01/21 08:45	12/01/21 21:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.558		0.00404	mg/Kg			12/01/21 19:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1670		49.8	mg/Kg			12/01/21 20:09	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	101		49.8	mg/Kg		12/02/21 10:17	12/02/21 19:42	1
Diesel Range Organics (Over C10-C28)	1570		49.8	mg/Kg		12/02/21 10:17	12/02/21 19:42	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/02/21 10:17	12/02/21 19:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	12/02/21 10:17	12/02/21 19:42	1
o-Terphenyl	102		70 - 130	12/02/21 10:17	12/02/21 19:42	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: SW03

Lab Sample ID: 890-1625-9

Date Collected: 11/23/21 11:50

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 0 - 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	635		4.95	mg/Kg			12/05/21 23:02	1

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

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1625-1	FS41A	242 S1+	71
890-1625-2	FS42A	89	79
890-1625-3	FS40A	294 S1+	102
890-1625-4	FS43A	297 S1+	145 S1+
890-1625-5	FS44A	184 S1+	74
890-1625-6	FS45A	390 S1+	74
890-1625-7	SW01	131 S1+	110
890-1625-8	SW02	155 S1+	84
890-1625-9	SW03	168 S1+	85
890-1635-A-1-I MS	Matrix Spike	143 S1+	98
890-1635-A-1-J MSD	Matrix Spike Duplicate	119	114
LCS 880-13362/1-A	Lab Control Sample	105	94
LCSD 880-13362/2-A	Lab Control Sample Dup	113	93
MB 880-13362/5-A	Method Blank	85	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-8751-A-1-I MS	Matrix Spike	86	86
880-8751-A-1-J MSD	Matrix Spike Duplicate	74	74
890-1625-1	FS41A	105	101
890-1625-2	FS42A	106	105
890-1625-3	FS40A	119	119
890-1625-4	FS43A	123	117
890-1625-5	FS44A	114	119
890-1625-6	FS45A	133 S1+	105
890-1625-7	SW01	89	96
890-1625-8	SW02	111	108
890-1625-9	SW03	95	102
LCS 880-13728/2-A	Lab Control Sample	124	122
LCSD 880-13728/3-A	Lab Control Sample Dup	99	96
MB 880-13728/1-A	Method Blank	111	128

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-13362/5-A
Matrix: Solid
Analysis Batch: 13606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13362

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 13:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 13:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 13:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/01/21 08:45	12/01/21 13:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/01/21 08:45	12/01/21 13:56	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/01/21 08:45	12/01/21 13:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	12/01/21 08:45	12/01/21 13:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130	12/01/21 08:45	12/01/21 13:56	1

Lab Sample ID: LCS 880-13362/1-A
Matrix: Solid
Analysis Batch: 13606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09162		mg/Kg		92	70 - 130
Toluene	0.100	0.1023		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.09786		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2177		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1009		mg/Kg		101	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 880-13362/2-A
Matrix: Solid
Analysis Batch: 13606

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13362

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09373		mg/Kg		94	70 - 130	2	35
Toluene	0.100	0.1043		mg/Kg		104	70 - 130	2	35
Ethylbenzene	0.100	0.1040		mg/Kg		104	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2247		mg/Kg		112	70 - 130	3	35
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-1635-A-1-I MS
Matrix: Solid
Analysis Batch: 13606

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 13362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.08943		mg/Kg		89	70 - 130
Toluene	<0.00200	U	0.100	0.1030		mg/Kg		103	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1635-A-1-I MS
Matrix: Solid
Analysis Batch: 13606

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 13362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U	0.100	0.09992		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2191		mg/Kg		110	70 - 130
o-Xylene	<0.00200	U	0.100	0.1033		mg/Kg		103	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-1635-A-1-J MSD
Matrix: Solid
Analysis Batch: 13606

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13362

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0996	0.08847		mg/Kg		89	70 - 130	1	35
Toluene	<0.00200	U	0.0996	0.09828		mg/Kg		99	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0996	0.09313		mg/Kg		94	70 - 130	7	35
m-Xylene & p-Xylene	<0.00399	U	0.199	0.2045		mg/Kg		103	70 - 130	7	35
o-Xylene	<0.00200	U	0.0996	0.09722		mg/Kg		98	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

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

Lab Sample ID: MB 880-13728/1-A
Matrix: Solid
Analysis Batch: 13715

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13728

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		12/02/21 10:17	12/02/21 11:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/02/21 10:17	12/02/21 11:02	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/21 10:17	12/02/21 11:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	12/02/21 10:17	12/02/21 11:02	1
o-Terphenyl	128		70 - 130	12/02/21 10:17	12/02/21 11:02	1

Lab Sample ID: LCS 880-13728/2-A
Matrix: Solid
Analysis Batch: 13715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	864.2		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	859.9		mg/Kg		86	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-13728/2-A
Matrix: Solid
Analysis Batch: 13715

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13728

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	124		70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: LCSD 880-13728/3-A
Matrix: Solid
Analysis Batch: 13715

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13728

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	962.9		mg/Kg		96	70 - 130	11	20	
Diesel Range Organics (Over C10-C28)	1000	950.8		mg/Kg		95	70 - 130	10	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	99		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 880-8751-A-1-I MS
Matrix: Solid
Analysis Batch: 13715

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 13728

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	997	1077		mg/Kg		105	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	944.3		mg/Kg		93	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	86		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 880-8751-A-1-J MSD
Matrix: Solid
Analysis Batch: 13715

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13728

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	999	864.9	F2	mg/Kg		84	70 - 130	22	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	831.4		mg/Kg		81	70 - 130	13	20	

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-13338/1-A
Matrix: Solid
Analysis Batch: 14052

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			12/05/21 19:41	1

Lab Sample ID: LCS 880-13338/2-A
Matrix: Solid
Analysis Batch: 14052

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	267.5		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-13338/3-A
Matrix: Solid
Analysis Batch: 14052

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	268.0		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-1625-6 MS
Matrix: Solid
Analysis Batch: 14052

Client Sample ID: FS45A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	143	F1	248	423.6	F1	mg/Kg		113	90 - 110

Lab Sample ID: 890-1625-6 MSD
Matrix: Solid
Analysis Batch: 14052

Client Sample ID: FS45A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	143	F1	248	421.5	F1	mg/Kg		112	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
 SDG: 31403236.022.0129

GC VOA

Prep Batch: 13362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Total/NA	Solid	5035	
890-1625-2	FS42A	Total/NA	Solid	5035	
890-1625-3	FS40A	Total/NA	Solid	5035	
890-1625-4	FS43A	Total/NA	Solid	5035	
890-1625-5	FS44A	Total/NA	Solid	5035	
890-1625-6	FS45A	Total/NA	Solid	5035	
890-1625-7	SW01	Total/NA	Solid	5035	
890-1625-8	SW02	Total/NA	Solid	5035	
890-1625-9	SW03	Total/NA	Solid	5035	
MB 880-13362/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-13362/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-13362/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1635-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
890-1635-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 13606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Total/NA	Solid	8021B	13362
890-1625-2	FS42A	Total/NA	Solid	8021B	13362
890-1625-3	FS40A	Total/NA	Solid	8021B	13362
890-1625-4	FS43A	Total/NA	Solid	8021B	13362
890-1625-5	FS44A	Total/NA	Solid	8021B	13362
890-1625-6	FS45A	Total/NA	Solid	8021B	13362
890-1625-7	SW01	Total/NA	Solid	8021B	13362
890-1625-8	SW02	Total/NA	Solid	8021B	13362
890-1625-9	SW03	Total/NA	Solid	8021B	13362
MB 880-13362/5-A	Method Blank	Total/NA	Solid	8021B	13362
LCS 880-13362/1-A	Lab Control Sample	Total/NA	Solid	8021B	13362
LCSD 880-13362/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	13362
890-1635-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	13362
890-1635-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	13362

Analysis Batch: 13709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Total/NA	Solid	Total BTEX	
890-1625-2	FS42A	Total/NA	Solid	Total BTEX	
890-1625-3	FS40A	Total/NA	Solid	Total BTEX	
890-1625-4	FS43A	Total/NA	Solid	Total BTEX	
890-1625-5	FS44A	Total/NA	Solid	Total BTEX	
890-1625-6	FS45A	Total/NA	Solid	Total BTEX	
890-1625-7	SW01	Total/NA	Solid	Total BTEX	
890-1625-8	SW02	Total/NA	Solid	Total BTEX	
890-1625-9	SW03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 13711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Total/NA	Solid	8015 NM	
890-1625-2	FS42A	Total/NA	Solid	8015 NM	
890-1625-3	FS40A	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 13711 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-4	FS43A	Total/NA	Solid	8015 NM	
890-1625-5	FS44A	Total/NA	Solid	8015 NM	
890-1625-6	FS45A	Total/NA	Solid	8015 NM	
890-1625-7	SW01	Total/NA	Solid	8015 NM	
890-1625-8	SW02	Total/NA	Solid	8015 NM	
890-1625-9	SW03	Total/NA	Solid	8015 NM	

Analysis Batch: 13715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Total/NA	Solid	8015B NM	13728
890-1625-2	FS42A	Total/NA	Solid	8015B NM	13728
890-1625-3	FS40A	Total/NA	Solid	8015B NM	13728
890-1625-4	FS43A	Total/NA	Solid	8015B NM	13728
890-1625-5	FS44A	Total/NA	Solid	8015B NM	13728
890-1625-6	FS45A	Total/NA	Solid	8015B NM	13728
890-1625-7	SW01	Total/NA	Solid	8015B NM	13728
890-1625-8	SW02	Total/NA	Solid	8015B NM	13728
890-1625-9	SW03	Total/NA	Solid	8015B NM	13728
MB 880-13728/1-A	Method Blank	Total/NA	Solid	8015B NM	13728
LCS 880-13728/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	13728
LCSD 880-13728/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	13728
880-8751-A-1-I MS	Matrix Spike	Total/NA	Solid	8015B NM	13728
880-8751-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	13728

Prep Batch: 13728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Total/NA	Solid	8015NM Prep	
890-1625-2	FS42A	Total/NA	Solid	8015NM Prep	
890-1625-3	FS40A	Total/NA	Solid	8015NM Prep	
890-1625-4	FS43A	Total/NA	Solid	8015NM Prep	
890-1625-5	FS44A	Total/NA	Solid	8015NM Prep	
890-1625-6	FS45A	Total/NA	Solid	8015NM Prep	
890-1625-7	SW01	Total/NA	Solid	8015NM Prep	
890-1625-8	SW02	Total/NA	Solid	8015NM Prep	
890-1625-9	SW03	Total/NA	Solid	8015NM Prep	
MB 880-13728/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-13728/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-13728/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-8751-A-1-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-8751-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 13338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Soluble	Solid	DI Leach	
890-1625-2	FS42A	Soluble	Solid	DI Leach	
890-1625-3	FS40A	Soluble	Solid	DI Leach	
890-1625-4	FS43A	Soluble	Solid	DI Leach	
890-1625-5	FS44A	Soluble	Solid	DI Leach	
890-1625-6	FS45A	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
 SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 13338 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-7	SW01	Soluble	Solid	DI Leach	
890-1625-8	SW02	Soluble	Solid	DI Leach	
890-1625-9	SW03	Soluble	Solid	DI Leach	
MB 880-13338/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-13338/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-13338/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1625-6 MS	FS45A	Soluble	Solid	DI Leach	
890-1625-6 MSD	FS45A	Soluble	Solid	DI Leach	

Analysis Batch: 14052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1625-1	FS41A	Soluble	Solid	300.0	13338
890-1625-2	FS42A	Soluble	Solid	300.0	13338
890-1625-3	FS40A	Soluble	Solid	300.0	13338
890-1625-4	FS43A	Soluble	Solid	300.0	13338
890-1625-5	FS44A	Soluble	Solid	300.0	13338
890-1625-6	FS45A	Soluble	Solid	300.0	13338
890-1625-7	SW01	Soluble	Solid	300.0	13338
890-1625-8	SW02	Soluble	Solid	300.0	13338
890-1625-9	SW03	Soluble	Solid	300.0	13338
MB 880-13338/1-A	Method Blank	Soluble	Solid	300.0	13338
LCS 880-13338/2-A	Lab Control Sample	Soluble	Solid	300.0	13338
LCSD 880-13338/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	13338
890-1625-6 MS	FS45A	Soluble	Solid	300.0	13338
890-1625-6 MSD	FS45A	Soluble	Solid	300.0	13338

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS41A
Date Collected: 11/23/21 10:42
Date Received: 11/23/21 16:24

Lab Sample ID: 890-1625-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 17:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 16:57	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 21:21	CH	XEN MID

Client Sample ID: FS42A
Date Collected: 11/23/21 10:50
Date Received: 11/23/21 16:24

Lab Sample ID: 890-1625-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 17:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 17:18	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 21:30	CH	XEN MID

Client Sample ID: FS40A
Date Collected: 11/23/21 11:00
Date Received: 11/23/21 16:24

Lab Sample ID: 890-1625-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 17:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 17:38	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 21:38	CH	XEN MID

Client Sample ID: FS43A
Date Collected: 11/23/21 11:10
Date Received: 11/23/21 16:24

Lab Sample ID: 890-1625-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 18:20	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: FS43A

Lab Sample ID: 890-1625-4

Date Collected: 11/23/21 11:10

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 17:59	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 21:46	CH	XEN MID

Client Sample ID: FS44A

Lab Sample ID: 890-1625-5

Date Collected: 11/23/21 11:15

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 20:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 18:20	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 21:55	CH	XEN MID

Client Sample ID: FS45A

Lab Sample ID: 890-1625-6

Date Collected: 11/23/21 11:22

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 20:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 18:41	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 22:03	CH	XEN MID

Client Sample ID: SW01

Lab Sample ID: 890-1625-7

Date Collected: 11/23/21 11:30

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 20:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 19:01	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Client Sample ID: SW01

Lab Sample ID: 890-1625-7

Date Collected: 11/23/21 11:30

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 22:28	CH	XEN MID

Client Sample ID: SW02

Lab Sample ID: 890-1625-8

Date Collected: 11/23/21 11:38

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 21:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 19:22	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 22:37	CH	XEN MID

Client Sample ID: SW03

Lab Sample ID: 890-1625-9

Date Collected: 11/23/21 11:50

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13362	12/01/21 08:45	KL	XEN MID
Total/NA	Analysis	8021B		1	13606	12/01/21 21:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13709	12/01/21 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13711	12/01/21 20:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13728	12/02/21 10:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13715	12/02/21 19:42	AJ	XEN MID
Soluble	Leach	DI Leach			13338	11/29/21 11:07	CA	XEN MID
Soluble	Analysis	300.0		1	14052	12/05/21 23:02	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1625-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1625-1	FS41A	Solid	11/23/21 10:42	11/23/21 16:24	3
890-1625-2	FS42A	Solid	11/23/21 10:50	11/23/21 16:24	3
890-1625-3	FS40A	Solid	11/23/21 11:00	11/23/21 16:24	3
890-1625-4	FS43A	Solid	11/23/21 11:10	11/23/21 16:24	3
890-1625-5	FS44A	Solid	11/23/21 11:15	11/23/21 16:24	3
890-1625-6	FS45A	Solid	11/23/21 11:22	11/23/21 16:24	3
890-1625-7	SW01	Solid	11/23/21 11:30	11/23/21 16:24	0 - 1
890-1625-8	SW02	Solid	11/23/21 11:38	11/23/21 16:24	0 - 3
890-1625-9	SW03	Solid	11/23/21 11:50	11/23/21 16:24	0 - 3

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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

Chain of Custody

Work Order No: _____

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Project Manager:	Dan Moir	Bill to: (if different)	Adrian Baker
Company Name:	WSP Permian office	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:	Elliot.Lee@wsp.com, Kate.Jennings@wsp.com

Work Order Comments	
Program: UST/PST	<input type="checkbox"/> RP <input type="checkbox"/> Rowfields <input type="checkbox"/> RC <input type="checkbox"/> Fund
State of Project:	
Reporting Level II	<input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	PLU 25 BD 901H	Turn Around	
Project Number:	31403236.022.0129	Routine	A
P.O. Number:		Rush:	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Seal:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Temperature (°C):	2.0/2.4	Thermometer ID: TMM003		
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor: -0.2		
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			



890-1625 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)														
FS41A	S	11/23/2021	10:42	3'	X	X	X														
FS42A	S	11/23/2021	10:50	3'	X	X	X														
FS40A	S	11/23/2021	11:00	3'	X	X	X														
FS43A	S	11/23/2021	11:10	3'	X	X	X														
FS44A	S	11/23/2021	11:15	3'	X	X	X														
FS45A	S	11/23/2021	11:22	3'	X	X	X														
SW01	S	11/23/2021	11:30	0-1'	X	X	X														
SW02	S	11/23/2021	11:38	0-3'	X	X	X														
SW03	S	11/23/2021	11:50	0-3'	X	X	X														

Total 200.7 / 6010 200.8 / 6020: BRCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: BRCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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
<i>[Signature]</i>	<i>[Signature]</i>	11-23-21 10:24			

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Shipping/Receiving	Phone	Kramer Jessica	State of Origin	890-522-1	
Company: Eurofins Xenco	E-Mail: jessica.kramer@eurofinsnet.com	Accreditations Required (See note)	New Mexico	Page 1 of 1	
Address: 1211 W Florida Ave	Due Date Requested: 12/1/2021	NE LAP - Louisiana	NE LAP - Texas	Job #	890-1625-1
City: Midland	TAT Requested (days):	Analysis Requested			
State Zip: TX 79701	PO #	Perform MS/MSD (Yes or No)			
Phone: 432-704-5440(Tel)	W/O #	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH			
Email	Project #	8015MOD_Calc			
Project Name: PLU 25 BD 901H	SSOV#:	300_ORGFM_28D/DI_LEACH Chloride			
Site		8021B/6035FP_Calc (MOD) BTEX			
		Total_BTEX_GCV			
		Total Number of containers			
		Special Instructions/Note:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Other)	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/6035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers
FS41A (890-1625-1)	11/23/21	10 42	Mountain	Solid	X	X	X	X	X	X	X	1
FS42A (890-1625-2)	11/23/21	10 30	Mountain	Solid	X	X	X	X	X	X	X	1
FS40A (890-1625-3)	11/23/21	11 00	Mountain	Solid	X	X	X	X	X	X	X	1
FS43A (890-1625-4)	11/23/21	11 10	Mountain	Solid	X	X	X	X	X	X	X	1
FS44A (890-1625-5)	11/23/21	11 15	Mountain	Solid	X	X	X	X	X	X	X	1
FS45A (890-1625-6)	11/23/21	11 22	Mountain	Solid	X	X	X	X	X	X	X	1
SW01 (890-1625-7)	11/23/21	11 30	Mountain	Solid	X	X	X	X	X	X	X	1
SW02 (890-1625-8)	11/23/21	11 38	Mountain	Solid	X	X	X	X	X	X	X	1
SW03 (890-1625-9)	11/23/21	11 50	Mountain	Solid	X	X	X	X	X	X	X	1

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontracted 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/estimator being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification
 Unconfirmed

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 *Joe Culp* Date/Time *11.24.21* Company _____

Relinquished by _____ Date/Time _____ Company _____

Relinquished by _____ Date/Time _____ Company _____

Custody Seals Intact: Yes No Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks *3.8/3.9*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1625-1

SDG Number: 31403236.022.0129

Login Number: 1625

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1625-1

SDG Number: 31403236.022.0129

Login Number: 1625

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 11/24/21 12:15 PM

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8/3.9
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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1627-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
11/30/2021 2:43:05 PM

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



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results through
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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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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1627-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

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
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: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Job ID: 890-1627-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1627-1

Receipt

The sample was received on 11/23/2021 4:24 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 2.4°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.

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Client Sample ID: PH13

Lab Sample ID: 890-1627-1

Date Collected: 11/22/21 14:05

Matrix: Solid

Date Received: 11/23/21 16:24

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:18	1
Toluene	0.00262		0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:18	1
m-Xylene & p-Xylene	0.0298		0.00398	mg/Kg		11/24/21 10:16	11/29/21 13:18	1
o-Xylene	0.0562		0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:18	1
Xylenes, Total	0.0860		0.00398	mg/Kg		11/24/21 10:16	11/29/21 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	189	S1+	70 - 130	11/24/21 10:16	11/29/21 13:18	1
1,4-Difluorobenzene (Surr)	70		70 - 130	11/24/21 10:16	11/29/21 13:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0886		0.00398	mg/Kg			11/30/21 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1550		49.9	mg/Kg			11/30/21 14:25	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	137		49.9	mg/Kg		11/24/21 12:36	11/25/21 07:32	1
Diesel Range Organics (Over C10-C28)	1410		49.9	mg/Kg		11/24/21 12:36	11/25/21 07:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/24/21 12:36	11/25/21 07:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130	11/24/21 12:36	11/25/21 07:32	1
o-Terphenyl	118		70 - 130	11/24/21 12:36	11/25/21 07:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		5.00	mg/Kg			11/24/21 19:50	1

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
 SDG: 31403236.022.0129

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)
890-1627-1	PH13	189 S1+	70
890-1631-A-21-A MS	Matrix Spike	137 S1+	120
890-1631-A-21-B MSD	Matrix Spike Duplicate	122	112
LCS 880-13161/1-A	Lab Control Sample	124	73
LCSD 880-13161/2-A	Lab Control Sample Dup	134 S1+	116
MB 880-13161/5-A	Method Blank	77	79

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)
890-1613-A-1-F MS	Matrix Spike	109	106
890-1613-A-1-G MSD	Matrix Spike Duplicate	110	105
890-1627-1	PH13	128	118
LCS 880-13223/2-A	Lab Control Sample	117	128
LCSD 880-13223/3-A	Lab Control Sample Dup	110	122
MB 880-13223/1-A	Method Blank	151 S1+	169 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-13161/5-A
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13161

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/24/21 10:16	11/29/21 12:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	11/24/21 10:16	11/29/21 12:26	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/24/21 10:16	11/29/21 12:26	1

Lab Sample ID: LCS 880-13161/1-A
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08839		mg/Kg		88	70 - 130
Toluene	0.100	0.09719		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2239		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1073		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	73		70 - 130

Lab Sample ID: LCSD 880-13161/2-A
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1007		mg/Kg		101	70 - 130	13	35
Toluene	0.100	0.1097		mg/Kg		110	70 - 130	12	35
Ethylbenzene	0.100	0.08493		mg/Kg		85	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.2350		mg/Kg		118	70 - 130	5	35
o-Xylene	0.100	0.1130		mg/Kg		113	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: 890-1631-A-21-B MSD
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.08962		mg/Kg					
Toluene	<0.00200	U	0.0998	0.09842		mg/Kg					

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1631-A-21-B MSD
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00200	U	0.0998	0.09973		mg/Kg					
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2203		mg/Kg					
o-Xylene	<0.00200	U	0.0998	0.1058		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 890-1631-A-21-A MS
Matrix: Solid
Analysis Batch: 13293

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

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

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

Lab Sample ID: MB 880-13223/1-A
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13223

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		11/24/21 12:36	11/24/21 23:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/24/21 12:36	11/24/21 23:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/24/21 12:36	11/24/21 23:28	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	151	S1+	70 - 130	11/24/21 12:36	11/24/21 23:28	1
o-Terphenyl	169	S1+	70 - 130	11/24/21 12:36	11/24/21 23:28	1

Lab Sample ID: LCS 880-13223/2-A
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	923.3		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1252		mg/Kg		125	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	128		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-13223/3-A
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	870.1		mg/Kg		87	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	1000	1240		mg/Kg		124	70 - 130	1	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	110		70 - 130							
o-Terphenyl	122		70 - 130							

Lab Sample ID: 890-1613-A-1-F MS
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1197		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1168		mg/Kg		117	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: 890-1613-A-1-G MSD
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1217		mg/Kg		122	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1172		mg/Kg		117	70 - 130	0	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	105		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-13214/1-A
Matrix: Solid
Analysis Batch: 13253

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			11/24/21 16:24	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-13214/2-A
Matrix: Solid
Analysis Batch: 13253

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	266.3		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-13214/3-A
Matrix: Solid
Analysis Batch: 13253

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	265.9		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-1626-A-11-B MS
Matrix: Solid
Analysis Batch: 13253

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	51.6		248	310.3		mg/Kg		104	90 - 110

Lab Sample ID: 890-1626-A-11-C MSD
Matrix: Solid
Analysis Batch: 13253

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	51.6		248	311.1		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 13161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Total/NA	Solid	5035	
MB 880-13161/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-13161/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-13161/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1631-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 13293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Total/NA	Solid	8021B	13161
MB 880-13161/5-A	Method Blank	Total/NA	Solid	8021B	13161
LCS 880-13161/1-A	Lab Control Sample	Total/NA	Solid	8021B	13161
LCSD 880-13161/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	13161
890-1631-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1631-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	13161

Analysis Batch: 13453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 13220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Total/NA	Solid	8015B NM	13223
MB 880-13223/1-A	Method Blank	Total/NA	Solid	8015B NM	13223
LCS 880-13223/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	13223
LCSD 880-13223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	13223
890-1613-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	13223
890-1613-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	13223

Prep Batch: 13223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Total/NA	Solid	8015NM Prep	
MB 880-13223/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-13223/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-13223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1613-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1613-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 13501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 13214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Soluble	Solid	DI Leach	
MB 880-13214/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-13214/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-13214/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1626-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 13214 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1626-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 13253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1627-1	PH13	Soluble	Solid	300.0	13214
MB 880-13214/1-A	Method Blank	Soluble	Solid	300.0	13214
LCS 880-13214/2-A	Lab Control Sample	Soluble	Solid	300.0	13214
LCSD 880-13214/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	13214
890-1626-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	13214
890-1626-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	13214

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Client Sample ID: PH13

Lab Sample ID: 890-1627-1

Date Collected: 11/22/21 14:05

Matrix: Solid

Date Received: 11/23/21 16:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13161	11/24/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	13293	11/29/21 13:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13453	11/30/21 11:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13501	11/30/21 14:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13223	11/24/21 12:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13220	11/25/21 07:32	AJ	XEN MID
Soluble	Leach	DI Leach			13214	11/24/21 11:46	CA	XEN MID
Soluble	Analysis	300.0		1	13253	11/24/21 19:50	SC	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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

- 1
- 2
- 3
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- 12
- 13
- 14

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1627-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1627-1	PH13	Solid	11/22/21 14:05	11/23/21 16:24	3

- 1
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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab), Shipping/Receiving, Address, City, State, Zip, Phone, Project Name, Sample Identification - Client ID (Lab ID), Sample Date, Sample Time, Sample Type, Matrix, Analysis Requested, Preservation Codes, Special Instructions/Note, Sample Disposal, Relinquished by, Custody Seals Intact.

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1627-1

SDG Number: 31403236.022.0129

Login Number: 1627

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1627-1

SDG Number: 31403236.022.0129

Login Number: 1627

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 11/24/21 12:15 PM

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8/3.9
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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1630-1
Laboratory Sample Delivery Group: 31403236.022.0129
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
11/30/2021 2:43:07 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.

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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1630-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

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
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: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Job ID: 890-1630-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1630-1

Receipt

The samples were received on 11/23/2021 4:25 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 2.4°C

GC VOA

Method 8021B: The following sample was diluted due to the nature of the sample matrix: PH12A (890-1630-2) 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

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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Client Sample ID: PH12

Lab Sample ID: 890-1630-1

Date Collected: 11/22/21 13:40

Matrix: Solid

Date Received: 11/23/21 16:25

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00394		0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:44	1
Toluene	0.160		0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:44	1
Ethylbenzene	0.212		0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:44	1
m-Xylene & p-Xylene	0.788		0.00398	mg/Kg		11/24/21 10:16	11/29/21 13:44	1
o-Xylene	0.323		0.00199	mg/Kg		11/24/21 10:16	11/29/21 13:44	1
Xylenes, Total	1.11		0.00398	mg/Kg		11/24/21 10:16	11/29/21 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	756	S1+	70 - 130	11/24/21 10:16	11/29/21 13:44	1
1,4-Difluorobenzene (Surr)	90		70 - 130	11/24/21 10:16	11/29/21 13:44	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.49		0.00398	mg/Kg			11/30/21 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6980		50.0	mg/Kg			11/30/21 14:25	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	3830		50.0	mg/Kg		11/24/21 12:36	11/25/21 07:53	1
Diesel Range Organics (Over C10-C28)	3150		50.0	mg/Kg		11/24/21 12:36	11/25/21 07:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/24/21 12:36	11/25/21 07:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	188	S1+	70 - 130	11/24/21 12:36	11/25/21 07:53	1
o-Terphenyl	107		70 - 130	11/24/21 12:36	11/25/21 07:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.1		5.03	mg/Kg			11/24/21 19:58	1

Client Sample ID: PH12A

Lab Sample ID: 890-1630-2

Date Collected: 11/22/21 13:45

Matrix: Solid

Date Received: 11/23/21 16:25

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.415		0.200	mg/Kg		11/24/21 10:16	11/29/21 15:07	100
Toluene	1.90		0.200	mg/Kg		11/24/21 10:16	11/29/21 15:07	100
Ethylbenzene	0.952		0.200	mg/Kg		11/24/21 10:16	11/29/21 15:07	100
m-Xylene & p-Xylene	29.2		0.400	mg/Kg		11/24/21 10:16	11/29/21 15:07	100
o-Xylene	1.93		0.200	mg/Kg		11/24/21 10:16	11/29/21 15:07	100
Xylenes, Total	31.1		0.400	mg/Kg		11/24/21 10:16	11/29/21 15:07	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	233	S1+	70 - 130	11/24/21 10:16	11/29/21 15:07	100

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Client Sample ID: PH12A

Lab Sample ID: 890-1630-2

Date Collected: 11/22/21 13:45

Matrix: Solid

Date Received: 11/23/21 16:25

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	11/24/21 10:16	11/29/21 15:07	100

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	34.4		0.400	mg/Kg			11/30/21 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5600		50.0	mg/Kg			11/30/21 14:25	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	3200		50.0	mg/Kg		11/24/21 12:36	11/25/21 08:15	1
Diesel Range Organics (Over C10-C28)	2400		50.0	mg/Kg		11/24/21 12:36	11/25/21 08:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/24/21 12:36	11/25/21 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	154	S1+	70 - 130	11/24/21 12:36	11/25/21 08:15	1
o-Terphenyl	111		70 - 130	11/24/21 12:36	11/25/21 08:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.4		5.04	mg/Kg			11/24/21 20:05	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1630-1	PH12	756 S1+	90
890-1630-2	PH12A	233 S1+	85
LCS 880-13161/1-A	Lab Control Sample	124	73
LCSD 880-13161/2-A	Lab Control Sample Dup	134 S1+	116
MB 880-13161/5-A	Method Blank	77	79

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
890-1631-A-21-A MS	Matrix Spike		
890-1631-A-21-B MSD	Matrix Spike Duplicate		

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1613-A-1-F MS	Matrix Spike	109	106
890-1613-A-1-G MSD	Matrix Spike Duplicate	110	105
890-1630-1	PH12	188 S1+	107
890-1630-2	PH12A	154 S1+	111
LCS 880-13223/2-A	Lab Control Sample	117	128
LCSD 880-13223/3-A	Lab Control Sample Dup	110	122
MB 880-13223/1-A	Method Blank	151 S1+	169 S1+

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

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-13161/5-A
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13161

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/24/21 10:16	11/29/21 12:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/24/21 10:16	11/29/21 12:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	11/24/21 10:16	11/29/21 12:26	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/24/21 10:16	11/29/21 12:26	1

Lab Sample ID: LCS 880-13161/1-A
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08839		mg/Kg		88	70 - 130
Toluene	0.100	0.09719		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2239		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1073		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	73		70 - 130

Lab Sample ID: LCSD 880-13161/2-A
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1007		mg/Kg		101	70 - 130	13	35
Toluene	0.100	0.1097		mg/Kg		110	70 - 130	12	35
Ethylbenzene	0.100	0.08493		mg/Kg		85	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.2350		mg/Kg		118	70 - 130	5	35
o-Xylene	0.100	0.1130		mg/Kg		113	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: 890-1631-A-21-B MSD
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.08962		mg/Kg					
Toluene	<0.00200	U	0.0998	0.09842		mg/Kg					

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1631-A-21-B MSD
Matrix: Solid
Analysis Batch: 13293

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13161

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00200	U	0.0998	0.09973		mg/Kg					
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2203		mg/Kg					
o-Xylene	<0.00200	U	0.0998	0.1058		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: 890-1631-A-21-A MS
Matrix: Solid
Analysis Batch: 13293

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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

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

Lab Sample ID: MB 880-13223/1-A
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13223

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		11/24/21 12:36	11/24/21 23:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/24/21 12:36	11/24/21 23:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/24/21 12:36	11/24/21 23:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	151	S1+	70 - 130	11/24/21 12:36	11/24/21 23:28	1
o-Terphenyl	169	S1+	70 - 130	11/24/21 12:36	11/24/21 23:28	1

Lab Sample ID: LCS 880-13223/2-A
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	923.3		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1252		mg/Kg		125	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	128		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-13223/3-A
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	870.1		mg/Kg		87	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	1000	1240		mg/Kg		124	70 - 130	1	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	110		70 - 130							
o-Terphenyl	122		70 - 130							

Lab Sample ID: 890-1613-A-1-F MS
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1197		mg/Kg		120	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1168		mg/Kg		117	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: 890-1613-A-1-G MSD
Matrix: Solid
Analysis Batch: 13220

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 13223

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1217		mg/Kg		122	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1172		mg/Kg		117	70 - 130	0	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	105		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-13214/1-A
Matrix: Solid
Analysis Batch: 13253

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			11/24/21 16:24	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-13214/2-A
Matrix: Solid
Analysis Batch: 13253

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	266.3		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-13214/3-A
Matrix: Solid
Analysis Batch: 13253

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	265.9		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-1626-A-11-B MS
Matrix: Solid
Analysis Batch: 13253

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	51.6		248	310.3		mg/Kg		104	90 - 110

Lab Sample ID: 890-1626-A-11-C MSD
Matrix: Solid
Analysis Batch: 13253

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	51.6		248	311.1		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
 SDG: 31403236.022.0129

GC VOA

Prep Batch: 13161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Total/NA	Solid	5035	
890-1630-2	PH12A	Total/NA	Solid	5035	
MB 880-13161/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-13161/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-13161/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1631-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 13293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Total/NA	Solid	8021B	13161
890-1630-2	PH12A	Total/NA	Solid	8021B	13161
MB 880-13161/5-A	Method Blank	Total/NA	Solid	8021B	13161
LCS 880-13161/1-A	Lab Control Sample	Total/NA	Solid	8021B	13161
LCSD 880-13161/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	13161
890-1631-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1631-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	13161

Analysis Batch: 13453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Total/NA	Solid	Total BTEX	
890-1630-2	PH12A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 13220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Total/NA	Solid	8015B NM	13223
890-1630-2	PH12A	Total/NA	Solid	8015B NM	13223
MB 880-13223/1-A	Method Blank	Total/NA	Solid	8015B NM	13223
LCS 880-13223/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	13223
LCSD 880-13223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	13223
890-1613-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	13223
890-1613-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	13223

Prep Batch: 13223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Total/NA	Solid	8015NM Prep	
890-1630-2	PH12A	Total/NA	Solid	8015NM Prep	
MB 880-13223/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-13223/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-13223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1613-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1613-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 13501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Total/NA	Solid	8015 NM	
890-1630-2	PH12A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
 SDG: 31403236.022.0129

HPLC/IC

Leach Batch: 13214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Soluble	Solid	DI Leach	
890-1630-2	PH12A	Soluble	Solid	DI Leach	
MB 880-13214/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-13214/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-13214/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1626-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1626-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 13253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1630-1	PH12	Soluble	Solid	300.0	13214
890-1630-2	PH12A	Soluble	Solid	300.0	13214
MB 880-13214/1-A	Method Blank	Soluble	Solid	300.0	13214
LCS 880-13214/2-A	Lab Control Sample	Soluble	Solid	300.0	13214
LCSD 880-13214/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	13214
890-1626-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	13214
890-1626-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	13214

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Client Sample ID: PH12

Lab Sample ID: 890-1630-1

Date Collected: 11/22/21 13:40

Matrix: Solid

Date Received: 11/23/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13161	11/24/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		1	13293	11/29/21 13:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13453	11/30/21 11:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13501	11/30/21 14:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13223	11/24/21 12:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13220	11/25/21 07:53	AJ	XEN MID
Soluble	Leach	DI Leach			13214	11/24/21 11:46	CA	XEN MID
Soluble	Analysis	300.0		1	13253	11/24/21 19:58	SC	XEN MID

Client Sample ID: PH12A

Lab Sample ID: 890-1630-2

Date Collected: 11/22/21 13:45

Matrix: Solid

Date Received: 11/23/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13161	11/24/21 10:16	KL	XEN MID
Total/NA	Analysis	8021B		100	13293	11/29/21 15:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	13453	11/30/21 11:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	13501	11/30/21 14:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			13223	11/24/21 12:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	13220	11/25/21 08:15	AJ	XEN MID
Soluble	Leach	DI Leach			13214	11/24/21 11:46	CA	XEN MID
Soluble	Analysis	300.0		1	13253	11/24/21 20:05	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, 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

- 1
- 2
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Method Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
 SDG: 31403236.022.0129

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1630-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1630-1	PH12	Solid	11/22/21 13:40	11/23/21 16:25	3
890-1630-2	PH12A	Solid	11/22/21 13:45	11/23/21 16:25	4

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Eurofins Xenco, 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)

Client Contact: Shipping/Receiving
 Phone: _____
 Eurofins Xenco
 Address: 1211 W Florida Ave., Midland TX 79701
 Due Date Requested: 11/29/2021
 TAT Requested (days): _____
 City: Midland
 State Zip: TX 79701
 Phone: 432-704-5440(Tel)
 Email: _____
 Project Name: PLU 29 BD 901-H
 Project #: 89000004
 Site: _____
 SSOV#: _____
 Lab PM: Kramer, Jessica
 E-Mail: jessica.kramer@eurofinest.com
 Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas
 Carrier Tracking No(s): _____
 State of Origin: New Mexico
 COC No: 890-522-1
 Page: Page 1 of 1
 Job #: 890-1630-1
 Preservation Codes:
 A. HCL
 B. NaOH
 C. Zn Acetate
 D. Nitric Acid
 E. NaHSO4
 F. NaOH
 G. Amchlor
 H. Ascorbic Acid
 I. Ice
 J. DI Water
 K. EDTA
 L. EDA
 M. Hexane
 N. None
 O. AsNaO2
 P. Na2CO4S
 Q. Na2SO3
 R. Na2S2O3
 S. H2SO4
 T. TSP Dodecalhydrate
 U. Acetone
 V. MCAA
 W. pH 4.5
 Z. other (specify) _____
 Other: _____

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=comp, G=grab)	Matrix (W=solid, O=particulate, A=AI)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
PH12 (890-1630-1)	11/22/21	13:40	Mountain	Solid		X	X	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH 8015MOD_Calc 300_ORGFM_28D/DI_LEACH Chloride 8021B/6035FP_Calc (MOD) BTEX Total_BTEX_GCV	1	
PH12A (890-1630-2)	11/22/21	13:45	Mountain	Solid		X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco 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 analysts/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Deliverable Requested: I II III IV Other (specify) _____ Primary Deliverable Rank: 2
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by _____ Date _____ Time _____ Method of Shipment: _____

Relinquished by *Jesse Kraft 11/24/21* Date/Time: _____ Company: _____ Received by *Jessica Kramer* Date/Time: 11/29/21 Company: _____

Relinquished by _____ Date/Time: _____ Company: _____ Received by _____ Date/Time: 12/10/21 Company: _____

Custody Seals Intact: _____ Custody Seal No: _____
 Δ Yes Δ No
 Cooler Temperature(s) °C and Other Remarks: _____
 307809

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1630-1

SDG Number: 31403236.022.0129

Login Number: 1630

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1630-1

SDG Number: 31403236.022.0129

Login Number: 1630

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 11/24/21 12:15 PM

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8/3.9
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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1704-1
Laboratory SDG: 31403236.022.0129. TASK 0302
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
12/20/2021 7:37:58 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.

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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Glossary

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

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Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Job ID: 890-1704-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-1704-1**

Receipt

The samples were received on 12/13/2021 12:31 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 3.0°C

GC VOA

Method 8021B: The following samples were diluted due to the nature of the sample matrix: PH15A (890-1704-2), PH15B (890-1704-3), PH15C (890-1704-4), PH15D (890-1704-5), PH15E (890-1704-6), PH16 (890-1704-7), PH16A (890-1704-8), PH17B (890-1704-15), PH18 (890-1704-16), PH18A (890-1704-17) and PH18B (890-1704-18) at 50.0, 50.0, 20.0, 20.0, 20.0, 50.0, 20.0, 20.0, 20.0, 20.0 and 20.0. 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 880-14776 and analytical batch 880-14800 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: (880-9270-A-1-F MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: PH15B (890-1704-3). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: PH17B (890-1704-15) and PH18A (890-1704-17). 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 880-14834 and analytical batch 880-14983 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. The associated samples are: PH16E (890-1704-12), PH17 (890-1704-13), PH17A (890-1704-14), PH17B (890-1704-15), PH18 (890-1704-16), PH18A (890-1704-17), PH18B (890-1704-18), PH19 (890-1704-19), PH19A (890-1704-20), PH19B (890-1704-21), (890-1704-A-12-F MS) and (890-1704-A-12-G MSD).

Method 300_ORGFM_28D: The matrix spike (MS) recovery for preparation batch 880-14833 and analytical batch 880-14982 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. The associated sample is: PH15 (890-1704-1).

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-14833 and analytical batch 880-14982 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. The associated samples are: PH15B (890-1704-3), PH15C (890-1704-4), PH15D (890-1704-5), PH15E (890-1704-6), PH16 (890-1704-7), PH16A (890-1704-8), PH16B (890-1704-9), PH16C (890-1704-10), PH16D (890-1704-11), (890-1704-A-2-F MS) and (890-1704-A-2-G MSD).

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: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15

Lab Sample ID: 890-1704-1

Date Collected: 12/10/21 09:00

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 07:30	12/14/21 12:32	1
Toluene	0.0894		0.00200	mg/Kg		12/14/21 07:30	12/14/21 12:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 12:32	1
m-Xylene & p-Xylene	0.320		0.00401	mg/Kg		12/14/21 07:30	12/14/21 12:32	1
o-Xylene	0.0878		0.00200	mg/Kg		12/14/21 07:30	12/14/21 12:32	1
Xylenes, Total	0.408		0.00401	mg/Kg		12/14/21 07:30	12/14/21 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	12/14/21 07:30	12/14/21 12:32	1
1,4-Difluorobenzene (Surr)	82		70 - 130	12/14/21 07:30	12/14/21 12:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.497		0.00401	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	493		50.0	mg/Kg			12/17/21 09:16	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	111		50.0	mg/Kg		12/14/21 15:12	12/16/21 22:06	1
Diesel Range Organics (Over C10-C28)	382		50.0	mg/Kg		12/14/21 15:12	12/16/21 22:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 15:12	12/16/21 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	12/14/21 15:12	12/16/21 22:06	1
o-Terphenyl	114		70 - 130	12/14/21 15:12	12/16/21 22:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	383		4.98	mg/Kg			12/17/21 11:02	1

Client Sample ID: PH15A

Lab Sample ID: 890-1704-2

Date Collected: 12/10/21 09:10

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.719		0.0996	mg/Kg		12/14/21 07:30	12/14/21 13:33	50
Toluene	10.2		0.0996	mg/Kg		12/14/21 07:30	12/14/21 13:33	50
Ethylbenzene	2.18		0.0996	mg/Kg		12/14/21 07:30	12/14/21 13:33	50
m-Xylene & p-Xylene	19.0		0.199	mg/Kg		12/14/21 07:30	12/14/21 13:33	50
o-Xylene	4.87		0.0996	mg/Kg		12/14/21 07:30	12/14/21 13:33	50
Xylenes, Total	23.9		0.199	mg/Kg		12/14/21 07:30	12/14/21 13:33	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	12/14/21 07:30	12/14/21 13:33	50

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15A

Lab Sample ID: 890-1704-2

Date Collected: 12/10/21 09:10

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130	12/14/21 07:30	12/14/21 13:33	50

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	37.0		0.199	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5010		50.0	mg/Kg			12/17/21 09:16	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		50.0	mg/Kg		12/14/21 15:12	12/16/21 22:27	1
Diesel Range Organics (Over C10-C28)	3050		50.0	mg/Kg		12/14/21 15:12	12/16/21 22:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 15:12	12/16/21 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	12/14/21 15:12	12/16/21 22:27	1
o-Terphenyl	86		70 - 130	12/14/21 15:12	12/16/21 22:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1010		4.95	mg/Kg			12/17/21 11:11	1

Client Sample ID: PH15B

Lab Sample ID: 890-1704-3

Date Collected: 12/10/21 09:30

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.662		0.100	mg/Kg		12/14/21 07:30	12/14/21 13:53	50
Toluene	10.6		0.100	mg/Kg		12/14/21 07:30	12/14/21 13:53	50
Ethylbenzene	2.59		0.100	mg/Kg		12/14/21 07:30	12/14/21 13:53	50
m-Xylene & p-Xylene	26.3		0.200	mg/Kg		12/14/21 07:30	12/14/21 13:53	50
o-Xylene	6.34		0.100	mg/Kg		12/14/21 07:30	12/14/21 13:53	50
Xylenes, Total	32.6		0.200	mg/Kg		12/14/21 07:30	12/14/21 13:53	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	12/14/21 07:30	12/14/21 13:53	50
1,4-Difluorobenzene (Surr)	95		70 - 130	12/14/21 07:30	12/14/21 13:53	50

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	46.5		0.200	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10200		50.0	mg/Kg			12/17/21 09:16	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15B
Date Collected: 12/10/21 09:30
Date Received: 12/13/21 12:31
Sample Depth: 8

Lab Sample ID: 890-1704-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3780		50.0	mg/Kg		12/14/21 15:12	12/16/21 22:52	1
Diesel Range Organics (Over C10-C28)	6430		50.0	mg/Kg		12/14/21 15:12	12/16/21 22:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 15:12	12/16/21 22:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	198	S1+	70 - 130			12/14/21 15:12	12/16/21 22:52	1
o-Terphenyl	80		70 - 130			12/14/21 15:12	12/16/21 22:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	654		25.1	mg/Kg			12/17/21 11:36	5

Client Sample ID: PH15C
Date Collected: 12/10/21 09:45
Date Received: 12/13/21 12:31
Sample Depth: 12

Lab Sample ID: 890-1704-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0891		0.0398	mg/Kg		12/14/21 07:30	12/14/21 14:14	20
Toluene	2.16		0.0398	mg/Kg		12/14/21 07:30	12/14/21 14:14	20
Ethylbenzene	0.779		0.0398	mg/Kg		12/14/21 07:30	12/14/21 14:14	20
m-Xylene & p-Xylene	7.31		0.0797	mg/Kg		12/14/21 07:30	12/14/21 14:14	20
o-Xylene	1.88		0.0398	mg/Kg		12/14/21 07:30	12/14/21 14:14	20
Xylenes, Total	9.19		0.0797	mg/Kg		12/14/21 07:30	12/14/21 14:14	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130			12/14/21 07:30	12/14/21 14:14	20
1,4-Difluorobenzene (Surr)	85		70 - 130			12/14/21 07:30	12/14/21 14:14	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	12.2		0.0797	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3400		49.9	mg/Kg			12/17/21 09:16	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	1220		49.9	mg/Kg		12/14/21 15:12	12/16/21 23:19	1
Diesel Range Organics (Over C10-C28)	2180		49.9	mg/Kg		12/14/21 15:12	12/16/21 23:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 15:12	12/16/21 23:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130			12/14/21 15:12	12/16/21 23:19	1
o-Terphenyl	91		70 - 130			12/14/21 15:12	12/16/21 23:19	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15C
Date Collected: 12/10/21 09:45
Date Received: 12/13/21 12:31
Sample Depth: 12

Lab Sample ID: 890-1704-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	404		4.97	mg/Kg			12/17/21 11:44	1

Client Sample ID: PH15D
Date Collected: 12/10/21 10:00
Date Received: 12/13/21 12:31
Sample Depth: 14

Lab Sample ID: 890-1704-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0751		0.0399	mg/Kg		12/14/21 07:30	12/14/21 14:34	20
Toluene	1.13		0.0399	mg/Kg		12/14/21 07:30	12/14/21 14:34	20
Ethylbenzene	0.586		0.0399	mg/Kg		12/14/21 07:30	12/14/21 14:34	20
m-Xylene & p-Xylene	5.09		0.0798	mg/Kg		12/14/21 07:30	12/14/21 14:34	20
o-Xylene	1.41		0.0399	mg/Kg		12/14/21 07:30	12/14/21 14:34	20
Xylenes, Total	6.50		0.0798	mg/Kg		12/14/21 07:30	12/14/21 14:34	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130			12/14/21 07:30	12/14/21 14:34	20
1,4-Difluorobenzene (Surr)	91		70 - 130			12/14/21 07:30	12/14/21 14:34	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	8.29		0.0798	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3690		50.0	mg/Kg			12/17/21 09:16	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	1080		50.0	mg/Kg		12/14/21 15:12	12/16/21 23:40	1
Diesel Range Organics (Over C10-C28)	2610		50.0	mg/Kg		12/14/21 15:12	12/16/21 23:40	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 15:12	12/16/21 23:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130			12/14/21 15:12	12/16/21 23:40	1
o-Terphenyl	81		70 - 130			12/14/21 15:12	12/16/21 23:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	335		4.98	mg/Kg			12/17/21 12:09	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15E

Lab Sample ID: 890-1704-6

Date Collected: 12/10/21 10:20

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 16

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0722		0.0403	mg/Kg		12/14/21 07:30	12/14/21 14:54	20
Toluene	3.23		0.0403	mg/Kg		12/14/21 07:30	12/14/21 14:54	20
Ethylbenzene	1.07		0.0403	mg/Kg		12/14/21 07:30	12/14/21 14:54	20
m-Xylene & p-Xylene	11.3		0.0806	mg/Kg		12/14/21 07:30	12/14/21 14:54	20
o-Xylene	2.75		0.0403	mg/Kg		12/14/21 07:30	12/14/21 14:54	20
Xylenes, Total	14.1		0.0806	mg/Kg		12/14/21 07:30	12/14/21 14:54	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	12/14/21 07:30	12/14/21 14:54	20
1,4-Difluorobenzene (Surr)	101		70 - 130	12/14/21 07:30	12/14/21 14:54	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	18.4		0.0806	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3730		49.9	mg/Kg			12/17/21 09:16	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	1210		49.9	mg/Kg		12/14/21 15:12	12/17/21 00:04	1
Diesel Range Organics (Over C10-C28)	2520		49.9	mg/Kg		12/14/21 15:12	12/17/21 00:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 15:12	12/17/21 00:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	12/14/21 15:12	12/17/21 00:04	1
o-Terphenyl	79		70 - 130	12/14/21 15:12	12/17/21 00:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	389		4.95	mg/Kg			12/17/21 12:18	1

Client Sample ID: PH16

Lab Sample ID: 890-1704-7

Date Collected: 12/10/21 10:40

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.48		0.100	mg/Kg		12/14/21 07:30	12/14/21 15:15	50
Toluene	13.0		0.100	mg/Kg		12/14/21 07:30	12/14/21 15:15	50
Ethylbenzene	3.39		0.100	mg/Kg		12/14/21 07:30	12/14/21 15:15	50
m-Xylene & p-Xylene	27.2		0.200	mg/Kg		12/14/21 07:30	12/14/21 15:15	50
o-Xylene	6.25		0.100	mg/Kg		12/14/21 07:30	12/14/21 15:15	50
Xylenes, Total	33.5		0.200	mg/Kg		12/14/21 07:30	12/14/21 15:15	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	12/14/21 07:30	12/14/21 15:15	50

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16

Lab Sample ID: 890-1704-7

Date Collected: 12/10/21 10:40

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 8

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	89		70 - 130	12/14/21 07:30	12/14/21 15:15	50

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	51.3		0.200	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	11300		50.0	mg/Kg			12/17/21 09:16	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	5020		50.0	mg/Kg		12/14/21 15:12	12/17/21 00:28	1
Diesel Range Organics (Over C10-C28)	6230		50.0	mg/Kg		12/14/21 15:12	12/17/21 00:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 15:12	12/17/21 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	205	S1+	70 - 130	12/14/21 15:12	12/17/21 00:28	1
o-Terphenyl	80		70 - 130	12/14/21 15:12	12/17/21 00:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2850		25.0	mg/Kg			12/20/21 18:44	5

Client Sample ID: PH16A

Lab Sample ID: 890-1704-8

Date Collected: 12/10/21 10:50

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0800		0.0396	mg/Kg		12/14/21 07:30	12/14/21 15:35	20
Toluene	1.12		0.0396	mg/Kg		12/14/21 07:30	12/14/21 15:35	20
Ethylbenzene	0.930		0.0396	mg/Kg		12/14/21 07:30	12/14/21 15:35	20
m-Xylene & p-Xylene	6.61		0.0792	mg/Kg		12/14/21 07:30	12/14/21 15:35	20
o-Xylene	2.00		0.0396	mg/Kg		12/14/21 07:30	12/14/21 15:35	20
Xylenes, Total	8.61		0.0792	mg/Kg		12/14/21 07:30	12/14/21 15:35	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	12/14/21 07:30	12/14/21 15:35	20
1,4-Difluorobenzene (Surr)	94		70 - 130	12/14/21 07:30	12/14/21 15:35	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	10.7		0.0792	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1340		49.9	mg/Kg			12/17/21 09:16	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16A
Date Collected: 12/10/21 10:50
Date Received: 12/13/21 12:31
Sample Depth: 10

Lab Sample ID: 890-1704-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	348		49.9	mg/Kg		12/14/21 15:12	12/17/21 00:53	1
Diesel Range Organics (Over C10-C28)	990		49.9	mg/Kg		12/14/21 15:12	12/17/21 00:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 15:12	12/17/21 00:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			12/14/21 15:12	12/17/21 00:53	1
o-Terphenyl	88		70 - 130			12/14/21 15:12	12/17/21 00:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	940		5.01	mg/Kg			12/17/21 12:34	1

Client Sample ID: PH16B
Date Collected: 12/10/21 11:00
Date Received: 12/13/21 12:31
Sample Depth: 12

Lab Sample ID: 890-1704-9
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		12/14/21 07:30	12/14/21 12:52	1
Toluene	0.00282		0.00199	mg/Kg		12/14/21 07:30	12/14/21 12:52	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 12:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 12:52	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 12:52	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 12:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			12/14/21 07:30	12/14/21 12:52	1
1,4-Difluorobenzene (Surr)	84		70 - 130			12/14/21 07:30	12/14/21 12:52	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			12/20/21 15:38	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			12/17/21 09:16	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		12/14/21 16:40	12/17/21 01:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 01:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 01:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			12/14/21 16:40	12/17/21 01:36	1
o-Terphenyl	97		70 - 130			12/14/21 16:40	12/17/21 01:36	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16B
Date Collected: 12/10/21 11:00
Date Received: 12/13/21 12:31
Sample Depth: 12

Lab Sample ID: 890-1704-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2840		24.8	mg/Kg			12/17/21 12:43	5

Client Sample ID: PH16C
Date Collected: 12/10/21 11:30
Date Received: 12/13/21 12:31
Sample Depth: 14

Lab Sample ID: 890-1704-10
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		12/14/21 07:30	12/14/21 13:12	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 13:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 13:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 13:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 13:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 13:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130			12/14/21 07:30	12/14/21 13:12	1
1,4-Difluorobenzene (Surr)	80		70 - 130			12/14/21 07:30	12/14/21 13:12	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			12/20/21 15:38	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			12/17/21 09:16	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		12/14/21 16:40	12/17/21 01:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		12/14/21 16:40	12/17/21 01:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/14/21 16:40	12/17/21 01:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			12/14/21 16:40	12/17/21 01:57	1
o-Terphenyl	97		70 - 130			12/14/21 16:40	12/17/21 01:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2230		25.2	mg/Kg			12/17/21 12:51	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16D
Date Collected: 12/10/21 12:00
Date Received: 12/13/21 12:31
Sample Depth: 16

Lab Sample ID: 890-1704-11
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		12/14/21 07:30	12/14/21 17:25	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 17:25	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 17:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 17:25	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 17:25	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 17:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			12/14/21 07:30	12/14/21 17:25	1
1,4-Difluorobenzene (Surr)	88		70 - 130			12/14/21 07:30	12/14/21 17:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/20/21 15:38	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			12/17/21 09:16	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		12/14/21 16:40	12/17/21 02:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 02:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 02:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			12/14/21 16:40	12/17/21 02:18	1
o-Terphenyl	113		70 - 130			12/14/21 16:40	12/17/21 02:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	329		5.00	mg/Kg			12/17/21 13:00	1

Client Sample ID: PH16E
Date Collected: 12/10/21 12:20
Date Received: 12/13/21 12:31
Sample Depth: 21

Lab Sample ID: 890-1704-12
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/14/21 07:30	12/14/21 17:46	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/14/21 07:30	12/14/21 17:46	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/14/21 07:30	12/14/21 17:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		12/14/21 07:30	12/14/21 17:46	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/14/21 07:30	12/14/21 17:46	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/14/21 07:30	12/14/21 17:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			12/14/21 07:30	12/14/21 17:46	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16E

Lab Sample ID: 890-1704-12

Date Collected: 12/10/21 12:20

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 21

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	12/14/21 07:30	12/14/21 17:46	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			12/20/21 15:38	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			12/17/21 09:16	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		12/14/21 16:40	12/17/21 02:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 02:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	12/14/21 16:40	12/17/21 02:40	1
o-Terphenyl	93		70 - 130	12/14/21 16:40	12/17/21 02:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.4	F1	5.00	mg/Kg			12/19/21 19:54	1

Client Sample ID: PH17

Lab Sample ID: 890-1704-13

Date Collected: 12/10/21 12:45

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 07:30	12/14/21 18:06	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 18:06	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 18:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 18:06	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 07:30	12/14/21 18:06	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 07:30	12/14/21 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	148	S1+	70 - 130	12/14/21 07:30	12/14/21 18:06	1
1,4-Difluorobenzene (Surr)	103		70 - 130	12/14/21 07:30	12/14/21 18:06	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			12/20/21 15:38	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			12/17/21 09:16	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH17

Lab Sample ID: 890-1704-13

Date Collected: 12/10/21 12:45

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 16:40	12/17/21 03:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 03:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	12/14/21 16:40	12/17/21 03:01	1
o-Terphenyl	101		70 - 130	12/14/21 16:40	12/17/21 03:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4310		25.1	mg/Kg			12/19/21 20:29	5

Client Sample ID: PH17A

Lab Sample ID: 890-1704-14

Date Collected: 12/10/21 13:00

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 07:30	12/14/21 18:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 18:26	1
Ethylbenzene	0.0160		0.00200	mg/Kg		12/14/21 07:30	12/14/21 18:26	1
m-Xylene & p-Xylene	0.0185		0.00401	mg/Kg		12/14/21 07:30	12/14/21 18:26	1
o-Xylene	0.00666		0.00200	mg/Kg		12/14/21 07:30	12/14/21 18:26	1
Xylenes, Total	0.0252		0.00401	mg/Kg		12/14/21 07:30	12/14/21 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	12/14/21 07:30	12/14/21 18:26	1
1,4-Difluorobenzene (Surr)	94		70 - 130	12/14/21 07:30	12/14/21 18:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0412		0.00401	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	954		49.9	mg/Kg			12/17/21 09:16	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		12/14/21 16:40	12/17/21 03:22	1
Diesel Range Organics (Over C10-C28)	954		49.9	mg/Kg		12/14/21 16:40	12/17/21 03:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 16:40	12/17/21 03:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	12/14/21 16:40	12/17/21 03:22	1
o-Terphenyl	102		70 - 130	12/14/21 16:40	12/17/21 03:22	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH17A

Lab Sample ID: 890-1704-14

Date Collected: 12/10/21 13:00

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		4.99	mg/Kg			12/19/21 20:41	1

Client Sample ID: PH17B

Lab Sample ID: 890-1704-15

Date Collected: 12/10/21 13:30

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0404	U	0.0404	mg/Kg		12/14/21 07:30	12/14/21 19:28	20
Toluene	1.18		0.0404	mg/Kg		12/14/21 07:30	12/14/21 19:28	20
Ethylbenzene	1.01		0.0404	mg/Kg		12/14/21 07:30	12/14/21 19:28	20
m-Xylene & p-Xylene	6.59		0.0808	mg/Kg		12/14/21 07:30	12/14/21 19:28	20
o-Xylene	2.00		0.0404	mg/Kg		12/14/21 07:30	12/14/21 19:28	20
Xylenes, Total	8.59		0.0808	mg/Kg		12/14/21 07:30	12/14/21 19:28	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	12/14/21 07:30	12/14/21 19:28	20
1,4-Difluorobenzene (Surr)	72		70 - 130	12/14/21 07:30	12/14/21 19:28	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	10.8		0.0808	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1880		50.0	mg/Kg			12/17/21 09:16	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	457		50.0	mg/Kg		12/14/21 16:40	12/17/21 03:43	1
Diesel Range Organics (Over C10-C28)	1420		50.0	mg/Kg		12/14/21 16:40	12/17/21 03:43	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 03:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130	12/14/21 16:40	12/17/21 03:43	1
o-Terphenyl	127		70 - 130	12/14/21 16:40	12/17/21 03:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	202		4.98	mg/Kg			12/19/21 20:53	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH18

Lab Sample ID: 890-1704-16

Date Collected: 12/10/21 13:45

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398	mg/Kg		12/14/21 07:30	12/14/21 19:48	20
Toluene	1.26		0.0398	mg/Kg		12/14/21 07:30	12/14/21 19:48	20
Ethylbenzene	1.01		0.0398	mg/Kg		12/14/21 07:30	12/14/21 19:48	20
m-Xylene & p-Xylene	12.5		0.0797	mg/Kg		12/14/21 07:30	12/14/21 19:48	20
o-Xylene	5.86		0.0398	mg/Kg		12/14/21 07:30	12/14/21 19:48	20
Xylenes, Total	18.4		0.0797	mg/Kg		12/14/21 07:30	12/14/21 19:48	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	12/14/21 07:30	12/14/21 19:48	20
1,4-Difluorobenzene (Surr)	84		70 - 130	12/14/21 07:30	12/14/21 19:48	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	20.6		0.0797	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4290		49.9	mg/Kg			12/17/21 09:16	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	901		49.9	mg/Kg		12/14/21 16:40	12/17/21 04:05	1
Diesel Range Organics (Over C10-C28)	3390		49.9	mg/Kg		12/14/21 16:40	12/17/21 04:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 16:40	12/17/21 04:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	12/14/21 16:40	12/17/21 04:05	1
o-Terphenyl	77		70 - 130	12/14/21 16:40	12/17/21 04:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	469		4.99	mg/Kg			12/19/21 21:05	1

Client Sample ID: PH18A

Lab Sample ID: 890-1704-17

Date Collected: 12/10/21 14:00

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0403	U	0.0403	mg/Kg		12/14/21 07:30	12/14/21 20:08	20
Toluene	1.04		0.0403	mg/Kg		12/14/21 07:30	12/14/21 20:08	20
Ethylbenzene	0.921		0.0403	mg/Kg		12/14/21 07:30	12/14/21 20:08	20
m-Xylene & p-Xylene	13.3		0.0806	mg/Kg		12/14/21 07:30	12/14/21 20:08	20
o-Xylene	6.51		0.0403	mg/Kg		12/14/21 07:30	12/14/21 20:08	20
Xylenes, Total	19.8		0.0806	mg/Kg		12/14/21 07:30	12/14/21 20:08	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	12/14/21 07:30	12/14/21 20:08	20

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH18A

Lab Sample ID: 890-1704-17

Date Collected: 12/10/21 14:00

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	12/14/21 07:30	12/14/21 20:08	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	21.8		0.0806	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4650		50.0	mg/Kg			12/17/21 09:16	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	905		50.0	mg/Kg		12/14/21 16:40	12/17/21 04:30	1
Diesel Range Organics (Over C10-C28)	3740		50.0	mg/Kg		12/14/21 16:40	12/17/21 04:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/17/21 04:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	161	S1+	70 - 130	12/14/21 16:40	12/17/21 04:30	1
o-Terphenyl	91		70 - 130	12/14/21 16:40	12/17/21 04:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	506		4.95	mg/Kg			12/19/21 21:41	1

Client Sample ID: PH18B

Lab Sample ID: 890-1704-18

Date Collected: 12/10/21 14:20

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 07:30	12/14/21 20:29	20
Toluene	0.0503		0.0402	mg/Kg		12/14/21 07:30	12/14/21 20:29	20
Ethylbenzene	0.805		0.0402	mg/Kg		12/14/21 07:30	12/14/21 20:29	20
m-Xylene & p-Xylene	0.845		0.0805	mg/Kg		12/14/21 07:30	12/14/21 20:29	20
o-Xylene	2.34		0.0402	mg/Kg		12/14/21 07:30	12/14/21 20:29	20
Xylenes, Total	3.19		0.0805	mg/Kg		12/14/21 07:30	12/14/21 20:29	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	12/14/21 07:30	12/14/21 20:29	20
1,4-Difluorobenzene (Surr)	88		70 - 130	12/14/21 07:30	12/14/21 20:29	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	4.04		0.0805	mg/Kg			12/20/21 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4610		49.9	mg/Kg			12/17/21 09:16	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH18B
Date Collected: 12/10/21 14:20
Date Received: 12/13/21 12:31
Sample Depth: 4

Lab Sample ID: 890-1704-18
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	526		49.9	mg/Kg		12/14/21 16:40	12/17/21 04:55	1
Diesel Range Organics (Over C10-C28)	4080		49.9	mg/Kg		12/14/21 16:40	12/17/21 04:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 16:40	12/17/21 04:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130			12/14/21 16:40	12/17/21 04:55	1
o-Terphenyl	83		70 - 130			12/14/21 16:40	12/17/21 04:55	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			12/19/21 21:53	1

Client Sample ID: PH19
Date Collected: 12/10/21 14:50
Date Received: 12/13/21 12:31
Sample Depth: 0.5

Lab Sample ID: 890-1704-19
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		12/14/21 07:30	12/14/21 18:47	1
Toluene	<0.00202	U	0.00202	mg/Kg		12/14/21 07:30	12/14/21 18:47	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		12/14/21 07:30	12/14/21 18:47	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		12/14/21 07:30	12/14/21 18:47	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		12/14/21 07:30	12/14/21 18:47	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		12/14/21 07:30	12/14/21 18:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			12/14/21 07:30	12/14/21 18:47	1
1,4-Difluorobenzene (Surr)	92		70 - 130			12/14/21 07:30	12/14/21 18:47	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			12/20/21 15:38	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			12/17/21 09:16	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		12/14/21 11:31	12/15/21 18:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 11:31	12/15/21 18:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 11:31	12/15/21 18:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			12/14/21 11:31	12/15/21 18:41	1
o-Terphenyl	106		70 - 130			12/14/21 11:31	12/15/21 18:41	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19

Lab Sample ID: 890-1704-19

Date Collected: 12/10/21 14:50

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	336		5.04	mg/Kg			12/19/21 22:04	1

Client Sample ID: PH19A

Lab Sample ID: 890-1704-20

Date Collected: 12/10/21 15:00

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 07:30	12/14/21 19:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 19:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 19:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/14/21 07:30	12/14/21 19:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 19:07	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/14/21 07:30	12/14/21 19:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130			12/14/21 07:30	12/14/21 19:07	1
1,4-Difluorobenzene (Surr)	92		70 - 130			12/14/21 07:30	12/14/21 19:07	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			12/20/21 15:38	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			12/17/21 09:16	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		12/14/21 11:31	12/15/21 19:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		12/14/21 11:31	12/15/21 19:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/14/21 11:31	12/15/21 19:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			12/14/21 11:31	12/15/21 19:03	1
o-Terphenyl	126		70 - 130			12/14/21 11:31	12/15/21 19:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	741		4.98	mg/Kg			12/19/21 22:16	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19B

Lab Sample ID: 890-1704-21

Date Collected: 12/10/21 15:20

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 11:25	1
Toluene	0.00212		0.00199	mg/Kg		12/14/21 13:00	12/15/21 11:25	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 11:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 13:00	12/15/21 11:25	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 11:25	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 13:00	12/15/21 11:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130			12/14/21 13:00	12/15/21 11:25	1
1,4-Difluorobenzene (Surr)	116		70 - 130			12/14/21 13:00	12/15/21 11:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/20/21 15:38	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			12/17/21 09:16	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		12/15/21 10:41	12/17/21 21:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		12/15/21 10:41	12/17/21 21:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/15/21 10:41	12/17/21 21:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			12/15/21 10:41	12/17/21 21:47	1
o-Terphenyl	97		70 - 130			12/15/21 10:41	12/17/21 21:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	574		49.8	mg/Kg			12/19/21 22:28	10

Client Sample ID: PH19C

Lab Sample ID: 890-1704-22

Date Collected: 12/10/21 15:30

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/14/21 13:00	12/15/21 11:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/14/21 13:00	12/15/21 11:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			12/14/21 13:00	12/15/21 11:45	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19C
Date Collected: 12/10/21 15:30
Date Received: 12/13/21 12:31
Sample Depth: 10

Lab Sample ID: 890-1704-22
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	12/14/21 13:00	12/15/21 11:45	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			12/20/21 15:38	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			12/17/21 09:16	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		12/15/21 10:41	12/17/21 22:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 22:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 22:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	12/15/21 10:41	12/17/21 22:08	1
o-Terphenyl	95		70 - 130	12/15/21 10:41	12/17/21 22:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2220		24.8	mg/Kg			12/19/21 22:40	5

Client Sample ID: PH19D
Date Collected: 12/10/21 15:45
Date Received: 12/13/21 12:31
Sample Depth: 12

Lab Sample ID: 890-1704-23
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		12/14/21 13:00	12/15/21 12:06	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:06	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 13:00	12/15/21 12:06	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:06	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 13:00	12/15/21 12:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	12/14/21 13:00	12/15/21 12:06	1
1,4-Difluorobenzene (Surr)	96		70 - 130	12/14/21 13:00	12/15/21 12:06	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			12/20/21 15:38	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			12/17/21 09:16	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19D
Date Collected: 12/10/21 15:45
Date Received: 12/13/21 12:31
Sample Depth: 12

Lab Sample ID: 890-1704-23
Matrix: Solid

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		12/15/21 10:41	12/17/21 22:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 22:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			12/15/21 10:41	12/17/21 22:29	1
o-Terphenyl	97		70 - 130			12/15/21 10:41	12/17/21 22:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	355		25.1	mg/Kg			12/19/21 23:16	5

Client Sample ID: PH19E
Date Collected: 12/10/21 16:00
Date Received: 12/13/21 12:31
Sample Depth: 14

Lab Sample ID: 890-1704-24
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/14/21 13:00	12/15/21 12:26	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/14/21 13:00	12/15/21 12:26	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/14/21 13:00	12/15/21 12:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		12/14/21 13:00	12/15/21 12:26	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/14/21 13:00	12/15/21 12:26	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/14/21 13:00	12/15/21 12:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			12/14/21 13:00	12/15/21 12:26	1
1,4-Difluorobenzene (Surr)	101		70 - 130			12/14/21 13:00	12/15/21 12:26	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			12/20/21 15:38	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			12/17/21 09:16	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		12/15/21 10:41	12/17/21 22:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 22:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 22:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			12/15/21 10:41	12/17/21 22:49	1
o-Terphenyl	93		70 - 130			12/15/21 10:41	12/17/21 22:49	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19E

Lab Sample ID: 890-1704-24

Date Collected: 12/10/21 16:00

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 14

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	307		4.97	mg/Kg			12/19/21 23:28	1

Client Sample ID: PH19F

Lab Sample ID: 890-1704-25

Date Collected: 12/10/21 16:10

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 16

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/14/21 13:00	12/15/21 12:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/14/21 13:00	12/15/21 12:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/14/21 13:00	12/15/21 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	12/14/21 13:00	12/15/21 12:47	1
1,4-Difluorobenzene (Surr)	106		70 - 130	12/14/21 13:00	12/15/21 12:47	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			12/20/21 15:38	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			12/17/21 09:16	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		12/15/21 10:41	12/17/21 23:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		12/15/21 10:41	12/17/21 23:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/15/21 10:41	12/17/21 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	12/15/21 10:41	12/17/21 23:10	1
o-Terphenyl	95		70 - 130	12/15/21 10:41	12/17/21 23:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	352		4.98	mg/Kg			12/20/21 00:03	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH20

Lab Sample ID: 890-1704-26

Date Collected: 12/10/21 16:20

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 13:00	12/15/21 13:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 13:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 13:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		12/14/21 13:00	12/15/21 13:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 13:07	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		12/14/21 13:00	12/15/21 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	12/14/21 13:00	12/15/21 13:07	1
1,4-Difluorobenzene (Surr)	104		70 - 130	12/14/21 13:00	12/15/21 13:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			12/20/21 15:38	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			12/17/21 09:16	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		12/15/21 10:41	12/17/21 23:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 23:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	12/15/21 10:41	12/17/21 23:31	1
o-Terphenyl	94		70 - 130	12/15/21 10:41	12/17/21 23:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	418		4.95	mg/Kg			12/20/21 00:15	1

Client Sample ID: PH20A

Lab Sample ID: 890-1704-27

Date Collected: 12/10/21 16:30

Matrix: Solid

Date Received: 12/13/21 12:31

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		12/14/21 13:00	12/15/21 13:27	1
Toluene	0.00224		0.00200	mg/Kg		12/14/21 13:00	12/15/21 13:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 13:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/14/21 13:00	12/15/21 13:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 13:27	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/14/21 13:00	12/15/21 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	12/14/21 13:00	12/15/21 13:27	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH20A

Lab Sample ID: 890-1704-27

Date Collected: 12/10/21 16:30

Matrix: Solid

Date Received: 12/13/21 12:31

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	73		70 - 130	12/14/21 13:00	12/15/21 13:27	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			12/20/21 15:38	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			12/17/21 09:16	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		12/15/21 10:41	12/17/21 23:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 23:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 23:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	12/15/21 10:41	12/17/21 23:52	1
o-Terphenyl	97		70 - 130	12/15/21 10:41	12/17/21 23:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	836		5.00	mg/Kg			12/20/21 00:27	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1704-1	PH15	122	82
890-1704-1 MS	PH15	105	93
890-1704-1 MSD	PH15	116	94
890-1704-2	PH15A	101	94
890-1704-3	PH15B	89	95
890-1704-4	PH15C	80	85
890-1704-5	PH15D	82	91
890-1704-6	PH15E	133 S1+	101
890-1704-7	PH16	74	89
890-1704-8	PH16A	126	94
890-1704-9	PH16B	105	84
890-1704-10	PH16C	139 S1+	80
890-1704-11	PH16D	125	88
890-1704-12	PH16E	124	108
890-1704-13	PH17	148 S1+	103
890-1704-14	PH17A	104	94
890-1704-15	PH17B	127	72
890-1704-16	PH18	109	84
890-1704-17	PH18A	100	88
890-1704-18	PH18B	116	88
890-1704-19	PH19	119	92
890-1704-20	PH19A	137 S1+	92
890-1704-21	PH19B	134 S1+	116
890-1704-21 MS	PH19B	104	98
890-1704-21 MSD	PH19B	112	103
890-1704-22	PH19C	116	105
890-1704-23	PH19D	117	96
890-1704-24	PH19E	115	101
890-1704-25	PH19F	132 S1+	106
890-1704-26	PH20	125	104
890-1704-27	PH20A	124	73
LCS 880-14659/1-A	Lab Control Sample	105	91
LCS 880-14762/1-A	Lab Control Sample	106	100
LCSD 880-14659/2-A	Lab Control Sample Dup	111	100
LCSD 880-14762/2-A	Lab Control Sample Dup	101	99
MB 880-14659/5-A	Method Blank	130	99
MB 880-14762/5-A	Method Blank	127	105

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-9270-A-1-E MS	Matrix Spike	73	79
880-9270-A-1-F MSD	Matrix Spike Duplicate	60 S1-	65 S1-

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Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
 SDG: 31403236.022.0129. TASK 0302

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-9353-A-21-C MS	Matrix Spike	84	88
880-9353-A-21-D MSD	Matrix Spike Duplicate	83	87
890-1704-1	PH15	111	114
890-1704-2	PH15A	129	86
890-1704-3	PH15B	198 S1+	80
890-1704-4	PH15C	136 S1+	91
890-1704-5	PH15D	126	81
890-1704-6	PH15E	119	79
890-1704-7	PH16	205 S1+	80
890-1704-8	PH16A	109	88
890-1704-9	PH16B	97	97
890-1704-10	PH16C	98	97
890-1704-11	PH16D	112	113
890-1704-12	PH16E	94	93
890-1704-13	PH17	102	101
890-1704-14	PH17A	116	102
890-1704-15	PH17B	132 S1+	127
890-1704-16	PH18	120	77
890-1704-17	PH18A	161 S1+	91
890-1704-18	PH18B	129	83
890-1704-19	PH19	91	106
890-1704-20	PH19A	104	126
890-1704-21	PH19B	96	97
890-1704-22	PH19C	92	95
890-1704-23	PH19D	95	97
890-1704-24	PH19E	91	93
890-1704-25	PH19F	93	95
890-1704-26	PH20	93	94
890-1704-27	PH20A	95	97
890-1707-A-13-C MS	Matrix Spike	91	94
890-1707-A-13-D MSD	Matrix Spike Duplicate	94	92
890-1709-A-1-E MS	Matrix Spike	84	86
890-1709-A-1-F MSD	Matrix Spike Duplicate	105	106
LCS 880-14776/2-A	Lab Control Sample	98	102
LCSD 880-14776/3-A	Lab Control Sample Dup	103	102
MB 880-14776/1-A	Method Blank	89	104

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO2 (70-130)	OTPH2 (70-130)
LCS 880-14785/2-A	Lab Control Sample	93	98
LCS 880-14794/2-A	Lab Control Sample	115	119
LCS 880-14820/2-A	Lab Control Sample	98	104
LCSD 880-14785/3-A	Lab Control Sample Dup	108	105

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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	1CO2 (70-130)	OTPH2 (70-130)
LCS D 880-14794/3-A	Lab Control Sample Dup	102	109
LCS D 880-14820/3-A	Lab Control Sample Dup	108	115
MB 880-14785/1-A	Method Blank	104	105
MB 880-14794/1-A	Method Blank	102	104
MB 880-14820/1-A	Method Blank	119	121

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14659/5-A
Matrix: Solid
Analysis Batch: 14699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14659

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 10:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 10:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/14/21 07:30	12/14/21 10:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/14/21 07:30	12/14/21 10:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/14/21 07:30	12/14/21 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	12/14/21 07:30	12/14/21 10:47	1
1,4-Difluorobenzene (Surr)	99		70 - 130	12/14/21 07:30	12/14/21 10:47	1

Lab Sample ID: LCS 880-14659/1-A
Matrix: Solid
Analysis Batch: 14699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08699		mg/Kg		87	70 - 130
Toluene	0.100	0.08785		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.09396		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1825		mg/Kg		91	70 - 130
o-Xylene	0.100	0.08732		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-14659/2-A
Matrix: Solid
Analysis Batch: 14699

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14659

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09203		mg/Kg		92	70 - 130	6	35
Toluene	0.100	0.09794		mg/Kg		98	70 - 130	11	35
Ethylbenzene	0.100	0.1052		mg/Kg		105	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.2032		mg/Kg		102	70 - 130	11	35
o-Xylene	0.100	0.09457		mg/Kg		95	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1704-1 MSD
Matrix: Solid
Analysis Batch: 14699

Client Sample ID: PH15
Prep Type: Total/NA
Prep Batch: 14659

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.09562		mg/Kg					
Toluene	0.0894		0.0998	0.09519		mg/Kg					

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: 890-1704-1 MSD

Client Sample ID: PH15

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 14699

Prep Batch: 14659

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00200	U	0.0998	0.1000		mg/Kg					
m-Xylene & p-Xylene	0.320		0.200	0.1963		mg/Kg					
o-Xylene	0.0878		0.0998	0.09634		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-1704-1 MS

Client Sample ID: PH15

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 14699

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: MB 880-14762/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 14797

Prep Batch: 14762

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/14/21 13:00	12/15/21 11:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/14/21 13:00	12/15/21 11:03	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/14/21 13:00	12/15/21 11:03	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	12/14/21 13:00	12/15/21 11:03	1
1,4-Difluorobenzene (Surr)	105		70 - 130	12/14/21 13:00	12/15/21 11:03	1

Lab Sample ID: LCS 880-14762/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 14797

Prep Batch: 14762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08329		mg/Kg		83	70 - 130
Toluene	0.100	0.08010		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.07972		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1711		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08439		mg/Kg		84	70 - 130

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: LCSD 880-14762/2-A
Matrix: Solid
Analysis Batch: 14797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14762

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Benzene	0.100	0.08173		mg/Kg		82	70 - 130	2	35	
Toluene	0.100	0.07601		mg/Kg		76	70 - 130	5	35	
Ethylbenzene	0.100	0.07588		mg/Kg		76	70 - 130	5	35	
m-Xylene & p-Xylene	0.200	0.1600		mg/Kg		80	70 - 130	7	35	
o-Xylene	0.100	0.07886		mg/Kg		79	70 - 130	7	35	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-1704-21 MS
Matrix: Solid
Analysis Batch: 14797

Client Sample ID: PH19B
Prep Type: Total/NA
Prep Batch: 14762

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U	0.0992	0.09019		mg/Kg		90	70 - 130			
Toluene	0.00212		0.0992	0.08677		mg/Kg		85	70 - 130			
Ethylbenzene	<0.00199	U	0.0992	0.08884		mg/Kg		90	70 - 130			
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1840		mg/Kg		91	70 - 130			
o-Xylene	<0.00199	U	0.0992	0.09075		mg/Kg		90	70 - 130			

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-1704-21 MSD
Matrix: Solid
Analysis Batch: 14797

Client Sample ID: PH19B
Prep Type: Total/NA
Prep Batch: 14762

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U	0.0996	0.09239		mg/Kg		92	70 - 130	2	35	
Toluene	0.00212		0.0996	0.08848		mg/Kg		87	70 - 130	2	35	
Ethylbenzene	<0.00199	U	0.0996	0.08972		mg/Kg		90	70 - 130	1	35	
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1882		mg/Kg		93	70 - 130	2	35	
o-Xylene	<0.00199	U	0.0996	0.09416		mg/Kg		93	70 - 130	4	35	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: MB 880-14776/1-A
Matrix: Solid
Analysis Batch: 14800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14776

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/14/21 11:31	12/15/21 10:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 11:31	12/15/21 10:05	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 11:31	12/15/21 10:05	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
%Recovery	Qualifier							
1-Chlorooctane	89		70 - 130			12/14/21 11:31	12/15/21 10:05	1
o-Terphenyl	104		70 - 130			12/14/21 11:31	12/15/21 10:05	1

Lab Sample ID: LCS 880-14776/2-A
Matrix: Solid
Analysis Batch: 14800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	1042		mg/Kg		104	70 - 130
Surrogate	LCS LCS		Limits			%Recovery	Qualifier
%Recovery	Qualifier						
1-Chlorooctane	98		70 - 130				
o-Terphenyl	102		70 - 130				

Lab Sample ID: LCSD 880-14776/3-A
Matrix: Solid
Analysis Batch: 14800

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14776

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	804.8		mg/Kg		80	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	888.6		mg/Kg		89	70 - 130	16	20
Surrogate	LCSD LCSD		Limits			%Recovery	Qualifier		
%Recovery	Qualifier								
1-Chlorooctane	103		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: 880-9270-A-1-E MS
Matrix: Solid
Analysis Batch: 14800

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14776

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	<49.9	U F1	997	752.4		mg/Kg		75	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: 880-9270-A-1-E MS
Matrix: Solid
Analysis Batch: 14800

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14776

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	73		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 880-9270-A-1-F MSD
Matrix: Solid
Analysis Batch: 14800

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14776

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	999	831.4	F2	mg/Kg		81	70 - 130	35	20	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	625.3	F1	mg/Kg		63	70 - 130	18	20	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	60	S1-	70 - 130
o-Terphenyl	65	S1-	70 - 130

Lab Sample ID: MB 880-14785/1-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14785

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		12/14/21 15:12	12/16/21 15:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 15:12	12/16/21 15:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	12/14/21 15:12	12/16/21 15:52	1
o-Terphenyl	105		70 - 130	12/14/21 15:12	12/16/21 15:52	1

Lab Sample ID: LCS 880-14785/2-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14785

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	1000	869.6		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	852.6		mg/Kg		85	70 - 130	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	98		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: LCSD 880-14785/3-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14785

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	939.7		mg/Kg		94	70 - 130	8	20	
Diesel Range Organics (Over C10-C28)	1000	938.2		mg/Kg		94	70 - 130	10	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	108		70 - 130							
o-Terphenyl	105		70 - 130							

Lab Sample ID: 890-1707-A-13-C MS
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14785

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	996	943.1		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	996	1025		mg/Kg		103	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	91		70 - 130								
o-Terphenyl	94		70 - 130								

Lab Sample ID: 890-1707-A-13-D MSD
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14785

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	995	1236	F2	mg/Kg		120	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	<50.0	U	995	1006		mg/Kg		101	70 - 130	2	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	92		70 - 130								

Lab Sample ID: MB 880-14794/1-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14794

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		12/14/21 16:40	12/16/21 10:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/16/21 10:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/14/21 16:40	12/16/21 10:15	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: MB 880-14794/1-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14794

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	102		70 - 130	12/14/21 16:40	12/16/21 10:15	1
o-Terphenyl	104		70 - 130	12/14/21 16:40	12/16/21 10:15	1

Lab Sample ID: LCS 880-14794/2-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							LCS	LCS
Gasoline Range Organics (GRO)-C6-C10	1000	1027		mg/Kg		103	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1062		mg/Kg		106	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	115		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: LCSD 880-14794/3-A
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14794

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
							LCSD	LCSD	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	898.3		mg/Kg		90	70 - 130	13	20	
Diesel Range Organics (Over C10-C28)	1000	880.0		mg/Kg		88	70 - 130	19	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	102		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 890-1709-A-1-E MS
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
									MS	MS
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	996	916.1		mg/Kg		89	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U F2	996	978.6		mg/Kg		97	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	84		70 - 130
o-Terphenyl	86		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: 890-1709-A-1-F MSD
Matrix: Solid
Analysis Batch: 14897

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14794

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	995	1433	F1 F2	mg/Kg		142	70 - 130	44	20
Diesel Range Organics (Over C10-C28)	<50.0	U F2	995	1226	F2	mg/Kg		122	70 - 130	22	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	105		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: MB 880-14820/1-A
Matrix: Solid
Analysis Batch: 15015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14820

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 19:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 19:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/21 10:41	12/17/21 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			12/15/21 10:41	12/17/21 19:43	1
o-Terphenyl	121		70 - 130			12/15/21 10:41	12/17/21 19:43	1

Lab Sample ID: LCS 880-14820/2-A
Matrix: Solid
Analysis Batch: 15015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14820

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.	RPD	
		Result	Qualifier				Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	871.5		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	909.9		mg/Kg		91	70 - 130		
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	104		70 - 130						

Lab Sample ID: LCSD 880-14820/3-A
Matrix: Solid
Analysis Batch: 15015

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14820

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	
		Result	Qualifier				Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	921.3		mg/Kg		92	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	938.2		mg/Kg		94	70 - 130	3	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

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

Lab Sample ID: LCSD 880-14820/3-A
Matrix: Solid
Analysis Batch: 15015

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14820

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 880-9353-A-21-C MS
Matrix: Solid
Analysis Batch: 15015

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14820

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	996	1061		mg/Kg		104
Diesel Range Organics (Over C10-C28)	95.5		996	931.0		mg/Kg		84	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-9353-A-21-D MSD
Matrix: Solid
Analysis Batch: 15015

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 14820

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	995	1057		mg/Kg		104	70 - 130	0
Diesel Range Organics (Over C10-C28)	95.5		995	924.9		mg/Kg		83	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	87		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14833/1-A
Matrix: Solid
Analysis Batch: 14982

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			12/17/21 08:48	1

Lab Sample ID: LCS 880-14833/2-A
Matrix: Solid
Analysis Batch: 14982

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	257.3		mg/Kg		103	90 - 110

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-14833/3-A
Matrix: Solid
Analysis Batch: 14982

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	258.3		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-1704-2 MS
Matrix: Solid
Analysis Batch: 14982

Client Sample ID: PH15A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1010		248	1222	4	mg/Kg		86	90 - 110

Lab Sample ID: 890-1704-2 MSD
Matrix: Solid
Analysis Batch: 14982

Client Sample ID: PH15A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1010		248	1217	4	mg/Kg		84	90 - 110	0	20

Lab Sample ID: MB 880-14834/1-A
Matrix: Solid
Analysis Batch: 14983

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			12/19/21 19:18	1

Lab Sample ID: LCS 880-14834/2-A
Matrix: Solid
Analysis Batch: 14983

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	264.8		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-14834/3-A
Matrix: Solid
Analysis Batch: 14983

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	268.8		mg/Kg		108	90 - 110	1	20

Lab Sample ID: 890-1704-12 MS
Matrix: Solid
Analysis Batch: 14983

Client Sample ID: PH16E
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	58.4	F1	250	358.4	F1	mg/Kg		120	90 - 110

Lab Sample ID: 890-1704-12 MSD
Matrix: Solid
Analysis Batch: 14983

Client Sample ID: PH16E
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	58.4	F1	250	354.5	F1	mg/Kg		118	90 - 110	1	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1704-22 MS
Matrix: Solid
Analysis Batch: 14983

Client Sample ID: PH19C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2220		1240	3536		mg/Kg		106	90 - 110

Lab Sample ID: 890-1704-22 MSD
Matrix: Solid
Analysis Batch: 14983

Client Sample ID: PH19C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2220		1240	3473		mg/Kg		101	90 - 110	2	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

GC VOA

Prep Batch: 14659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Total/NA	Solid	5035	
890-1704-2	PH15A	Total/NA	Solid	5035	
890-1704-3	PH15B	Total/NA	Solid	5035	
890-1704-4	PH15C	Total/NA	Solid	5035	
890-1704-5	PH15D	Total/NA	Solid	5035	
890-1704-6	PH15E	Total/NA	Solid	5035	
890-1704-7	PH16	Total/NA	Solid	5035	
890-1704-8	PH16A	Total/NA	Solid	5035	
890-1704-9	PH16B	Total/NA	Solid	5035	
890-1704-10	PH16C	Total/NA	Solid	5035	
890-1704-11	PH16D	Total/NA	Solid	5035	
890-1704-12	PH16E	Total/NA	Solid	5035	
890-1704-13	PH17	Total/NA	Solid	5035	
890-1704-14	PH17A	Total/NA	Solid	5035	
890-1704-15	PH17B	Total/NA	Solid	5035	
890-1704-16	PH18	Total/NA	Solid	5035	
890-1704-17	PH18A	Total/NA	Solid	5035	
890-1704-18	PH18B	Total/NA	Solid	5035	
890-1704-19	PH19	Total/NA	Solid	5035	
890-1704-20	PH19A	Total/NA	Solid	5035	
MB 880-14659/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14659/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14659/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1704-1 MSD	PH15	Total/NA	Solid	5035	

Analysis Batch: 14699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Total/NA	Solid	8021B	14659
890-1704-2	PH15A	Total/NA	Solid	8021B	14659
890-1704-3	PH15B	Total/NA	Solid	8021B	14659
890-1704-4	PH15C	Total/NA	Solid	8021B	14659
890-1704-5	PH15D	Total/NA	Solid	8021B	14659
890-1704-6	PH15E	Total/NA	Solid	8021B	14659
890-1704-7	PH16	Total/NA	Solid	8021B	14659
890-1704-8	PH16A	Total/NA	Solid	8021B	14659
890-1704-9	PH16B	Total/NA	Solid	8021B	14659
890-1704-10	PH16C	Total/NA	Solid	8021B	14659
890-1704-11	PH16D	Total/NA	Solid	8021B	14659
890-1704-12	PH16E	Total/NA	Solid	8021B	14659
890-1704-13	PH17	Total/NA	Solid	8021B	14659
890-1704-14	PH17A	Total/NA	Solid	8021B	14659
890-1704-15	PH17B	Total/NA	Solid	8021B	14659
890-1704-16	PH18	Total/NA	Solid	8021B	14659
890-1704-17	PH18A	Total/NA	Solid	8021B	14659
890-1704-18	PH18B	Total/NA	Solid	8021B	14659
890-1704-19	PH19	Total/NA	Solid	8021B	14659
890-1704-20	PH19A	Total/NA	Solid	8021B	14659
MB 880-14659/5-A	Method Blank	Total/NA	Solid	8021B	14659
LCS 880-14659/1-A	Lab Control Sample	Total/NA	Solid	8021B	14659
LCSD 880-14659/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14659
890-1704-1 MS	PH15	Total/NA	Solid	8021B	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

GC VOA (Continued)

Analysis Batch: 14699 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1 MSD	PH15	Total/NA	Solid	8021B	14659

Prep Batch: 14762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-21	PH19B	Total/NA	Solid	5035	
890-1704-22	PH19C	Total/NA	Solid	5035	
890-1704-23	PH19D	Total/NA	Solid	5035	
890-1704-24	PH19E	Total/NA	Solid	5035	
890-1704-25	PH19F	Total/NA	Solid	5035	
890-1704-26	PH20	Total/NA	Solid	5035	
890-1704-27	PH20A	Total/NA	Solid	5035	
MB 880-14762/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14762/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14762/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1704-21 MS	PH19B	Total/NA	Solid	5035	
890-1704-21 MSD	PH19B	Total/NA	Solid	5035	

Analysis Batch: 14797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-21	PH19B	Total/NA	Solid	8021B	14762
890-1704-22	PH19C	Total/NA	Solid	8021B	14762
890-1704-23	PH19D	Total/NA	Solid	8021B	14762
890-1704-24	PH19E	Total/NA	Solid	8021B	14762
890-1704-25	PH19F	Total/NA	Solid	8021B	14762
890-1704-26	PH20	Total/NA	Solid	8021B	14762
890-1704-27	PH20A	Total/NA	Solid	8021B	14762
MB 880-14762/5-A	Method Blank	Total/NA	Solid	8021B	14762
LCS 880-14762/1-A	Lab Control Sample	Total/NA	Solid	8021B	14762
LCSD 880-14762/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14762
890-1704-21 MS	PH19B	Total/NA	Solid	8021B	14762
890-1704-21 MSD	PH19B	Total/NA	Solid	8021B	14762

Analysis Batch: 15211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Total/NA	Solid	Total BTEX	
890-1704-2	PH15A	Total/NA	Solid	Total BTEX	
890-1704-3	PH15B	Total/NA	Solid	Total BTEX	
890-1704-4	PH15C	Total/NA	Solid	Total BTEX	
890-1704-5	PH15D	Total/NA	Solid	Total BTEX	
890-1704-6	PH15E	Total/NA	Solid	Total BTEX	
890-1704-7	PH16	Total/NA	Solid	Total BTEX	
890-1704-8	PH16A	Total/NA	Solid	Total BTEX	
890-1704-9	PH16B	Total/NA	Solid	Total BTEX	
890-1704-10	PH16C	Total/NA	Solid	Total BTEX	
890-1704-11	PH16D	Total/NA	Solid	Total BTEX	
890-1704-12	PH16E	Total/NA	Solid	Total BTEX	
890-1704-13	PH17	Total/NA	Solid	Total BTEX	
890-1704-14	PH17A	Total/NA	Solid	Total BTEX	
890-1704-15	PH17B	Total/NA	Solid	Total BTEX	
890-1704-16	PH18	Total/NA	Solid	Total BTEX	
890-1704-17	PH18A	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

GC VOA (Continued)

Analysis Batch: 15211 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-18	PH18B	Total/NA	Solid	Total BTEX	
890-1704-19	PH19	Total/NA	Solid	Total BTEX	
890-1704-20	PH19A	Total/NA	Solid	Total BTEX	
890-1704-21	PH19B	Total/NA	Solid	Total BTEX	
890-1704-22	PH19C	Total/NA	Solid	Total BTEX	
890-1704-23	PH19D	Total/NA	Solid	Total BTEX	
890-1704-24	PH19E	Total/NA	Solid	Total BTEX	
890-1704-25	PH19F	Total/NA	Solid	Total BTEX	
890-1704-26	PH20	Total/NA	Solid	Total BTEX	
890-1704-27	PH20A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 14776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-19	PH19	Total/NA	Solid	8015NM Prep	
890-1704-20	PH19A	Total/NA	Solid	8015NM Prep	
MB 880-14776/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14776/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14776/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9270-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9270-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 14785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Total/NA	Solid	8015NM Prep	
890-1704-2	PH15A	Total/NA	Solid	8015NM Prep	
890-1704-3	PH15B	Total/NA	Solid	8015NM Prep	
890-1704-4	PH15C	Total/NA	Solid	8015NM Prep	
890-1704-5	PH15D	Total/NA	Solid	8015NM Prep	
890-1704-6	PH15E	Total/NA	Solid	8015NM Prep	
890-1704-7	PH16	Total/NA	Solid	8015NM Prep	
890-1704-8	PH16A	Total/NA	Solid	8015NM Prep	
MB 880-14785/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14785/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14785/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1707-A-13-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1707-A-13-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 14794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-9	PH16B	Total/NA	Solid	8015NM Prep	
890-1704-10	PH16C	Total/NA	Solid	8015NM Prep	
890-1704-11	PH16D	Total/NA	Solid	8015NM Prep	
890-1704-12	PH16E	Total/NA	Solid	8015NM Prep	
890-1704-13	PH17	Total/NA	Solid	8015NM Prep	
890-1704-14	PH17A	Total/NA	Solid	8015NM Prep	
890-1704-15	PH17B	Total/NA	Solid	8015NM Prep	
890-1704-16	PH18	Total/NA	Solid	8015NM Prep	
890-1704-17	PH18A	Total/NA	Solid	8015NM Prep	
890-1704-18	PH18B	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

GC Semi VOA (Continued)

Prep Batch: 14794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-14794/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14794/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14794/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1709-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1709-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 14800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-19	PH19	Total/NA	Solid	8015B NM	14776
890-1704-20	PH19A	Total/NA	Solid	8015B NM	14776
MB 880-14776/1-A	Method Blank	Total/NA	Solid	8015B NM	14776
LCS 880-14776/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14776
LCSD 880-14776/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14776
880-9270-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	14776
880-9270-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14776

Prep Batch: 14820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-21	PH19B	Total/NA	Solid	8015NM Prep	
890-1704-22	PH19C	Total/NA	Solid	8015NM Prep	
890-1704-23	PH19D	Total/NA	Solid	8015NM Prep	
890-1704-24	PH19E	Total/NA	Solid	8015NM Prep	
890-1704-25	PH19F	Total/NA	Solid	8015NM Prep	
890-1704-26	PH20	Total/NA	Solid	8015NM Prep	
890-1704-27	PH20A	Total/NA	Solid	8015NM Prep	
MB 880-14820/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14820/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14820/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9353-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9353-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 14897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Total/NA	Solid	8015B NM	14785
890-1704-2	PH15A	Total/NA	Solid	8015B NM	14785
890-1704-3	PH15B	Total/NA	Solid	8015B NM	14785
890-1704-4	PH15C	Total/NA	Solid	8015B NM	14785
890-1704-5	PH15D	Total/NA	Solid	8015B NM	14785
890-1704-6	PH15E	Total/NA	Solid	8015B NM	14785
890-1704-7	PH16	Total/NA	Solid	8015B NM	14785
890-1704-8	PH16A	Total/NA	Solid	8015B NM	14785
890-1704-9	PH16B	Total/NA	Solid	8015B NM	14794
890-1704-10	PH16C	Total/NA	Solid	8015B NM	14794
890-1704-11	PH16D	Total/NA	Solid	8015B NM	14794
890-1704-12	PH16E	Total/NA	Solid	8015B NM	14794
890-1704-13	PH17	Total/NA	Solid	8015B NM	14794
890-1704-14	PH17A	Total/NA	Solid	8015B NM	14794
890-1704-15	PH17B	Total/NA	Solid	8015B NM	14794
890-1704-16	PH18	Total/NA	Solid	8015B NM	14794
890-1704-17	PH18A	Total/NA	Solid	8015B NM	14794
890-1704-18	PH18B	Total/NA	Solid	8015B NM	14794

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
 SDG: 31403236.022.0129. TASK 0302

GC Semi VOA (Continued)

Analysis Batch: 14897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-14785/1-A	Method Blank	Total/NA	Solid	8015B NM	14785
MB 880-14794/1-A	Method Blank	Total/NA	Solid	8015B NM	14794
LCS 880-14785/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14785
LCS 880-14794/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14794
LCSD 880-14785/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14785
LCSD 880-14794/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14794
890-1707-A-13-C MS	Matrix Spike	Total/NA	Solid	8015B NM	14785
890-1707-A-13-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14785
890-1709-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	14794
890-1709-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14794

Analysis Batch: 15015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-21	PH19B	Total/NA	Solid	8015B NM	14820
890-1704-22	PH19C	Total/NA	Solid	8015B NM	14820
890-1704-23	PH19D	Total/NA	Solid	8015B NM	14820
890-1704-24	PH19E	Total/NA	Solid	8015B NM	14820
890-1704-25	PH19F	Total/NA	Solid	8015B NM	14820
890-1704-26	PH20	Total/NA	Solid	8015B NM	14820
890-1704-27	PH20A	Total/NA	Solid	8015B NM	14820
MB 880-14820/1-A	Method Blank	Total/NA	Solid	8015B NM	14820
LCS 880-14820/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14820
LCSD 880-14820/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14820
880-9353-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	14820
880-9353-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14820

Analysis Batch: 15045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Total/NA	Solid	8015 NM	
890-1704-2	PH15A	Total/NA	Solid	8015 NM	
890-1704-3	PH15B	Total/NA	Solid	8015 NM	
890-1704-4	PH15C	Total/NA	Solid	8015 NM	
890-1704-5	PH15D	Total/NA	Solid	8015 NM	
890-1704-6	PH15E	Total/NA	Solid	8015 NM	
890-1704-7	PH16	Total/NA	Solid	8015 NM	
890-1704-8	PH16A	Total/NA	Solid	8015 NM	
890-1704-9	PH16B	Total/NA	Solid	8015 NM	
890-1704-10	PH16C	Total/NA	Solid	8015 NM	
890-1704-11	PH16D	Total/NA	Solid	8015 NM	
890-1704-12	PH16E	Total/NA	Solid	8015 NM	
890-1704-13	PH17	Total/NA	Solid	8015 NM	
890-1704-14	PH17A	Total/NA	Solid	8015 NM	
890-1704-15	PH17B	Total/NA	Solid	8015 NM	
890-1704-16	PH18	Total/NA	Solid	8015 NM	
890-1704-17	PH18A	Total/NA	Solid	8015 NM	
890-1704-18	PH18B	Total/NA	Solid	8015 NM	
890-1704-19	PH19	Total/NA	Solid	8015 NM	
890-1704-20	PH19A	Total/NA	Solid	8015 NM	
890-1704-21	PH19B	Total/NA	Solid	8015 NM	
890-1704-22	PH19C	Total/NA	Solid	8015 NM	
890-1704-23	PH19D	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

GC Semi VOA (Continued)

Analysis Batch: 15045 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-24	PH19E	Total/NA	Solid	8015 NM	
890-1704-25	PH19F	Total/NA	Solid	8015 NM	
890-1704-26	PH20	Total/NA	Solid	8015 NM	
890-1704-27	PH20A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 14833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Soluble	Solid	DI Leach	
890-1704-2	PH15A	Soluble	Solid	DI Leach	
890-1704-3	PH15B	Soluble	Solid	DI Leach	
890-1704-4	PH15C	Soluble	Solid	DI Leach	
890-1704-5	PH15D	Soluble	Solid	DI Leach	
890-1704-6	PH15E	Soluble	Solid	DI Leach	
890-1704-7	PH16	Soluble	Solid	DI Leach	
890-1704-8	PH16A	Soluble	Solid	DI Leach	
890-1704-9	PH16B	Soluble	Solid	DI Leach	
890-1704-10	PH16C	Soluble	Solid	DI Leach	
890-1704-11	PH16D	Soluble	Solid	DI Leach	
MB 880-14833/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14833/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14833/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1704-2 MS	PH15A	Soluble	Solid	DI Leach	
890-1704-2 MSD	PH15A	Soluble	Solid	DI Leach	

Leach Batch: 14834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-12	PH16E	Soluble	Solid	DI Leach	
890-1704-13	PH17	Soluble	Solid	DI Leach	
890-1704-14	PH17A	Soluble	Solid	DI Leach	
890-1704-15	PH17B	Soluble	Solid	DI Leach	
890-1704-16	PH18	Soluble	Solid	DI Leach	
890-1704-17	PH18A	Soluble	Solid	DI Leach	
890-1704-18	PH18B	Soluble	Solid	DI Leach	
890-1704-19	PH19	Soluble	Solid	DI Leach	
890-1704-20	PH19A	Soluble	Solid	DI Leach	
890-1704-21	PH19B	Soluble	Solid	DI Leach	
890-1704-22	PH19C	Soluble	Solid	DI Leach	
890-1704-23	PH19D	Soluble	Solid	DI Leach	
890-1704-24	PH19E	Soluble	Solid	DI Leach	
890-1704-25	PH19F	Soluble	Solid	DI Leach	
890-1704-26	PH20	Soluble	Solid	DI Leach	
890-1704-27	PH20A	Soluble	Solid	DI Leach	
MB 880-14834/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14834/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14834/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1704-12 MS	PH16E	Soluble	Solid	DI Leach	
890-1704-12 MSD	PH16E	Soluble	Solid	DI Leach	
890-1704-22 MS	PH19C	Soluble	Solid	DI Leach	
890-1704-22 MSD	PH19C	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
 SDG: 31403236.022.0129. TASK 0302

HPLC/IC

Analysis Batch: 14982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-1	PH15	Soluble	Solid	300.0	14833
890-1704-2	PH15A	Soluble	Solid	300.0	14833
890-1704-3	PH15B	Soluble	Solid	300.0	14833
890-1704-4	PH15C	Soluble	Solid	300.0	14833
890-1704-5	PH15D	Soluble	Solid	300.0	14833
890-1704-6	PH15E	Soluble	Solid	300.0	14833
890-1704-7	PH16	Soluble	Solid	300.0	14833
890-1704-8	PH16A	Soluble	Solid	300.0	14833
890-1704-9	PH16B	Soluble	Solid	300.0	14833
890-1704-10	PH16C	Soluble	Solid	300.0	14833
890-1704-11	PH16D	Soluble	Solid	300.0	14833
MB 880-14833/1-A	Method Blank	Soluble	Solid	300.0	14833
LCS 880-14833/2-A	Lab Control Sample	Soluble	Solid	300.0	14833
LCSD 880-14833/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14833
890-1704-2 MS	PH15A	Soluble	Solid	300.0	14833
890-1704-2 MSD	PH15A	Soluble	Solid	300.0	14833

Analysis Batch: 14983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1704-12	PH16E	Soluble	Solid	300.0	14834
890-1704-13	PH17	Soluble	Solid	300.0	14834
890-1704-14	PH17A	Soluble	Solid	300.0	14834
890-1704-15	PH17B	Soluble	Solid	300.0	14834
890-1704-16	PH18	Soluble	Solid	300.0	14834
890-1704-17	PH18A	Soluble	Solid	300.0	14834
890-1704-18	PH18B	Soluble	Solid	300.0	14834
890-1704-19	PH19	Soluble	Solid	300.0	14834
890-1704-20	PH19A	Soluble	Solid	300.0	14834
890-1704-21	PH19B	Soluble	Solid	300.0	14834
890-1704-22	PH19C	Soluble	Solid	300.0	14834
890-1704-23	PH19D	Soluble	Solid	300.0	14834
890-1704-24	PH19E	Soluble	Solid	300.0	14834
890-1704-25	PH19F	Soluble	Solid	300.0	14834
890-1704-26	PH20	Soluble	Solid	300.0	14834
890-1704-27	PH20A	Soluble	Solid	300.0	14834
MB 880-14834/1-A	Method Blank	Soluble	Solid	300.0	14834
LCS 880-14834/2-A	Lab Control Sample	Soluble	Solid	300.0	14834
LCSD 880-14834/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14834
890-1704-12 MS	PH16E	Soluble	Solid	300.0	14834
890-1704-12 MSD	PH16E	Soluble	Solid	300.0	14834
890-1704-22 MS	PH19C	Soluble	Solid	300.0	14834
890-1704-22 MSD	PH19C	Soluble	Solid	300.0	14834

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15

Lab Sample ID: 890-1704-1

Date Collected: 12/10/21 09:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 12:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/16/21 22:06	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 11:02	SC	XEN MID

Client Sample ID: PH15A

Lab Sample ID: 890-1704-2

Date Collected: 12/10/21 09:10

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		50	14699	12/14/21 13:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/16/21 22:27	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 11:11	SC	XEN MID

Client Sample ID: PH15B

Lab Sample ID: 890-1704-3

Date Collected: 12/10/21 09:30

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		50	14699	12/14/21 13:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/16/21 22:52	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		5	14982	12/17/21 11:36	SC	XEN MID

Client Sample ID: PH15C

Lab Sample ID: 890-1704-4

Date Collected: 12/10/21 09:45

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 14:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH15C

Lab Sample ID: 890-1704-4

Date Collected: 12/10/21 09:45

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/16/21 23:19	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 11:44	SC	XEN MID

Client Sample ID: PH15D

Lab Sample ID: 890-1704-5

Date Collected: 12/10/21 10:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 14:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/16/21 23:40	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 12:09	SC	XEN MID

Client Sample ID: PH15E

Lab Sample ID: 890-1704-6

Date Collected: 12/10/21 10:20

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 14:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 00:04	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 12:18	SC	XEN MID

Client Sample ID: PH16

Lab Sample ID: 890-1704-7

Date Collected: 12/10/21 10:40

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		50	14699	12/14/21 15:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 00:28	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16

Lab Sample ID: 890-1704-7

Date Collected: 12/10/21 10:40

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		5	14982	12/20/21 18:44	SC	XEN MID

Client Sample ID: PH16A

Lab Sample ID: 890-1704-8

Date Collected: 12/10/21 10:50

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 15:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14785	12/14/21 15:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 00:53	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 12:34	SC	XEN MID

Client Sample ID: PH16B

Lab Sample ID: 890-1704-9

Date Collected: 12/10/21 11:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 12:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 01:36	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		5	14982	12/17/21 12:43	SC	XEN MID

Client Sample ID: PH16C

Lab Sample ID: 890-1704-10

Date Collected: 12/10/21 11:30

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 13:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 01:57	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		5	14982	12/17/21 12:51	SC	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH16D

Lab Sample ID: 890-1704-11

Date Collected: 12/10/21 12:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 17:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 02:18	AJ	XEN MID
Soluble	Leach	DI Leach			14833	12/15/21 11:24	CA	XEN MID
Soluble	Analysis	300.0		1	14982	12/17/21 13:00	SC	XEN MID

Client Sample ID: PH16E

Lab Sample ID: 890-1704-12

Date Collected: 12/10/21 12:20

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 17:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 02:40	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 19:54	SC	XEN MID

Client Sample ID: PH17

Lab Sample ID: 890-1704-13

Date Collected: 12/10/21 12:45

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 18:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 03:01	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		5	14983	12/19/21 20:29	SC	XEN MID

Client Sample ID: PH17A

Lab Sample ID: 890-1704-14

Date Collected: 12/10/21 13:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 18:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH17A

Lab Sample ID: 890-1704-14

Date Collected: 12/10/21 13:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 03:22	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 20:41	SC	XEN MID

Client Sample ID: PH17B

Lab Sample ID: 890-1704-15

Date Collected: 12/10/21 13:30

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 19:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 03:43	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 20:53	SC	XEN MID

Client Sample ID: PH18

Lab Sample ID: 890-1704-16

Date Collected: 12/10/21 13:45

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 19:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 04:05	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 21:05	SC	XEN MID

Client Sample ID: PH18A

Lab Sample ID: 890-1704-17

Date Collected: 12/10/21 14:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 20:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 04:30	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH18A

Lab Sample ID: 890-1704-17

Date Collected: 12/10/21 14:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 21:41	SC	XEN MID

Client Sample ID: PH18B

Lab Sample ID: 890-1704-18

Date Collected: 12/10/21 14:20

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		20	14699	12/14/21 20:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14794	12/14/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14897	12/17/21 04:55	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 21:53	SC	XEN MID

Client Sample ID: PH19

Lab Sample ID: 890-1704-19

Date Collected: 12/10/21 14:50

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 18:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14776	12/14/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14800	12/15/21 18:41	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 22:04	SC	XEN MID

Client Sample ID: PH19A

Lab Sample ID: 890-1704-20

Date Collected: 12/10/21 15:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14659	12/14/21 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	14699	12/14/21 19:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14776	12/14/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	14800	12/15/21 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 22:16	SC	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19B

Lab Sample ID: 890-1704-21

Date Collected: 12/10/21 15:20

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 11:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 21:47	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		10	14983	12/19/21 22:28	SC	XEN MID

Client Sample ID: PH19C

Lab Sample ID: 890-1704-22

Date Collected: 12/10/21 15:30

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 11:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 22:08	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		5	14983	12/19/21 22:40	SC	XEN MID

Client Sample ID: PH19D

Lab Sample ID: 890-1704-23

Date Collected: 12/10/21 15:45

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 12:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 22:29	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		5	14983	12/19/21 23:16	SC	XEN MID

Client Sample ID: PH19E

Lab Sample ID: 890-1704-24

Date Collected: 12/10/21 16:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 12:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH19E

Lab Sample ID: 890-1704-24

Date Collected: 12/10/21 16:00

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 22:49	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/19/21 23:28	SC	XEN MID

Client Sample ID: PH19F

Lab Sample ID: 890-1704-25

Date Collected: 12/10/21 16:10

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 12:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 23:10	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/20/21 00:03	SC	XEN MID

Client Sample ID: PH20

Lab Sample ID: 890-1704-26

Date Collected: 12/10/21 16:20

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 13:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 23:31	AJ	XEN MID
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/20/21 00:15	SC	XEN MID

Client Sample ID: PH20A

Lab Sample ID: 890-1704-27

Date Collected: 12/10/21 16:30

Matrix: Solid

Date Received: 12/13/21 12:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			14762	12/14/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	14797	12/15/21 13:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	15211	12/20/21 15:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15045	12/17/21 09:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			14820	12/15/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15015	12/17/21 23:52	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Client Sample ID: PH20A
Date Collected: 12/10/21 16:30
Date Received: 12/13/21 12:31

Lab Sample ID: 890-1704-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			14834	12/15/21 11:26	CA	XEN MID
Soluble	Analysis	300.0		1	14983	12/20/21 00:27	SC	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
SDG: 31403236.022.0129. TASK 0302

Laboratory: Eurofins Xenco, 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

- 1
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Method Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
 SDG: 31403236.022.0129. TASK 0302

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 Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1704-1
 SDG: 31403236.022.0129. TASK 0302

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1704-1	PH15	Solid	12/10/21 09:00	12/13/21 12:31	0.5
890-1704-2	PH15A	Solid	12/10/21 09:10	12/13/21 12:31	4
890-1704-3	PH15B	Solid	12/10/21 09:30	12/13/21 12:31	8
890-1704-4	PH15C	Solid	12/10/21 09:45	12/13/21 12:31	12
890-1704-5	PH15D	Solid	12/10/21 10:00	12/13/21 12:31	14
890-1704-6	PH15E	Solid	12/10/21 10:20	12/13/21 12:31	16
890-1704-7	PH16	Solid	12/10/21 10:40	12/13/21 12:31	8
890-1704-8	PH16A	Solid	12/10/21 10:50	12/13/21 12:31	10
890-1704-9	PH16B	Solid	12/10/21 11:00	12/13/21 12:31	12
890-1704-10	PH16C	Solid	12/10/21 11:30	12/13/21 12:31	14
890-1704-11	PH16D	Solid	12/10/21 12:00	12/13/21 12:31	16
890-1704-12	PH16E	Solid	12/10/21 12:20	12/13/21 12:31	21
890-1704-13	PH17	Solid	12/10/21 12:45	12/13/21 12:31	0.5
890-1704-14	PH17A	Solid	12/10/21 13:00	12/13/21 12:31	4
890-1704-15	PH17B	Solid	12/10/21 13:30	12/13/21 12:31	6
890-1704-16	PH18	Solid	12/10/21 13:45	12/13/21 12:31	0.5
890-1704-17	PH18A	Solid	12/10/21 14:00	12/13/21 12:31	2
890-1704-18	PH18B	Solid	12/10/21 14:20	12/13/21 12:31	4
890-1704-19	PH19	Solid	12/10/21 14:50	12/13/21 12:31	0.5
890-1704-20	PH19A	Solid	12/10/21 15:00	12/13/21 12:31	4
890-1704-21	PH19B	Solid	12/10/21 15:20	12/13/21 12:31	8
890-1704-22	PH19C	Solid	12/10/21 15:30	12/13/21 12:31	10
890-1704-23	PH19D	Solid	12/10/21 15:45	12/13/21 12:31	12
890-1704-24	PH19E	Solid	12/10/21 16:00	12/13/21 12:31	14
890-1704-25	PH19F	Solid	12/10/21 16:10	12/13/21 12:31	16
890-1704-26	PH20	Solid	12/10/21 16:20	12/13/21 12:31	0.5
890-1704-27	PH20A	Solid	12/10/21 16:30	12/13/21 12:31	4

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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 (813-820-2000)

Chain of Custody

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

Work Order No: _____

Page 1 of 3

Project Manager: Keli Tennings
Company Name: WSP
Address: 3300 North A Street
City, State ZIP: Midland, TX 79705
Phone: 432-236-9849
Bill to: (if different)
Company Name: XTO Energy
Address: 3104 E. Green Street
City, State ZIP: Carlsbad, New Mexico 88220
Email: ben.beill@wsp.com

Program: UST/PST PRP Brownfields RC Superfund
State of Project:
Reporting Level: I II III ST/UST RP Well IV
Deliverables: EDD ADAPT Other: _____

Project Name: P11 25 RD 90TH
Project Number: 31403236.022.0129 T&O
P.O. Number: NAPP2116546260
Sampler's Name: Benjamin Beill
Turn Around:
Push:
Due Date: _____

SAMPLE RECEIPT
Temperature (°C): 3.2/3.0
Received Inact: Yes No
Cooler Custody Seals: Yes No
Sample Custody Seals: Yes No
Thermometer ID: TDM-007
Correction Factor: -0.2
Total Containers: _____

ANALYSIS REQUEST
TPH (EPA 8015)
BTEX (EPA 0-8021)
Chloride (EPA 300.0)
Barcode: 890-1704 Chain of Custody
Work Order Notes: CC: 1666621001
TAT starts the day received 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
PH15	S	12/10/21	0902	0.5'	1	X	X	X	
PH15A			0910	4'	1	X	X	X	
PH15B			0930	8'	1	X	X	X	
PH15C			0945	12'	1	X	X	X	
PH15D			1000	14'	1	X	X	X	
PH15E			1020	16'	1	X	X	X	
PH16			1040	8'	1	X	X	X	
PH16A			1050	10'	1	X	X	X	
PH16B			1100	12'	1	X	X	X	
PH16C			1130	14'	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 Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 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: 12-13-21 12:31
Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: 12-13-21 12:31



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) 365-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager: *Kelli Scainy* Bill to: (if different) *Arizona Becker*
 Company Name: WSP Company Name: *XTD Energy*
 Address: 3300 North A Street Address: *3101 E. Green Street*
 City, State ZIP: Midland, TX 79705 City, State ZIP: *Lubbock, TX 88220*
 Phone: 432.236.3849 Email: *ben.belill@wsp.com*

Program: UST/PST PRP Brownfields RC Superfund
 State of Project: Level II Level III ST/UST RP Level IV
 Reporting Level: EDD ADAPT Other: _____
 Deliverables: EDD ADAPT Other: _____

Project Name: *PLU 25 BD 4014* Turn Around
 Project Number: *31403236, 022.0124* *Take 03.0 Routine*
 P.O. Number: *44PP211654260* Rush:
 Sampler's Name: *Benjamin Bellill* Due Date:

SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No
 Temperature (°C): _____ Thermometer ID
 Received Inact: Yes No *PSI*
 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 0-8021)	Chloride (EPA 300.0)
PH16D	S	12/19/21	12:00	16'	1	X	X	X
PH16E			12:20	21'				
PH17			12:45	0.5'				
PH17A			1:00	4'				
PH17B			1:30	6'				
PH18			1:45	0.5'				
PH18A			1:50	2'				
PH18B			1:40	4'				
PH19			1:50	0.5'				
PH19A			1:50	4'				

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

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Relinquished by: (Signature) *[Signature]* Received by: (Signature) *[Signature]* Date/Time: *12-13-21 8:00*
 Relinquished by: (Signature) *[Signature]* Received by: (Signature) *[Signature]* Date/Time: *12-13-21 12:31*



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)565-3443 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)

Chain of Custody

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Work Order No: _____

Page 2 of 3

Project Manager: Keli Tennings Bill to: (if different) Adrian Becker
 Company Name: WSP Company Name: XTO Energy
 Address: 3300 North A Street Address: 3104 E Green Street
 City, State ZIP: Midland, TX 79705 City, State ZIP: Midland, TX 79705
 Phone: 432.236.3849 Email: ben.beill@wsp.com

Program: UST/PST PRP Brownfields RC Superfund
 State of Project: _____
 Reporting Level: I II III ST/UST RP Vel I Vel IV
 Deliverables: EDD ADAPT Other: _____

Project Name: PLV 25 RD 901H Turn Around _____
 Project Number: 31403236.022.0124 TRF 0302 Routine
 P.O. Number: MP 2116546260 Rush: _____
 Sampler's Name: Benjamin Beill Due Date: _____

SAMPLE RECEIPT Temp Blank: Yes No Wet Ice: Yes No
 Temperature (°C): _____ Thermometer ID: _____
 Received Inact: Yes No Correction Factor: _____
 Cooler Custody Seals: Yes No N/A Total Containers: _____
 Sample Custody Seals: Yes No N/A

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)
PH19B	S	12/02/14	15:20	8'	1	X	X	X
PH19C	1		15:30	10'				
PH19D	1		15:45	12'				
PH19E	1		16:03	14'				
PH19F	1		16:10	16'				
PH20	1		16:20	0.5'				
PH20A	1		16:30	4'				

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

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Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: _____
 1 [Signature] [Signature] 12-13-21 12:28
 2 _____
 3 _____
 4 _____
 5 _____
 6 _____



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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)

Client Contact:	Phone:	Lab PM:	Carrier Tracking No(s)	COC No:
Shipping/Receiving:		Kramer Jessica		890-543 1
Company:	Eurofins Xenco	E-Mail:	State of Origin:	Page 1 of 3
Address:	1211 W. Florida Ave	Accreditations Required (See note):	New Mexico	Job #:
City:	Midland	NE LAP - Louisiana, NE LAP - Texas		890-1704-1
State/Zip:	TX, 79701			
Phone:	432-704-5440(Tel)			
Email:				
Project Name:	PLU 25 BD 901H			
Site:				
Project #:	89000004			
SSOW#:				

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=soil, BR=Tissue, A=Air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	Special Instructions/Note
					Preservation Code	Analysis Requested	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8016MOD_Calc		
PH15 (890-1704-1)	12/10/21	09 00	Mountain	Solid	X	X	X	X	X	
PH15A (890-1704-2)	12/10/21	09 10	Mountain	Solid	X	X	X	X	X	
PH15B (890-1704-3)	12/10/21	09 30	Mountain	Solid	X	X	X	X	X	
PH15C (890-1704-4)	12/10/21	09 45	Mountain	Solid	X	X	X	X	X	
PH15D (890-1704-5)	12/10/21	10 00	Mountain	Solid	X	X	X	X	X	
PH15E (890-1704-6)	12/10/21	10 20	Mountain	Solid	X	X	X	X	X	
PH16 (890-1704-7)	12/10/21	10 40	Mountain	Solid	X	X	X	X	X	
PH16A (890-1704-8)	12/10/21	10 50	Mountain	Solid	X	X	X	X	X	
PH16B (890-1704-9)	12/10/21	11 00	Mountain	Solid	X	X	X	X	X	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontracted 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

Deliverable Requested: I II III IV Other (Specify) _____ Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: *Joe Gasp* Date/Time: *12-14-21 11:50* Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No. _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements

Received by: *Jessica Kramer* Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: *31/3.2 .10 IPD*

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

Chain of Custody Record



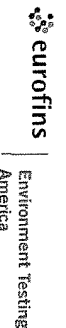
Client Information (Sub Contract Lab)		Sampler	Lab PM:	Carrier Tracking No(s)	COC No:									
Shipping/Receiving		Phone:	Kramer, Jessica		890-543 2									
Company:		E-Mail: jessica.kramer@eurofinsnet.com		State of Origin:	Page: 2 of 3									
Eurofins Xenco		Accreditations Required (See note):		New Mexico	Job #:									
Address:		Due Date Requested	NELAP - Louisiana, NELAP - Texas		890-1704-1									
1211 W. Florida Ave		12/17/2021												
City:		TAT Requested (days)	Analysis Requested											
Midland														
State Zip														
TX, 79701														
Phone:		PO #:												
432-704-5440(Tel)														
Email:		WO #:												
Project Name		Project #:												
PL U 25 BD 901H		89000004												
Site:		SSOVW#:												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Solid, O=Organic, 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/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
PH16C (890-1704-10)		12/10/21	11:30	Mountain	Solid	X	X	X	X	X	X	X		
PH16D (890-1704-11)		12/10/21	12:00	Mountain	Solid	X	X	X	X	X	X	X		
PH16E (890-1704-12)		12/10/21	12:20	Mountain	Solid	X	X	X	X	X	X	X		
PH17 (890-1704-13)		12/10/21	12:45	Mountain	Solid	X	X	X	X	X	X	X		
PH17A (890-1704-14)		12/10/21	13:00	Mountain	Solid	X	X	X	X	X	X	X		
PH17B (890-1704-15)		12/10/21	13:30	Mountain	Solid	X	X	X	X	X	X	X		
PH18 (890-1704-16)		12/10/21	13:45	Mountain	Solid	X	X	X	X	X	X	X		
PH18A (890-1704-17)		12/10/21	14:00	Mountain	Solid	X	X	X	X	X	X	X		
PH18B (890-1704-18)		12/10/21	14:20	Mountain	Solid	X	X	X	X	X	X	X		
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco 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 analysts/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>														
Possible Hazard Identification														
Unconfirmed														
Deliverable Requested I, II, III, IV, Other (specify)														
Primary Deliverable Rank 2														
Empty Kit Relinquished by:		Date:	Time:											
Relinquished by:		Date/Time:	Company:											
Relinquished by:		Date/Time:	Company:											
Relinquished by:		Date/Time:	Company:											
Custody Seals Intact:		Custody Seal No												
A Yes A No														
Cooler Temperature(s) °C and Other Remarks:		3.1 / 3.2		.10 IPR										



Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Client Information (Sub Contract Lab)

Client Contact: Shipping/Receiving
Company: Eurofins Xenco
Address: 1211 W. Florida Ave
City: Midland
State Zip: TX, 79701
Phone: 432-704-5440(Tel)
Email:
Project Name: PLU 25 BD 901H
Site: SSSOV#:
Sampler: Kramer Jessica
Lab PM: Jessica.kramer@eurofinsnet.com
E-Mail: Jessica.kramer@eurofinsnet.com
Accreditations Required (See note): NELAP - Louisiana NELAP - Texas
Carrier Tracking No(s):
State of Origin: New Mexico
COC No: 890-543 3
Page: Page 3 of 3
Job #: 890-1704-1

Due Date Requested: 12/17/2021
TAT Requested (days):
Analysis Requested:
Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascobric Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - ASN2O2
P - Na2OAS
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecalhydrate
U - Acetone
V - MCAA
W - pH 4.5
Z - other (specify)
Other:

Table with columns: Sample ID (Lab ID), Sample Date, Sample Time, Sample Type (C=Comp, G=grab), Matrix (W=Water, S=solid, O=Wastewater, B=Brittanic Acid), Field Filtered Sample (Yes or No), Perform MS/MSD (Yes or No), 8015MOD_NM/8016NM_S_Prep (MOD) Full TPH, 8016MOD_Calc, 300_ORGFMM_28D/DI_LEACH Chloride, 8021B/8035FP_Calc (MOD) BTEX, Total_BTEX_GCV, Total Number of containers, Special Instructions/Note.

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontracted 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification

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

Empty Kit Relinquished by
Date: 12-14-21 11:50
Company: [Handwritten]
Received by: [Handwritten]
Date/Time: [Handwritten]

Relinquished by: [Handwritten]
Date/Time: [Handwritten]
Company: [Handwritten]
Received by: [Handwritten]
Date/Time: [Handwritten]

Relinquished by: [Handwritten]
Date/Time: [Handwritten]
Company: [Handwritten]
Received by: [Handwritten]
Date/Time: [Handwritten]

Custody Seals Intact: Yes No
Custody Seal No: 3132
Cooler Temperature(s) °C and Other Remarks: 10 IPB
Ver 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1704-1
SDG Number: 31403236.022.0129. TASK 0302

Login Number: 1704
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1704-1
SDG Number: 31403236.022.0129. TASK 0302

Login Number: 1704
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland
List Creation: 12/14/21 12:00 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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1843-1
Laboratory SDG: 31403236.022.0129 TASK 03.02
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
1/24/2022 4:38:34 PM

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



LINKS

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results through
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Have a Question?



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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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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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.
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.
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.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Job ID: 890-1843-1

Laboratory: Eurofins Carlsbad**Narrative****Job Narrative
890-1843-1****Receipt**

The samples were received on 1/18/2022 11:50 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 5.6°C

GC VOA

Method 8021B: Surrogate 4-Bromofluorobenzene recovery for the following samples were outside control limits: PH20B (890-1843-1) and PH22 (890-1843-14). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-17279 and analytical batch 880-17443 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28)

Method 8015MOD_NM: The sample size used in the preparation of the matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 880-17279 and analytical batch 880-17443 was outside the 10% difference. As the relative percent difference (RPD) calculation is based upon the MS/MSD concentration as opposed to the MS/MSD percent recovery, elevated %RPD values were obtained.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1842-A-1-D 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 880-17336 and analytical batch 880-17522 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. The associated samples are: PH20B (890-1843-1), PH20C (890-1843-2), PH20D (890-1843-3), PH20E (890-1843-4), PH20F (890-1843-5), PH21 (890-1843-6), PH21A (890-1843-7), PH21B (890-1843-8), (890-1842-A-13-C), (890-1842-A-13-D MS) and (890-1842-A-13-E MSD).

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: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH20B

Lab Sample ID: 890-1843-1

Date Collected: 01/12/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 17:03	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 17:03	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 17:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/19/22 10:30	01/20/22 17:03	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 17:03	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/19/22 10:30	01/20/22 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130	01/19/22 10:30	01/20/22 17:03	1
1,4-Difluorobenzene (Surr)	87		70 - 130	01/19/22 10:30	01/20/22 17:03	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 12:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 12:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	01/19/22 14:02	01/21/22 12:49	1
o-Terphenyl	74		70 - 130	01/19/22 14:02	01/21/22 12:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	306		5.01	mg/Kg			01/23/22 13:34	1

Client Sample ID: PH20C

Lab Sample ID: 890-1843-2

Date Collected: 01/12/22 13:30

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 12

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 17:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 17:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 17:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 17:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 17:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/19/22 10:30	01/20/22 17:24	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH20C
Date Collected: 01/12/22 13:30
Date Received: 01/18/22 11:50
Sample Depth: 12

Lab Sample ID: 890-1843-2
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	01/19/22 10:30	01/20/22 17:24	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 13:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 13:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	01/19/22 14:02	01/21/22 13:51	1
o-Terphenyl	75		70 - 130	01/19/22 14:02	01/21/22 13:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	195		4.98	mg/Kg			01/23/22 13:56	1

Client Sample ID: PH20D
Date Collected: 01/12/22 14:00
Date Received: 01/18/22 11:50
Sample Depth: 14

Lab Sample ID: 890-1843-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 17:45	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 17:45	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 17:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 17:45	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 17:45	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	01/19/22 10:30	01/20/22 17:45	1
1,4-Difluorobenzene (Surr)	98		70 - 130	01/19/22 10:30	01/20/22 17:45	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			01/24/22 17:08	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			01/24/22 16:33	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH20D

Lab Sample ID: 890-1843-3

Date Collected: 01/12/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 14

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		01/19/22 14:02	01/21/22 14:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 14:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	01/19/22 14:02	01/21/22 14:12	1
o-Terphenyl	76		70 - 130	01/19/22 14:02	01/21/22 14:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	226		4.97	mg/Kg			01/23/22 14:04	1

Client Sample ID: PH20E

Lab Sample ID: 890-1843-4

Date Collected: 01/12/22 15:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 16

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:06	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:06	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 18:06	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:06	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	01/19/22 10:30	01/20/22 18:06	1
1,4-Difluorobenzene (Surr)	98		70 - 130	01/19/22 10:30	01/20/22 18:06	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 14:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 14:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	01/19/22 14:02	01/21/22 14:33	1
o-Terphenyl	72		70 - 130	01/19/22 14:02	01/21/22 14:33	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH20E
Date Collected: 01/12/22 15:00
Date Received: 01/18/22 11:50
Sample Depth: 16

Lab Sample ID: 890-1843-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	248		4.96	mg/Kg			01/23/22 14:12	1

Client Sample ID: PH20F
Date Collected: 01/12/22 16:00
Date Received: 01/18/22 11:50
Sample Depth: 17

Lab Sample ID: 890-1843-5
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		01/19/22 10:30	01/20/22 18:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 18:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 18:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 18:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			01/19/22 10:30	01/20/22 18:26	1
1,4-Difluorobenzene (Surr)	105		70 - 130			01/19/22 10:30	01/20/22 18:26	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 14:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 14:55	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			01/19/22 14:02	01/21/22 14:55	1
o-Terphenyl	75		70 - 130			01/19/22 14:02	01/21/22 14:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	255		5.00	mg/Kg			01/23/22 14:19	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21

Lab Sample ID: 890-1843-6

Date Collected: 01/13/22 10:00

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 10:30	01/20/22 18:47	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 18:47	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 18:47	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/19/22 10:30	01/20/22 18:47	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 18:47	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/19/22 10:30	01/20/22 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	01/19/22 10:30	01/20/22 18:47	1
1,4-Difluorobenzene (Surr)	101		70 - 130	01/19/22 10:30	01/20/22 18:47	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 15:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 15:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130	01/19/22 14:02	01/21/22 15:16	1
o-Terphenyl	73		70 - 130	01/19/22 14:02	01/21/22 15:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.5		4.95	mg/Kg			01/23/22 14:27	1

Client Sample ID: PH21A

Lab Sample ID: 890-1843-7

Date Collected: 01/13/22 10:20

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 19:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 19:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 19:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 19:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 19:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	01/19/22 10:30	01/20/22 19:08	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21A

Lab Sample ID: 890-1843-7

Date Collected: 01/13/22 10:20

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	72		70 - 130	01/19/22 10:30	01/20/22 19:08	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 15:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 15:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	01/19/22 14:02	01/21/22 15:37	1
o-Terphenyl	78		70 - 130	01/19/22 14:02	01/21/22 15:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	162		5.05	mg/Kg			01/23/22 14:34	1

Client Sample ID: PH21B

Lab Sample ID: 890-1843-8

Date Collected: 01/13/22 10:40

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 10:30	01/20/22 19:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 19:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 19:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 19:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 19:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	01/19/22 10:30	01/20/22 19:28	1
1,4-Difluorobenzene (Surr)	97		70 - 130	01/19/22 10:30	01/20/22 19:28	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			01/24/22 17:08	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			01/24/22 16:33	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21B

Lab Sample ID: 890-1843-8

Date Collected: 01/13/22 10:40

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 14:02	01/21/22 15:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 15:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	01/19/22 14:02	01/21/22 15:58	1
o-Terphenyl	78		70 - 130	01/19/22 14:02	01/21/22 15:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1820		25.0	mg/Kg			01/23/22 14:42	5

Client Sample ID: PH21C

Lab Sample ID: 890-1843-9

Date Collected: 01/13/22 11:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 19:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 19:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 19:49	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/19/22 10:30	01/20/22 19:49	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/19/22 10:30	01/20/22 19:49	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/19/22 10:30	01/20/22 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	01/19/22 10:30	01/20/22 19:49	1
1,4-Difluorobenzene (Surr)	102		70 - 130	01/19/22 10:30	01/20/22 19:49	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 16:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 16:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	01/19/22 14:02	01/21/22 16:19	1
o-Terphenyl	75		70 - 130	01/19/22 14:02	01/21/22 16:19	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21C
Date Collected: 01/13/22 11:00
Date Received: 01/18/22 11:50
Sample Depth: 8

Lab Sample ID: 890-1843-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		25.3	mg/Kg			01/22/22 18:55	5

Client Sample ID: PH21D
Date Collected: 01/13/22 11:20
Date Received: 01/18/22 11:50
Sample Depth: 10

Lab Sample ID: 890-1843-10
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		01/19/22 10:30	01/20/22 20:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 20:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 20:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/19/22 10:30	01/20/22 20:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 20:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/19/22 10:30	01/20/22 20:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			01/19/22 10:30	01/20/22 20:10	1
1,4-Difluorobenzene (Surr)	93		70 - 130			01/19/22 10:30	01/20/22 20:10	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 16:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 16:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 16:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130			01/19/22 14:02	01/21/22 16:40	1
o-Terphenyl	79		70 - 130			01/19/22 14:02	01/21/22 16:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	388		4.98	mg/Kg			01/22/22 19:14	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21E

Lab Sample ID: 890-1843-11

Date Collected: 01/13/22 11:40

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 12

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 21:33	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 21:33	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 21:33	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		01/19/22 10:30	01/20/22 21:33	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 21:33	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		01/19/22 10:30	01/20/22 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/19/22 10:30	01/20/22 21:33	1
1,4-Difluorobenzene (Surr)	94		70 - 130	01/19/22 10:30	01/20/22 21:33	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 17:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 17:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	01/19/22 14:02	01/21/22 17:23	1
o-Terphenyl	77		70 - 130	01/19/22 14:02	01/21/22 17:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		5.00	mg/Kg			01/22/22 19:20	1

Client Sample ID: PH21F

Lab Sample ID: 890-1843-12

Date Collected: 01/13/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 14

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 21:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 21:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 21:54	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/19/22 10:30	01/20/22 21:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 21:54	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/19/22 10:30	01/20/22 21:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	01/19/22 10:30	01/20/22 21:54	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21F

Lab Sample ID: 890-1843-12

Date Collected: 01/13/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 14

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	01/19/22 10:30	01/20/22 21:54	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 17:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130	01/19/22 14:02	01/21/22 17:44	1
o-Terphenyl	70		70 - 130	01/19/22 14:02	01/21/22 17:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	234		4.95	mg/Kg			01/22/22 19:27	1

Client Sample ID: PH21G

Lab Sample ID: 890-1843-13

Date Collected: 01/13/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 16

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 22:14	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 22:14	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 22:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 22:14	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/20/22 22:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/20/22 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	01/19/22 10:30	01/20/22 22:14	1
1,4-Difluorobenzene (Surr)	93		70 - 130	01/19/22 10:30	01/20/22 22:14	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			01/24/22 17:08	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			01/24/22 16:33	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21G

Lab Sample ID: 890-1843-13

Date Collected: 01/13/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 16

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		01/19/22 14:02	01/21/22 18:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 18:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	01/19/22 14:02	01/21/22 18:04	1
o-Terphenyl	80		70 - 130	01/19/22 14:02	01/21/22 18:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		5.04	mg/Kg			01/22/22 19:33	1

Client Sample ID: PH22

Lab Sample ID: 890-1843-14

Date Collected: 01/13/22 14:30

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 10:30	01/20/22 22:35	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 22:35	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 22:35	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		01/19/22 10:30	01/20/22 22:35	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 22:35	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		01/19/22 10:30	01/20/22 22:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130	01/19/22 10:30	01/20/22 22:35	1
1,4-Difluorobenzene (Surr)	79		70 - 130	01/19/22 10:30	01/20/22 22:35	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 18:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	01/19/22 14:02	01/21/22 18:25	1
o-Terphenyl	77		70 - 130	01/19/22 14:02	01/21/22 18:25	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22

Lab Sample ID: 890-1843-14

Date Collected: 01/13/22 14:30

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	162		4.99	mg/Kg			01/22/22 19:52	1

Client Sample ID: PH22A

Lab Sample ID: 890-1843-15

Date Collected: 01/13/22 15:00

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 10:30	01/20/22 22:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 22:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 22:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/19/22 10:30	01/20/22 22:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 22:56	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/19/22 10:30	01/20/22 22:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			01/19/22 10:30	01/20/22 22:56	1
1,4-Difluorobenzene (Surr)	106		70 - 130			01/19/22 10:30	01/20/22 22:56	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 18:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 18:45	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 18:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			01/19/22 14:02	01/21/22 18:45	1
o-Terphenyl	78		70 - 130			01/19/22 14:02	01/21/22 18:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.5		4.95	mg/Kg			01/22/22 19:58	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22B

Lab Sample ID: 890-1843-16

Date Collected: 01/13/22 16:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 23:17	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 23:17	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 23:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/19/22 10:30	01/20/22 23:17	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/19/22 10:30	01/20/22 23:17	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/19/22 10:30	01/20/22 23:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	01/19/22 10:30	01/20/22 23:17	1
1,4-Difluorobenzene (Surr)	94		70 - 130	01/19/22 10:30	01/20/22 23:17	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 19:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 19:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130	01/19/22 14:02	01/21/22 19:06	1
o-Terphenyl	73		70 - 130	01/19/22 14:02	01/21/22 19:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		4.97	mg/Kg			01/22/22 20:05	1

Client Sample ID: PH22C

Lab Sample ID: 890-1843-17

Date Collected: 01/14/22 09:30

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 12

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 23:37	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 23:37	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 23:37	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		01/19/22 10:30	01/20/22 23:37	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/19/22 10:30	01/20/22 23:37	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		01/19/22 10:30	01/20/22 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	01/19/22 10:30	01/20/22 23:37	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22C

Lab Sample ID: 890-1843-17

Date Collected: 01/14/22 09:30

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 12

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130	01/19/22 10:30	01/20/22 23:37	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 19:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 19:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	01/19/22 14:02	01/21/22 19:28	1
o-Terphenyl	76		70 - 130	01/19/22 14:02	01/21/22 19:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	272		4.99	mg/Kg			01/22/22 20:11	1

Client Sample ID: PH22D

Lab Sample ID: 890-1843-18

Date Collected: 01/14/22 10:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 14

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 23:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 23:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 23:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 23:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 23:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	01/19/22 10:30	01/20/22 23:58	1
1,4-Difluorobenzene (Surr)	106		70 - 130	01/19/22 10:30	01/20/22 23:58	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			01/24/22 17:08	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			01/24/22 16:33	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22D
Date Collected: 01/14/22 10:00
Date Received: 01/18/22 11:50
Sample Depth: 14

Lab Sample ID: 890-1843-18
Matrix: Solid

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		01/19/22 14:02	01/21/22 19:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 19:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 19:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130			01/19/22 14:02	01/21/22 19:50	1
o-Terphenyl	74		70 - 130			01/19/22 14:02	01/21/22 19:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		5.00	mg/Kg			01/22/22 20:17	1

Client Sample ID: PH22E
Date Collected: 01/14/22 10:30
Date Received: 01/18/22 11:50
Sample Depth: 16

Lab Sample ID: 890-1843-19
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		01/19/22 10:30	01/21/22 00:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/21/22 00:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/21/22 00:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/21/22 00:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/21/22 00:19	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/21/22 00:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			01/19/22 10:30	01/21/22 00:19	1
1,4-Difluorobenzene (Surr)	78		70 - 130			01/19/22 10:30	01/21/22 00:19	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 20:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 20:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 14:02	01/21/22 20:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			01/19/22 14:02	01/21/22 20:12	1
o-Terphenyl	70		70 - 130			01/19/22 14:02	01/21/22 20:12	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22E

Lab Sample ID: 890-1843-19

Date Collected: 01/14/22 10:30

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 16

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	238		4.96	mg/Kg			01/22/22 20:24	1

Client Sample ID: PH23

Lab Sample ID: 890-1843-20

Date Collected: 01/14/22 10:50

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 10:30	01/21/22 00:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/21/22 00:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/21/22 00:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/21/22 00:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 10:30	01/21/22 00:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 10:30	01/21/22 00:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			01/19/22 10:30	01/21/22 00:40	1
1,4-Difluorobenzene (Surr)	98		70 - 130			01/19/22 10:30	01/21/22 00:40	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 14:02	01/21/22 20:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 20:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 20:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130			01/19/22 14:02	01/21/22 20:34	1
o-Terphenyl	75		70 - 130			01/19/22 14:02	01/21/22 20:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1140		4.98	mg/Kg			01/22/22 20:43	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23A

Lab Sample ID: 890-1843-21

Date Collected: 01/14/22 11:00

Matrix: Solid

Date Received: 01/18/22 11:50

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		01/19/22 13:48	01/21/22 12:25	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/19/22 13:48	01/21/22 12:25	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/19/22 13:48	01/21/22 12:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/19/22 13:48	01/21/22 12:25	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/19/22 13:48	01/21/22 12:25	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/19/22 13:48	01/21/22 12:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	01/19/22 13:48	01/21/22 12:25	1
1,4-Difluorobenzene (Surr)	70		70 - 130	01/19/22 13:48	01/21/22 12:25	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 13:58	01/22/22 04:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		01/19/22 13:58	01/22/22 04:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/19/22 13:58	01/22/22 04:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	01/19/22 13:58	01/22/22 04:48	1
o-Terphenyl	90		70 - 130	01/19/22 13:58	01/22/22 04:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	211		5.00	mg/Kg			01/22/22 20:49	1

Client Sample ID: PH23B

Lab Sample ID: 890-1843-22

Date Collected: 01/14/22 12:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/19/22 13:48	01/21/22 12:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/19/22 13:48	01/21/22 12:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/19/22 13:48	01/21/22 12:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/19/22 13:48	01/21/22 12:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/19/22 13:48	01/21/22 12:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/19/22 13:48	01/21/22 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	01/19/22 13:48	01/21/22 12:46	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23B

Lab Sample ID: 890-1843-22

Date Collected: 01/14/22 12:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	01/19/22 13:48	01/21/22 12:46	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			01/24/22 17:08	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			01/24/22 16:33	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 *1	49.8	mg/Kg		01/19/22 13:58	01/22/22 05:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8	mg/Kg		01/19/22 13:58	01/22/22 05:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/19/22 13:58	01/22/22 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	01/19/22 13:58	01/22/22 05:10	1
o-Terphenyl	95		70 - 130	01/19/22 13:58	01/22/22 05:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	488		25.1	mg/Kg			01/22/22 21:08	5

Client Sample ID: PH23C

Lab Sample ID: 890-1843-23

Date Collected: 01/14/22 12:30

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 8

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 13:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 13:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 13:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 13:48	01/21/22 13:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 13:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 13:48	01/21/22 13:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/19/22 13:48	01/21/22 13:06	1
1,4-Difluorobenzene (Surr)	106		70 - 130	01/19/22 13:48	01/21/22 13:06	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			01/24/22 17:08	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			01/24/22 16:33	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23C
Date Collected: 01/14/22 12:30
Date Received: 01/18/22 11:50
Sample Depth: 8

Lab Sample ID: 890-1843-23
Matrix: Solid

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		01/19/22 13:58	01/22/22 05:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		01/19/22 13:58	01/22/22 05:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 13:58	01/22/22 05:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			01/19/22 13:58	01/22/22 05:30	1
o-Terphenyl	96		70 - 130			01/19/22 13:58	01/22/22 05:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	369		24.9	mg/Kg			01/22/22 21:15	5

Client Sample ID: PH23D
Date Collected: 01/14/22 13:00
Date Received: 01/18/22 11:50
Sample Depth: 12

Lab Sample ID: 890-1843-24
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		01/19/22 13:48	01/21/22 13:26	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/19/22 13:48	01/21/22 13:26	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/19/22 13:48	01/21/22 13:26	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		01/19/22 13:48	01/21/22 13:26	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/19/22 13:48	01/21/22 13:26	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		01/19/22 13:48	01/21/22 13:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			01/19/22 13:48	01/21/22 13:26	1
1,4-Difluorobenzene (Surr)	94		70 - 130			01/19/22 13:48	01/21/22 13:26	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 13:58	01/22/22 05:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		01/19/22 13:58	01/22/22 05:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 13:58	01/22/22 05:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			01/19/22 13:58	01/22/22 05:51	1
o-Terphenyl	78		70 - 130			01/19/22 13:58	01/22/22 05:51	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23D
Date Collected: 01/14/22 13:00
Date Received: 01/18/22 11:50
Sample Depth: 12

Lab Sample ID: 890-1843-24
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	267		4.96	mg/Kg			01/22/22 21:21	1

Client Sample ID: PH23E
Date Collected: 01/14/22 13:30
Date Received: 01/18/22 11:50
Sample Depth: 14

Lab Sample ID: 890-1843-25
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		01/19/22 13:48	01/21/22 13:47	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/19/22 13:48	01/21/22 13:47	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/19/22 13:48	01/21/22 13:47	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/19/22 13:48	01/21/22 13:47	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/19/22 13:48	01/21/22 13:47	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/19/22 13:48	01/21/22 13:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			01/19/22 13:48	01/21/22 13:47	1
1,4-Difluorobenzene (Surr)	102		70 - 130			01/19/22 13:48	01/21/22 13:47	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 13:58	01/22/22 06:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		01/19/22 13:58	01/22/22 06:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 13:58	01/22/22 06:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130			01/19/22 13:58	01/22/22 06:12	1
o-Terphenyl	78		70 - 130			01/19/22 13:58	01/22/22 06:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	209		4.99	mg/Kg			01/22/22 21:27	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23F

Lab Sample ID: 890-1843-26

Date Collected: 01/14/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Sample Depth: 16

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/21/22 12:09	01/21/22 15:40	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/21/22 12:09	01/21/22 15:40	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/21/22 12:09	01/21/22 15:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/21/22 12:09	01/21/22 15:40	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/21/22 12:09	01/21/22 15:40	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/21/22 12:09	01/21/22 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	01/21/22 12:09	01/21/22 15:40	1
1,4-Difluorobenzene (Surr)	101		70 - 130	01/21/22 12:09	01/21/22 15:40	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			01/24/22 17:08	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			01/24/22 16:33	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		01/19/22 13:58	01/22/22 06:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		01/19/22 13:58	01/22/22 06:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 13:58	01/22/22 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	01/19/22 13:58	01/22/22 06:32	1
o-Terphenyl	78		70 - 130	01/19/22 13:58	01/22/22 06:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	199		4.97	mg/Kg			01/22/22 21:34	1

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
 SDG: 31403236.022.0129 TASK 03.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-3188-A-21-A MS	Matrix Spike	108	95
820-3188-A-21-B MSD	Matrix Spike Duplicate	103	94
880-10254-A-6-M MS	Matrix Spike	87	63 S1-
880-10254-A-6-N MSD	Matrix Spike Duplicate	76	87
890-1843-1	PH20B	145 S1+	87
890-1843-1 MS	PH20B	104	92
890-1843-1 MSD	PH20B	105	97
890-1843-2	PH20C	115	100
890-1843-3	PH20D	116	98
890-1843-4	PH20E	128	98
890-1843-5	PH20F	109	105
890-1843-6	PH21	126	101
890-1843-7	PH21A	117	72
890-1843-8	PH21B	111	97
890-1843-9	PH21C	125	102
890-1843-10	PH21D	119	93
890-1843-11	PH21E	114	94
890-1843-12	PH21F	117	98
890-1843-13	PH21G	118	93
890-1843-14	PH22	154 S1+	79
890-1843-15	PH22A	118	106
890-1843-16	PH22B	112	94
890-1843-17	PH22C	103	91
890-1843-18	PH22D	118	106
890-1843-19	PH22E	90	78
890-1843-20	PH23	110	98
890-1843-21	PH23A	109	70
890-1843-22	PH23B	113	92
890-1843-23	PH23C	115	106
890-1843-24	PH23D	113	94
890-1843-25	PH23E	113	102
890-1843-26	PH23F	101	101
LCS 880-17113/1-A	Lab Control Sample	91	110
LCS 880-17168/1-A	Lab Control Sample	95	95
LCS 880-17169/1-A	Lab Control Sample	95	107
LCS 880-17426/1-A	Lab Control Sample	100	101
LCSD 880-17113/2-A	Lab Control Sample Dup	92	100
LCSD 880-17168/2-A	Lab Control Sample Dup	97	105
LCSD 880-17169/2-A	Lab Control Sample Dup	95	101
LCSD 880-17426/2-A	Lab Control Sample Dup	104	94
MB 880-17113/5-A	Method Blank	78	88
MB 880-17168/5-A	Method Blank	104	90
MB 880-17169/5-A	Method Blank	109	103

Surrogate Legend

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

Surrogate Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
 SDG: 31403236.022.0129 TASK 03.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
890-1843-21 MSD	PH23A		
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1842-A-1-D MS	Matrix Spike	68 S1-	71
890-1842-A-1-E MSD	Matrix Spike Duplicate	73	74
890-1843-1	PH20B	71	74
890-1843-1 MS	PH20B	71	65 S1-
890-1843-1 MSD	PH20B	72	66 S1-
890-1843-2	PH20C	73	75
890-1843-3	PH20D	73	76
890-1843-4	PH20E	71	72
890-1843-5	PH20F	76	75
890-1843-6	PH21	72	73
890-1843-7	PH21A	76	78
890-1843-8	PH21B	75	78
890-1843-9	PH21C	73	75
890-1843-10	PH21D	77	79
890-1843-11	PH21E	75	77
890-1843-12	PH21F	68 S1-	70
890-1843-13	PH21G	76	80
890-1843-14	PH22	76	77
890-1843-15	PH22A	76	78
890-1843-16	PH22B	72	73
890-1843-17	PH22C	73	76
890-1843-18	PH22D	71	74
890-1843-19	PH22E	68 S1-	70
890-1843-20	PH23	72	75
890-1843-21	PH23A	93	90
890-1843-22	PH23B	97	95
890-1843-23	PH23C	100	96
890-1843-24	PH23D	83	78
890-1843-25	PH23E	81	78
890-1843-26	PH23F	82	78
LCS 880-17280/2-A	Lab Control Sample	101	98
LCSD 880-17280/3-A	Lab Control Sample Dup	105	100
MB 880-17280/1-A	Method Blank	89	97
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-17279/2-A	Lab Control Sample	116	117
LCSD 880-17279/3-A	Lab Control Sample Dup	82	88
MB 880-17279/1-A	Method Blank	93	92

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17113/5-A
Matrix: Solid
Analysis Batch: 17425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17113

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 11:00	01/21/22 12:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 11:00	01/21/22 12:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 11:00	01/21/22 12:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 11:00	01/21/22 12:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 11:00	01/21/22 12:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 11:00	01/21/22 12:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	01/19/22 11:00	01/21/22 12:53	1
1,4-Difluorobenzene (Surr)	88		70 - 130	01/19/22 11:00	01/21/22 12:53	1

Lab Sample ID: LCS 880-17113/1-A
Matrix: Solid
Analysis Batch: 17425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1127		mg/Kg		113	70 - 130
Toluene	0.100	0.09574		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09535		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.2108		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1114		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-17113/2-A
Matrix: Solid
Analysis Batch: 17425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17113

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09102		mg/Kg		91	70 - 130	21	35
Toluene	0.100	0.07603		mg/Kg		76	70 - 130	23	35
Ethylbenzene	0.100	0.07455		mg/Kg		75	70 - 130	24	35
m-Xylene & p-Xylene	0.200	0.1629		mg/Kg		81	70 - 130	26	35
o-Xylene	0.100	0.08821		mg/Kg		88	70 - 130	23	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-10254-A-6-M MS
Matrix: Solid
Analysis Batch: 17425

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17113

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.0992	0.005473	F1	mg/Kg		6	70 - 130
Toluene	<0.00199	U F1 F2	0.0992	0.003894	F1	mg/Kg		4	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: 880-10254-A-6-M MS
Matrix: Solid
Analysis Batch: 17425

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17113

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	<0.00199	U F1	0.0992	0.005393	F1	mg/Kg		5	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.01999	F1	mg/Kg		10	70 - 130
o-Xylene	<0.00199	U F1	0.0992	0.01152	F1	mg/Kg		12	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	87		70 - 130						
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130						

Lab Sample ID: 880-10254-A-6-N MSD
Matrix: Solid
Analysis Batch: 17425

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 17113

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00199	U F1	0.100	0.005487	F1	mg/Kg		5	70 - 130	0 35
Toluene	<0.00199	U F1 F2	0.100	0.005737	F1 F2	mg/Kg		6	70 - 130	38 35
Ethylbenzene	<0.00199	U F1	0.100	0.005685	F1	mg/Kg		6	70 - 130	5 35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.01657	F1	mg/Kg		8	70 - 130	19 35
o-Xylene	<0.00199	U F1	0.100	0.008377	F1	mg/Kg		8	70 - 130	32 35
MSD MSD										
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	76		70 - 130							
1,4-Difluorobenzene (Surr)	87		70 - 130							

Lab Sample ID: MB 880-17168/5-A
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17168

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 16:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 16:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 16:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 16:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 10:30	01/20/22 16:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 10:30	01/20/22 16:41	1
MB MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	104		70 - 130	01/19/22 10:30	01/20/22 16:41	1		
1,4-Difluorobenzene (Surr)	90		70 - 130	01/19/22 10:30	01/20/22 16:41	1		

Lab Sample ID: LCS 880-17168/1-A
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17168

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
Benzene	0.100	0.1107		mg/Kg		111	70 - 130
Toluene	0.100	0.1006		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.09519		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1907		mg/Kg		95	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: LCS 880-17168/1-A
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	0.100	0.09264		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-17168/2-A
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17168

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1263		mg/Kg		126	70 - 130	13	35
Toluene	0.100	0.1090		mg/Kg		109	70 - 130	8	35
Ethylbenzene	0.100	0.1044		mg/Kg		104	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2075		mg/Kg		104	70 - 130	8	35
o-Xylene	0.100	0.1007		mg/Kg		101	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-1843-1 MS
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: PH20B
Prep Type: Total/NA
Prep Batch: 17168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U	0.0998	0.07574		mg/Kg		76	70 - 130
Toluene	<0.00201	U	0.0998	0.07460		mg/Kg		75	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.07643		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1552		mg/Kg		78	70 - 130
o-Xylene	<0.00201	U	0.0998	0.07645		mg/Kg		77	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-1843-1 MSD
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: PH20B
Prep Type: Total/NA
Prep Batch: 17168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.08518		mg/Kg		86	70 - 130	12	35
Toluene	<0.00201	U	0.0994	0.08167		mg/Kg		82	70 - 130	9	35
Ethylbenzene	<0.00201	U	0.0994	0.07908		mg/Kg		80	70 - 130	3	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1618		mg/Kg		81	70 - 130	4	35
o-Xylene	<0.00201	U	0.0994	0.08040		mg/Kg		81	70 - 130	5	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: 890-1843-1 MSD
Matrix: Solid
Analysis Batch: 17355

Client Sample ID: PH20B
Prep Type: Total/NA
Prep Batch: 17168

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-17169/5-A
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17169

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 12:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 12:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 12:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/19/22 13:48	01/21/22 12:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/19/22 13:48	01/21/22 12:04	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/19/22 13:48	01/21/22 12:04	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	01/19/22 13:48	01/21/22 12:04	1
1,4-Difluorobenzene (Surr)	103		70 - 130	01/19/22 13:48	01/21/22 12:04	1

Lab Sample ID: LCS 880-17169/1-A
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17169

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.100	0.08823		mg/Kg		88	70 - 130
Toluene	0.100	0.07876		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.07399		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1521		mg/Kg		76	70 - 130
o-Xylene	0.100	0.08095		mg/Kg		81	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-17169/2-A
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17169

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.09770		mg/Kg		98	70 - 130	10	35
Toluene	0.100	0.08720		mg/Kg		87	70 - 130	10	35
Ethylbenzene	0.100	0.08342		mg/Kg		83	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1673		mg/Kg		84	70 - 130	9	35
o-Xylene	0.100	0.08484		mg/Kg		85	70 - 130	5	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: LCSD 880-17169/2-A
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17169

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

Lab Sample ID: 890-1843-21 MSD
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: PH23A
Prep Type: Total/NA
Prep Batch: 17169

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	0.07840		mg/Kg					
Toluene	<0.00201	U	0.0990	0.06934		mg/Kg					
Ethylbenzene	<0.00201	U	0.0990	0.06580		mg/Kg					
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1343		mg/Kg					
o-Xylene	<0.00201	U	0.0990	0.06788		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: LCS 880-17426/1-A
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17426

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09060		mg/Kg		91	70 - 130
Toluene	0.100	0.08073		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.07731		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	0.200	0.1543		mg/Kg		77	70 - 130
o-Xylene	0.100	0.07819		mg/Kg		78	70 - 130

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

Lab Sample ID: LCSD 880-17426/2-A
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17426

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08899		mg/Kg		89	70 - 130	2	35
Toluene	0.100	0.08118		mg/Kg		81	70 - 130	1	35
Ethylbenzene	0.100	0.07771		mg/Kg		78	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1613		mg/Kg		81	70 - 130	4	35
o-Xylene	0.100	0.07892		mg/Kg		79	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: 820-3188-A-21-B MSD
Matrix: Solid
Analysis Batch: 17429

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 17426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.06041		mg/Kg					
Toluene	<0.00199	U	0.101	0.05726		mg/Kg					
Ethylbenzene	<0.00199	U	0.101	0.05610		mg/Kg					
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1137		mg/Kg					
o-Xylene	<0.00199	U	0.101	0.05557		mg/Kg					
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	103		70 - 130								
1,4-Difluorobenzene (Surr)	94		70 - 130								

Lab Sample ID: 820-3188-A-21-A MS
Matrix: Solid
Analysis Batch: 17429

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

Surrogate	%Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-17279/1-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17279

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		01/19/22 13:58	01/21/22 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 13:58	01/21/22 21:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 13:58	01/21/22 21:34	1
Surrogate	%Recovery	MB Qualifier	MB Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			01/19/22 13:58	01/21/22 21:34	1
o-Terphenyl	92		70 - 130			01/19/22 13:58	01/21/22 21:34	1

Lab Sample ID: LCS 880-17279/2-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1144		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1131		mg/Kg		113	70 - 130
Surrogate	%Recovery	LCS Qualifier	LCS Limits				
1-Chlorooctane	116		70 - 130				
o-Terphenyl	117		70 - 130				

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: LCSD 880-17279/3-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17279

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
										RPD
Gasoline Range Organics (GRO)-C6-C10	1000	829.4	*1	mg/Kg		83	70 - 130	32	20	
Diesel Range Organics (Over C10-C28)	1000	845.7	*1	mg/Kg		85	70 - 130	29	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							
o-Terphenyl	88		70 - 130							

Lab Sample ID: 890-1842-A-1-D MS
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1 F2	997	909.4		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U *1	997	935.0		mg/Kg		94	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	68	S1-	70 - 130								
o-Terphenyl	71		70 - 130								

Lab Sample ID: 890-1842-A-1-E MSD
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 17279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1 F2	996	1151	F2	mg/Kg		112	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	996	993.7		mg/Kg		100	70 - 130	6	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	73		70 - 130								
o-Terphenyl	74		70 - 130								

Lab Sample ID: MB 880-17280/1-A
Matrix: Solid
Analysis Batch: 17440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17280

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		01/19/22 14:02	01/21/22 11:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 11:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 14:02	01/21/22 11:45	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: MB 880-17280/1-A
Matrix: Solid
Analysis Batch: 17440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17280

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	89		70 - 130	01/19/22 14:02	01/21/22 11:45	1
o-Terphenyl	97		70 - 130	01/19/22 14:02	01/21/22 11:45	1

Lab Sample ID: LCS 880-17280/2-A
Matrix: Solid
Analysis Batch: 17440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							LCS	LCS
Gasoline Range Organics (GRO)-C6-C10	1000	1035		mg/Kg		103	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	986.1		mg/Kg		99	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	101		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-17280/3-A
Matrix: Solid
Analysis Batch: 17440

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17280

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
							LCSD	LCSD	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1032		mg/Kg		103	70 - 130	0	20	
Diesel Range Organics (Over C10-C28)	1000	933.1		mg/Kg		93	70 - 130	6	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	105		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 890-1843-1 MS
Matrix: Solid
Analysis Batch: 17440

Client Sample ID: PH20B
Prep Type: Total/NA
Prep Batch: 17280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
									MS	MS
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1269		mg/Kg		127	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1079		mg/Kg		107	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	71		70 - 130
o-Terphenyl	65	S1-	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: 890-1843-1 MSD
Matrix: Solid
Analysis Batch: 17440

Client Sample ID: PH20B
Prep Type: Total/NA
Prep Batch: 17280

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	996	1273		mg/Kg		128	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1100		mg/Kg		109	70 - 130	2	20
Surrogate	%Recovery	MSD Qualifier	MSD	Limits							
1-Chlorooctane	72			70 - 130							
o-Terphenyl	66	S1-		70 - 130							

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-17336/1-A
Matrix: Solid
Analysis Batch: 17522

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			01/23/22 10:55	1

Lab Sample ID: LCS 880-17336/2-A
Matrix: Solid
Analysis Batch: 17522

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	273.1		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-17336/3-A
Matrix: Solid
Analysis Batch: 17522

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	272.4		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 890-1842-A-13-D MS
Matrix: Solid
Analysis Batch: 17522

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	38.9	F1	248	344.0	F1	mg/Kg		123	90 - 110

Lab Sample ID: 890-1842-A-13-E MSD
Matrix: Solid
Analysis Batch: 17522

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	38.9	F1	248	349.6	F1	mg/Kg		126	90 - 110	2	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-17337/1-A
Matrix: Solid
Analysis Batch: 17523

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			01/22/22 18:36	1

Lab Sample ID: LCS 880-17337/2-A
Matrix: Solid
Analysis Batch: 17523

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	258.4		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-17337/3-A
Matrix: Solid
Analysis Batch: 17523

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	271.4		mg/Kg		109	90 - 110	5	20

Lab Sample ID: 890-1843-9 MS
Matrix: Solid
Analysis Batch: 17523

Client Sample ID: PH21C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1650		1260	3047		mg/Kg		110	90 - 110

Lab Sample ID: 890-1843-9 MSD
Matrix: Solid
Analysis Batch: 17523

Client Sample ID: PH21C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1650		1260	2862		mg/Kg		96	90 - 110	6	20

Lab Sample ID: 890-1843-19 MS
Matrix: Solid
Analysis Batch: 17523

Client Sample ID: PH22E
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	238		248	505.9		mg/Kg		108	90 - 110

Lab Sample ID: 890-1843-19 MSD
Matrix: Solid
Analysis Batch: 17523

Client Sample ID: PH22E
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	238		248	465.2		mg/Kg		92	90 - 110	8	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

GC VOA

Prep Batch: 17113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-26	PH23F	Total/NA	Solid	5035	
MB 880-17113/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17113/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17113/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10254-A-6-M MS	Matrix Spike	Total/NA	Solid	5035	
880-10254-A-6-N MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 17168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Total/NA	Solid	5035	
890-1843-2	PH20C	Total/NA	Solid	5035	
890-1843-3	PH20D	Total/NA	Solid	5035	
890-1843-4	PH20E	Total/NA	Solid	5035	
890-1843-5	PH20F	Total/NA	Solid	5035	
890-1843-6	PH21	Total/NA	Solid	5035	
890-1843-7	PH21A	Total/NA	Solid	5035	
890-1843-8	PH21B	Total/NA	Solid	5035	
890-1843-9	PH21C	Total/NA	Solid	5035	
890-1843-10	PH21D	Total/NA	Solid	5035	
890-1843-11	PH21E	Total/NA	Solid	5035	
890-1843-12	PH21F	Total/NA	Solid	5035	
890-1843-13	PH21G	Total/NA	Solid	5035	
890-1843-14	PH22	Total/NA	Solid	5035	
890-1843-15	PH22A	Total/NA	Solid	5035	
890-1843-16	PH22B	Total/NA	Solid	5035	
890-1843-17	PH22C	Total/NA	Solid	5035	
890-1843-18	PH22D	Total/NA	Solid	5035	
890-1843-19	PH22E	Total/NA	Solid	5035	
890-1843-20	PH23	Total/NA	Solid	5035	
MB 880-17168/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17168/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17168/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1843-1 MS	PH20B	Total/NA	Solid	5035	
890-1843-1 MSD	PH20B	Total/NA	Solid	5035	

Prep Batch: 17169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-21	PH23A	Total/NA	Solid	5035	
890-1843-22	PH23B	Total/NA	Solid	5035	
890-1843-23	PH23C	Total/NA	Solid	5035	
890-1843-24	PH23D	Total/NA	Solid	5035	
890-1843-25	PH23E	Total/NA	Solid	5035	
MB 880-17169/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17169/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17169/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1843-21 MSD	PH23A	Total/NA	Solid	5035	

Analysis Batch: 17355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Total/NA	Solid	8021B	17168
890-1843-2	PH20C	Total/NA	Solid	8021B	17168

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

GC VOA (Continued)

Analysis Batch: 17355 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-3	PH20D	Total/NA	Solid	8021B	17168
890-1843-4	PH20E	Total/NA	Solid	8021B	17168
890-1843-5	PH20F	Total/NA	Solid	8021B	17168
890-1843-6	PH21	Total/NA	Solid	8021B	17168
890-1843-7	PH21A	Total/NA	Solid	8021B	17168
890-1843-8	PH21B	Total/NA	Solid	8021B	17168
890-1843-9	PH21C	Total/NA	Solid	8021B	17168
890-1843-10	PH21D	Total/NA	Solid	8021B	17168
890-1843-11	PH21E	Total/NA	Solid	8021B	17168
890-1843-12	PH21F	Total/NA	Solid	8021B	17168
890-1843-13	PH21G	Total/NA	Solid	8021B	17168
890-1843-14	PH22	Total/NA	Solid	8021B	17168
890-1843-15	PH22A	Total/NA	Solid	8021B	17168
890-1843-16	PH22B	Total/NA	Solid	8021B	17168
890-1843-17	PH22C	Total/NA	Solid	8021B	17168
890-1843-18	PH22D	Total/NA	Solid	8021B	17168
890-1843-19	PH22E	Total/NA	Solid	8021B	17168
890-1843-20	PH23	Total/NA	Solid	8021B	17168
MB 880-17168/5-A	Method Blank	Total/NA	Solid	8021B	17168
LCS 880-17168/1-A	Lab Control Sample	Total/NA	Solid	8021B	17168
LCSD 880-17168/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17168
890-1843-1 MS	PH20B	Total/NA	Solid	8021B	17168
890-1843-1 MSD	PH20B	Total/NA	Solid	8021B	17168

Analysis Batch: 17425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-26	PH23F	Total/NA	Solid	8021B	17113
MB 880-17113/5-A	Method Blank	Total/NA	Solid	8021B	17113
LCS 880-17113/1-A	Lab Control Sample	Total/NA	Solid	8021B	17113
LCSD 880-17113/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17113
880-10254-A-6-M MS	Matrix Spike	Total/NA	Solid	8021B	17113
880-10254-A-6-N MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	17113

Prep Batch: 17426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-17426/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17426/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-3188-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 17429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-21	PH23A	Total/NA	Solid	8021B	17169
890-1843-22	PH23B	Total/NA	Solid	8021B	17169
890-1843-23	PH23C	Total/NA	Solid	8021B	17169
890-1843-24	PH23D	Total/NA	Solid	8021B	17169
890-1843-25	PH23E	Total/NA	Solid	8021B	17169
MB 880-17169/5-A	Method Blank	Total/NA	Solid	8021B	17169
LCS 880-17169/1-A	Lab Control Sample	Total/NA	Solid	8021B	17169
LCS 880-17426/1-A	Lab Control Sample	Total/NA	Solid	8021B	17426
LCSD 880-17169/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17169
LCSD 880-17426/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17426

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

GC VOA (Continued)

Analysis Batch: 17429 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3188-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	
820-3188-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	17426
890-1843-21 MSD	PH23A	Total/NA	Solid	8021B	17169

Analysis Batch: 17647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Total/NA	Solid	Total BTEX	
890-1843-2	PH20C	Total/NA	Solid	Total BTEX	
890-1843-3	PH20D	Total/NA	Solid	Total BTEX	
890-1843-4	PH20E	Total/NA	Solid	Total BTEX	
890-1843-5	PH20F	Total/NA	Solid	Total BTEX	
890-1843-6	PH21	Total/NA	Solid	Total BTEX	
890-1843-7	PH21A	Total/NA	Solid	Total BTEX	
890-1843-8	PH21B	Total/NA	Solid	Total BTEX	
890-1843-9	PH21C	Total/NA	Solid	Total BTEX	
890-1843-10	PH21D	Total/NA	Solid	Total BTEX	
890-1843-11	PH21E	Total/NA	Solid	Total BTEX	
890-1843-12	PH21F	Total/NA	Solid	Total BTEX	
890-1843-13	PH21G	Total/NA	Solid	Total BTEX	
890-1843-14	PH22	Total/NA	Solid	Total BTEX	
890-1843-15	PH22A	Total/NA	Solid	Total BTEX	
890-1843-16	PH22B	Total/NA	Solid	Total BTEX	
890-1843-17	PH22C	Total/NA	Solid	Total BTEX	
890-1843-18	PH22D	Total/NA	Solid	Total BTEX	
890-1843-19	PH22E	Total/NA	Solid	Total BTEX	
890-1843-20	PH23	Total/NA	Solid	Total BTEX	
890-1843-21	PH23A	Total/NA	Solid	Total BTEX	
890-1843-22	PH23B	Total/NA	Solid	Total BTEX	
890-1843-23	PH23C	Total/NA	Solid	Total BTEX	
890-1843-24	PH23D	Total/NA	Solid	Total BTEX	
890-1843-25	PH23E	Total/NA	Solid	Total BTEX	
890-1843-26	PH23F	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 17279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-21	PH23A	Total/NA	Solid	8015NM Prep	
890-1843-22	PH23B	Total/NA	Solid	8015NM Prep	
890-1843-23	PH23C	Total/NA	Solid	8015NM Prep	
890-1843-24	PH23D	Total/NA	Solid	8015NM Prep	
890-1843-25	PH23E	Total/NA	Solid	8015NM Prep	
890-1843-26	PH23F	Total/NA	Solid	8015NM Prep	
MB 880-17279/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17279/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17279/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1842-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1842-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
 SDG: 31403236.022.0129 TASK 03.02

GC Semi VOA

Prep Batch: 17280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Total/NA	Solid	8015NM Prep	
890-1843-2	PH20C	Total/NA	Solid	8015NM Prep	
890-1843-3	PH20D	Total/NA	Solid	8015NM Prep	
890-1843-4	PH20E	Total/NA	Solid	8015NM Prep	
890-1843-5	PH20F	Total/NA	Solid	8015NM Prep	
890-1843-6	PH21	Total/NA	Solid	8015NM Prep	
890-1843-7	PH21A	Total/NA	Solid	8015NM Prep	
890-1843-8	PH21B	Total/NA	Solid	8015NM Prep	
890-1843-9	PH21C	Total/NA	Solid	8015NM Prep	
890-1843-10	PH21D	Total/NA	Solid	8015NM Prep	
890-1843-11	PH21E	Total/NA	Solid	8015NM Prep	
890-1843-12	PH21F	Total/NA	Solid	8015NM Prep	
890-1843-13	PH21G	Total/NA	Solid	8015NM Prep	
890-1843-14	PH22	Total/NA	Solid	8015NM Prep	
890-1843-15	PH22A	Total/NA	Solid	8015NM Prep	
890-1843-16	PH22B	Total/NA	Solid	8015NM Prep	
890-1843-17	PH22C	Total/NA	Solid	8015NM Prep	
890-1843-18	PH22D	Total/NA	Solid	8015NM Prep	
890-1843-19	PH22E	Total/NA	Solid	8015NM Prep	
890-1843-20	PH23	Total/NA	Solid	8015NM Prep	
MB 880-17280/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17280/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17280/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1843-1 MS	PH20B	Total/NA	Solid	8015NM Prep	
890-1843-1 MSD	PH20B	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Total/NA	Solid	8015B NM	17280
890-1843-2	PH20C	Total/NA	Solid	8015B NM	17280
890-1843-3	PH20D	Total/NA	Solid	8015B NM	17280
890-1843-4	PH20E	Total/NA	Solid	8015B NM	17280
890-1843-5	PH20F	Total/NA	Solid	8015B NM	17280
890-1843-6	PH21	Total/NA	Solid	8015B NM	17280
890-1843-7	PH21A	Total/NA	Solid	8015B NM	17280
890-1843-8	PH21B	Total/NA	Solid	8015B NM	17280
890-1843-9	PH21C	Total/NA	Solid	8015B NM	17280
890-1843-10	PH21D	Total/NA	Solid	8015B NM	17280
890-1843-11	PH21E	Total/NA	Solid	8015B NM	17280
890-1843-12	PH21F	Total/NA	Solid	8015B NM	17280
890-1843-13	PH21G	Total/NA	Solid	8015B NM	17280
890-1843-14	PH22	Total/NA	Solid	8015B NM	17280
890-1843-15	PH22A	Total/NA	Solid	8015B NM	17280
890-1843-16	PH22B	Total/NA	Solid	8015B NM	17280
890-1843-17	PH22C	Total/NA	Solid	8015B NM	17280
890-1843-18	PH22D	Total/NA	Solid	8015B NM	17280
890-1843-19	PH22E	Total/NA	Solid	8015B NM	17280
890-1843-20	PH23	Total/NA	Solid	8015B NM	17280
MB 880-17280/1-A	Method Blank	Total/NA	Solid	8015B NM	17280
LCS 880-17280/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17280
LCSD 880-17280/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17280

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

GC Semi VOA (Continued)

Analysis Batch: 17440 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1 MS	PH20B	Total/NA	Solid	8015B NM	17280
890-1843-1 MSD	PH20B	Total/NA	Solid	8015B NM	17280

Analysis Batch: 17443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-21	PH23A	Total/NA	Solid	8015B NM	17279
890-1843-22	PH23B	Total/NA	Solid	8015B NM	17279
890-1843-23	PH23C	Total/NA	Solid	8015B NM	17279
890-1843-24	PH23D	Total/NA	Solid	8015B NM	17279
890-1843-25	PH23E	Total/NA	Solid	8015B NM	17279
890-1843-26	PH23F	Total/NA	Solid	8015B NM	17279
MB 880-17279/1-A	Method Blank	Total/NA	Solid	8015B NM	17279
LCS 880-17279/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17279
LCS 880-17279/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17279
890-1842-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	17279
890-1842-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	17279

Analysis Batch: 17641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Total/NA	Solid	8015 NM	
890-1843-2	PH20C	Total/NA	Solid	8015 NM	
890-1843-3	PH20D	Total/NA	Solid	8015 NM	
890-1843-4	PH20E	Total/NA	Solid	8015 NM	
890-1843-5	PH20F	Total/NA	Solid	8015 NM	
890-1843-6	PH21	Total/NA	Solid	8015 NM	
890-1843-7	PH21A	Total/NA	Solid	8015 NM	
890-1843-8	PH21B	Total/NA	Solid	8015 NM	
890-1843-9	PH21C	Total/NA	Solid	8015 NM	
890-1843-10	PH21D	Total/NA	Solid	8015 NM	
890-1843-11	PH21E	Total/NA	Solid	8015 NM	
890-1843-12	PH21F	Total/NA	Solid	8015 NM	
890-1843-13	PH21G	Total/NA	Solid	8015 NM	
890-1843-14	PH22	Total/NA	Solid	8015 NM	
890-1843-15	PH22A	Total/NA	Solid	8015 NM	
890-1843-16	PH22B	Total/NA	Solid	8015 NM	
890-1843-17	PH22C	Total/NA	Solid	8015 NM	
890-1843-18	PH22D	Total/NA	Solid	8015 NM	
890-1843-19	PH22E	Total/NA	Solid	8015 NM	
890-1843-20	PH23	Total/NA	Solid	8015 NM	
890-1843-21	PH23A	Total/NA	Solid	8015 NM	
890-1843-22	PH23B	Total/NA	Solid	8015 NM	
890-1843-23	PH23C	Total/NA	Solid	8015 NM	
890-1843-24	PH23D	Total/NA	Solid	8015 NM	
890-1843-25	PH23E	Total/NA	Solid	8015 NM	
890-1843-26	PH23F	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 17336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Soluble	Solid	DI Leach	

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
 SDG: 31403236.022.0129 TASK 03.02

HPLC/IC (Continued)

Leach Batch: 17336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-2	PH20C	Soluble	Solid	DI Leach	
890-1843-3	PH20D	Soluble	Solid	DI Leach	
890-1843-4	PH20E	Soluble	Solid	DI Leach	
890-1843-5	PH20F	Soluble	Solid	DI Leach	
890-1843-6	PH21	Soluble	Solid	DI Leach	
890-1843-7	PH21A	Soluble	Solid	DI Leach	
890-1843-8	PH21B	Soluble	Solid	DI Leach	
MB 880-17336/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17336/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17336/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1842-A-13-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1842-A-13-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 17337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-9	PH21C	Soluble	Solid	DI Leach	
890-1843-10	PH21D	Soluble	Solid	DI Leach	
890-1843-11	PH21E	Soluble	Solid	DI Leach	
890-1843-12	PH21F	Soluble	Solid	DI Leach	
890-1843-13	PH21G	Soluble	Solid	DI Leach	
890-1843-14	PH22	Soluble	Solid	DI Leach	
890-1843-15	PH22A	Soluble	Solid	DI Leach	
890-1843-16	PH22B	Soluble	Solid	DI Leach	
890-1843-17	PH22C	Soluble	Solid	DI Leach	
890-1843-18	PH22D	Soluble	Solid	DI Leach	
890-1843-19	PH22E	Soluble	Solid	DI Leach	
890-1843-20	PH23	Soluble	Solid	DI Leach	
890-1843-21	PH23A	Soluble	Solid	DI Leach	
890-1843-22	PH23B	Soluble	Solid	DI Leach	
890-1843-23	PH23C	Soluble	Solid	DI Leach	
890-1843-24	PH23D	Soluble	Solid	DI Leach	
890-1843-25	PH23E	Soluble	Solid	DI Leach	
890-1843-26	PH23F	Soluble	Solid	DI Leach	
MB 880-17337/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17337/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17337/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1843-9 MS	PH21C	Soluble	Solid	DI Leach	
890-1843-9 MSD	PH21C	Soluble	Solid	DI Leach	
890-1843-19 MS	PH22E	Soluble	Solid	DI Leach	
890-1843-19 MSD	PH22E	Soluble	Solid	DI Leach	

Analysis Batch: 17522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-1	PH20B	Soluble	Solid	300.0	17336
890-1843-2	PH20C	Soluble	Solid	300.0	17336
890-1843-3	PH20D	Soluble	Solid	300.0	17336
890-1843-4	PH20E	Soluble	Solid	300.0	17336
890-1843-5	PH20F	Soluble	Solid	300.0	17336
890-1843-6	PH21	Soluble	Solid	300.0	17336
890-1843-7	PH21A	Soluble	Solid	300.0	17336
890-1843-8	PH21B	Soluble	Solid	300.0	17336

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

HPLC/IC (Continued)

Analysis Batch: 17522 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-17336/1-A	Method Blank	Soluble	Solid	300.0	17336
LCS 880-17336/2-A	Lab Control Sample	Soluble	Solid	300.0	17336
LCSD 880-17336/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17336
890-1842-A-13-D MS	Matrix Spike	Soluble	Solid	300.0	17336
890-1842-A-13-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	17336

Analysis Batch: 17523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1843-9	PH21C	Soluble	Solid	300.0	17337
890-1843-10	PH21D	Soluble	Solid	300.0	17337
890-1843-11	PH21E	Soluble	Solid	300.0	17337
890-1843-12	PH21F	Soluble	Solid	300.0	17337
890-1843-13	PH21G	Soluble	Solid	300.0	17337
890-1843-14	PH22	Soluble	Solid	300.0	17337
890-1843-15	PH22A	Soluble	Solid	300.0	17337
890-1843-16	PH22B	Soluble	Solid	300.0	17337
890-1843-17	PH22C	Soluble	Solid	300.0	17337
890-1843-18	PH22D	Soluble	Solid	300.0	17337
890-1843-19	PH22E	Soluble	Solid	300.0	17337
890-1843-20	PH23	Soluble	Solid	300.0	17337
890-1843-21	PH23A	Soluble	Solid	300.0	17337
890-1843-22	PH23B	Soluble	Solid	300.0	17337
890-1843-23	PH23C	Soluble	Solid	300.0	17337
890-1843-24	PH23D	Soluble	Solid	300.0	17337
890-1843-25	PH23E	Soluble	Solid	300.0	17337
890-1843-26	PH23F	Soluble	Solid	300.0	17337
MB 880-17337/1-A	Method Blank	Soluble	Solid	300.0	17337
LCS 880-17337/2-A	Lab Control Sample	Soluble	Solid	300.0	17337
LCSD 880-17337/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17337
890-1843-9 MS	PH21C	Soluble	Solid	300.0	17337
890-1843-9 MSD	PH21C	Soluble	Solid	300.0	17337
890-1843-19 MS	PH22E	Soluble	Solid	300.0	17337
890-1843-19 MSD	PH22E	Soluble	Solid	300.0	17337

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH20B

Lab Sample ID: 890-1843-1

Date Collected: 01/12/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 17:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 12:49	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 13:34	SC	XEN MID

Client Sample ID: PH20C

Lab Sample ID: 890-1843-2

Date Collected: 01/12/22 13:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 17:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 13:51	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 13:56	SC	XEN MID

Client Sample ID: PH20D

Lab Sample ID: 890-1843-3

Date Collected: 01/12/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 17:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 14:12	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 14:04	SC	XEN MID

Client Sample ID: PH20E

Lab Sample ID: 890-1843-4

Date Collected: 01/12/22 15:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 18:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH20E

Lab Sample ID: 890-1843-4

Date Collected: 01/12/22 15:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 14:33	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 14:12	SC	XEN MID

Client Sample ID: PH20F

Lab Sample ID: 890-1843-5

Date Collected: 01/12/22 16:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 18:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 14:55	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 14:19	SC	XEN MID

Client Sample ID: PH21

Lab Sample ID: 890-1843-6

Date Collected: 01/13/22 10:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 18:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 14:27	SC	XEN MID

Client Sample ID: PH21A

Lab Sample ID: 890-1843-7

Date Collected: 01/13/22 10:20

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 19:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 15:37	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21A

Lab Sample ID: 890-1843-7

Date Collected: 01/13/22 10:20

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		1	17522	01/23/22 14:34	SC	XEN MID

Client Sample ID: PH21B

Lab Sample ID: 890-1843-8

Date Collected: 01/13/22 10:40

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 19:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 15:58	AJ	XEN MID
Soluble	Leach	DI Leach			17336	01/20/22 09:15	CH	XEN MID
Soluble	Analysis	300.0		5	17522	01/23/22 14:42	SC	XEN MID

Client Sample ID: PH21C

Lab Sample ID: 890-1843-9

Date Collected: 01/13/22 11:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 19:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 16:19	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		5	17523	01/22/22 18:55	CH	XEN MID

Client Sample ID: PH21D

Lab Sample ID: 890-1843-10

Date Collected: 01/13/22 11:20

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 20:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 16:40	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 19:14	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH21E

Lab Sample ID: 890-1843-11

Date Collected: 01/13/22 11:40

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 21:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 17:23	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 19:20	CH	XEN MID

Client Sample ID: PH21F

Lab Sample ID: 890-1843-12

Date Collected: 01/13/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 21:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 17:44	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 19:27	CH	XEN MID

Client Sample ID: PH21G

Lab Sample ID: 890-1843-13

Date Collected: 01/13/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 22:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 18:04	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 19:33	CH	XEN MID

Client Sample ID: PH22

Lab Sample ID: 890-1843-14

Date Collected: 01/13/22 14:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 22:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22

Lab Sample ID: 890-1843-14

Date Collected: 01/13/22 14:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 18:25	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 19:52	CH	XEN MID

Client Sample ID: PH22A

Lab Sample ID: 890-1843-15

Date Collected: 01/13/22 15:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 22:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 18:45	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 19:58	CH	XEN MID

Client Sample ID: PH22B

Lab Sample ID: 890-1843-16

Date Collected: 01/13/22 16:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 23:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 19:06	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 20:05	CH	XEN MID

Client Sample ID: PH22C

Lab Sample ID: 890-1843-17

Date Collected: 01/14/22 09:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 23:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 19:28	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH22C

Lab Sample ID: 890-1843-17

Date Collected: 01/14/22 09:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 20:11	CH	XEN MID

Client Sample ID: PH22D

Lab Sample ID: 890-1843-18

Date Collected: 01/14/22 10:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/20/22 23:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 19:50	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 20:17	CH	XEN MID

Client Sample ID: PH22E

Lab Sample ID: 890-1843-19

Date Collected: 01/14/22 10:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/21/22 00:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 20:12	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 20:24	CH	XEN MID

Client Sample ID: PH23

Lab Sample ID: 890-1843-20

Date Collected: 01/14/22 10:50

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17168	01/19/22 10:30	KL	XEN MID
Total/NA	Analysis	8021B		1	17355	01/21/22 00:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17280	01/19/22 14:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17440	01/21/22 20:34	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 20:43	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23A

Lab Sample ID: 890-1843-21

Date Collected: 01/14/22 11:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17169	01/19/22 13:48	KL	XEN MID
Total/NA	Analysis	8021B		1	17429	01/21/22 12:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17279	01/19/22 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17443	01/22/22 04:48	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 20:49	CH	XEN MID

Client Sample ID: PH23B

Lab Sample ID: 890-1843-22

Date Collected: 01/14/22 12:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17169	01/19/22 13:48	KL	XEN MID
Total/NA	Analysis	8021B		1	17429	01/21/22 12:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17279	01/19/22 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17443	01/22/22 05:10	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		5	17523	01/22/22 21:08	CH	XEN MID

Client Sample ID: PH23C

Lab Sample ID: 890-1843-23

Date Collected: 01/14/22 12:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17169	01/19/22 13:48	KL	XEN MID
Total/NA	Analysis	8021B		1	17429	01/21/22 13:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17279	01/19/22 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17443	01/22/22 05:30	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		5	17523	01/22/22 21:15	CH	XEN MID

Client Sample ID: PH23D

Lab Sample ID: 890-1843-24

Date Collected: 01/14/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17169	01/19/22 13:48	KL	XEN MID
Total/NA	Analysis	8021B		1	17429	01/21/22 13:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH23D

Lab Sample ID: 890-1843-24

Date Collected: 01/14/22 13:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17279	01/19/22 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17443	01/22/22 05:51	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 21:21	CH	XEN MID

Client Sample ID: PH23E

Lab Sample ID: 890-1843-25

Date Collected: 01/14/22 13:30

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17169	01/19/22 13:48	KL	XEN MID
Total/NA	Analysis	8021B		1	17429	01/21/22 13:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17279	01/19/22 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17443	01/22/22 06:12	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 21:27	CH	XEN MID

Client Sample ID: PH23F

Lab Sample ID: 890-1843-26

Date Collected: 01/14/22 14:00

Matrix: Solid

Date Received: 01/18/22 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			17113	01/21/22 12:09	KL	XEN MID
Total/NA	Analysis	8021B		1	17425	01/21/22 15:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17647	01/24/22 17:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17641	01/24/22 16:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17279	01/19/22 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17443	01/22/22 06:32	AJ	XEN MID
Soluble	Leach	DI Leach			17337	01/20/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	17523	01/22/22 21:34	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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

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

- 1
- 2
- 3
- 4
- 5
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- 13
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Method Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1843-1
 SDG: 31403236.022.0129 TASK 03.02

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: PLU 25 BD 901H

Job ID: 890-1843-1
SDG: 31403236.022.0129 TASK 03.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1843-1	PH20B	Solid	01/12/22 13:00	01/18/22 11:50	8
890-1843-2	PH20C	Solid	01/12/22 13:30	01/18/22 11:50	12
890-1843-3	PH20D	Solid	01/12/22 14:00	01/18/22 11:50	14
890-1843-4	PH20E	Solid	01/12/22 15:00	01/18/22 11:50	16
890-1843-5	PH20F	Solid	01/12/22 16:00	01/18/22 11:50	17
890-1843-6	PH21	Solid	01/13/22 10:00	01/18/22 11:50	0.5
890-1843-7	PH21A	Solid	01/13/22 10:20	01/18/22 11:50	2
890-1843-8	PH21B	Solid	01/13/22 10:40	01/18/22 11:50	4
890-1843-9	PH21C	Solid	01/13/22 11:00	01/18/22 11:50	8
890-1843-10	PH21D	Solid	01/13/22 11:20	01/18/22 11:50	10
890-1843-11	PH21E	Solid	01/13/22 11:40	01/18/22 11:50	12
890-1843-12	PH21F	Solid	01/13/22 13:00	01/18/22 11:50	14
890-1843-13	PH21G	Solid	01/13/22 14:00	01/18/22 11:50	16
890-1843-14	PH22	Solid	01/13/22 14:30	01/18/22 11:50	0.5
890-1843-15	PH22A	Solid	01/13/22 15:00	01/18/22 11:50	4
890-1843-16	PH22B	Solid	01/13/22 16:00	01/18/22 11:50	8
890-1843-17	PH22C	Solid	01/14/22 09:30	01/18/22 11:50	12
890-1843-18	PH22D	Solid	01/14/22 10:00	01/18/22 11:50	14
890-1843-19	PH22E	Solid	01/14/22 10:30	01/18/22 11:50	16
890-1843-20	PH23	Solid	01/14/22 10:50	01/18/22 11:50	0.5
890-1843-21	PH23A	Solid	01/14/22 11:00	01/18/22 11:50	4
890-1843-22	PH23B	Solid	01/14/22 12:00	01/18/22 11:50	6
890-1843-23	PH23C	Solid	01/14/22 12:30	01/18/22 11:50	8
890-1843-24	PH23D	Solid	01/14/22 13:00	01/18/22 11:50	12
890-1843-25	PH23E	Solid	01/14/22 13:30	01/18/22 11:50	14
890-1843-26	PH23F	Solid	01/14/22 14:00	01/18/22 11:50	16

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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) 595-3443 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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP	Company Name:	XTO Energy
Address:	3300 North A Street Midland, TX 79705	Address:	3104 E Green Street Carlsbad, NM 88220
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817 683 2503	Email:	Kalei.Jennings@wsp.com; ben.bellill@wsp.com

Program: <input checked="" type="checkbox"/> UST/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund State of Project:	
Reporting Level: <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> IV	<input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Well IV
Deliverables: <input type="checkbox"/> EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:	

Project Name:	PLU 25 BD 901H	Turn Around	
Project Number:	31403236, 022, 0124 Task: 0802	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Rush:	
Sampler's Name:	BEN BELLILL	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Well Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	5.8 / 5.4	Thermometer ID:	N/A	
Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	0.02	
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Containers:	N/A	
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			Sample Comments
					TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	
PH20B	S	1/2/22	1300	8'	X	X	X	
PH20C			1330	12'				
PH20D			1400	14'				
PH20E			1500	16'				
PH20F			1600	17'				
PH21		1/3/22	1000	0.5'				
PH21A			1020	2'				
PH21B			1040	4'				
PH21C			1100	8'				
PH21D			1120	10'				



890-1843 Chain of Custody
 CC: NAPP 2116546260
 1666621001
 TAT starts the day received by the lab, if received by 4:30pm

Total 200.7 / 6010 200.8 / 6020: BRORA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: BRORA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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
		1.18.22 1500			



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)

Chain of Custody

Work Order No: _____

Page 2 of 3

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP	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:	817 683 2503	Email:	Kalei.Jennings@wsp.com; ben.bellill@wsp.com

Program:	UST/PST	PRP	Brownfields	RC	Superfund
State of Project:					
Reporting Level:	Level II	Level III	ST/UST	RP	Level IV
Deliverables:	EDD	ADAPT	Other:		

Project Name:	PLU 25 BD 901H	Turn Around	
Project Number:	3403236, 022, 0129 T44603, 02	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Rush:	
Sampler's Name:	BEN BELLILL	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Well Ice:	Yes	No
Temperature (°C):				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 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH21E		1/13/22	1140	12'	1	X	X	X	
PH21F			1300	14'	1	X	X	X	
PH21G			1400	16'	1	X	X	X	
PH22			1430	05'	1	X	X	X	
PH22A			1500	4'	1	X	X	X	
PH22B			1600	8'	1	X	X	X	
PH22C		1/14/22	0930	12'	1	X	X	X	
PH22D			1000	14'	1	X	X	X	
PH22E			1030	16'	1	X	X	X	
PH23			1050	05'	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 Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		1.18.22			



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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

Chain of Custody

Work Order No: _____

Page 3 of 3

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP	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:	817 683 2503	Email:	Kalei.Jennings@wsp.com, ben.bell@wsp.com

Program:	<input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund
State of Project:	<input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV
Deliverables:	<input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	PLU 25 BD 901H	Turn Around	<input checked="" type="checkbox"/>
Project Number:	314 D3236, 022, 0124 Table 63.02	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Flush:	
Sampler's Name:	BEN BELL	Due Date:	

Temperature (°C):		Temp Blank:	Yes No	Wet Ice:	Yes No
Received Intact:	Yes No	Thermometer ID			
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 0-8021)	Chloride (EPA 300.0)
PH23A	S	1/14/22	1100	4'	1	X	X	Y
PH23B			1200	6'				
PH23C			1230	8'				
PH23D			1300	12'				
PH23E			1330	14'				
PH23F			1400	16'				

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

Note: 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
		1.02.22 1:53			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1843-1
SDG Number: 31403236.022.0129 TASK 03.02

Login Number: 1843
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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1843-1
SDG Number: 31403236.022.0129 TASK 03.02

Login Number: 1843
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 01/19/22 01:26 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.	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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Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1978-1
Laboratory SDG: 31403236.022.0129 TASK 03.02
Client Project/Site: PLU 25 BD 901H

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

Attn: Kalei Jennings

Authorized for release by:
2/28/2022 3:22:25 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.

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Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Laboratory Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Job ID: 890-1978-1

Laboratory: Eurofins Carlsbad**Narrative**

**Job Narrative
890-1978-1****Receipt**

The samples were received on 2/18/2022 12:17 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: Surrogate recovery for the following samples were outside control limits: (880-11473-A-1-C), (880-11473-A-1-D MS) and (880-11473-A-1-E 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 880-19898 and analytical batch 880-19941 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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24

Lab Sample ID: 890-1978-1

Date Collected: 02/17/22 10:00

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 13:51	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 13:51	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 13:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/24/22 08:30	02/26/22 13:51	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 13:51	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/24/22 08:30	02/26/22 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	02/24/22 08:30	02/26/22 13:51	1
1,4-Difluorobenzene (Surr)	117		70 - 130	02/24/22 08:30	02/26/22 13:51	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 00:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 00:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	02/21/22 11:35	02/22/22 00:06	1
o-Terphenyl	81		70 - 130	02/21/22 11:35	02/22/22 00:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	491	F1	5.04	mg/Kg			02/22/22 19:01	1

Client Sample ID: PH24A

Lab Sample ID: 890-1978-2

Date Collected: 02/17/22 10:20

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 14:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 14:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 14:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 08:30	02/26/22 14:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 14:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 08:30	02/26/22 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	02/24/22 08:30	02/26/22 14:12	1
1,4-Difluorobenzene (Surr)	82		70 - 130	02/24/22 08:30	02/26/22 14:12	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24A

Lab Sample ID: 890-1978-2

Date Collected: 02/17/22 10:20

Matrix: Solid

Date Received: 02/18/22 12:17

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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 00:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 00:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 00:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	02/21/22 11:35	02/22/22 00:27	1
o-Terphenyl	80		70 - 130	02/21/22 11:35	02/22/22 00:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	337		4.99	mg/Kg			02/22/22 19:20	1

Client Sample ID: PH24B

Lab Sample ID: 890-1978-3

Date Collected: 02/17/22 10:50

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/24/22 08:30	02/26/22 14:33	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/24/22 08:30	02/26/22 14:33	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/24/22 08:30	02/26/22 14:33	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		02/24/22 08:30	02/26/22 14:33	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/24/22 08:30	02/26/22 14:33	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		02/24/22 08:30	02/26/22 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	02/24/22 08:30	02/26/22 14:33	1
1,4-Difluorobenzene (Surr)	86		70 - 130	02/24/22 08:30	02/26/22 14:33	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 00:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 00:47	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24B

Lab Sample ID: 890-1978-3

Date Collected: 02/17/22 10:50

Matrix: Solid

Date Received: 02/18/22 12:17

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)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 00:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130			02/21/22 11:35	02/22/22 00:47	1
o-Terphenyl	81		70 - 130			02/21/22 11:35	02/22/22 00:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.4		4.97	mg/Kg			02/22/22 19:26	1

Client Sample ID: PH24C

Lab Sample ID: 890-1978-4

Date Collected: 02/17/22 11:15

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/24/22 08:30	02/26/22 14:54	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/24/22 08:30	02/26/22 14:54	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/24/22 08:30	02/26/22 14:54	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/24/22 08:30	02/26/22 14:54	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/24/22 08:30	02/26/22 14:54	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/24/22 08:30	02/26/22 14:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130			02/24/22 08:30	02/26/22 14:54	1
1,4-Difluorobenzene (Surr)	86		70 - 130			02/24/22 08:30	02/26/22 14:54	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 01:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/21/22 11:35	02/22/22 01:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/21/22 11:35	02/22/22 01:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130			02/21/22 11:35	02/22/22 01:29	1
o-Terphenyl	83		70 - 130			02/21/22 11:35	02/22/22 01:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		5.00	mg/Kg			02/22/22 19:45	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24D

Lab Sample ID: 890-1978-5

Date Collected: 02/17/22 12:00

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/24/22 08:30	02/26/22 15:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:15	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/24/22 08:30	02/26/22 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	02/24/22 08:30	02/26/22 15:15	1
1,4-Difluorobenzene (Surr)	111		70 - 130	02/24/22 08:30	02/26/22 15:15	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 01:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 01:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 01:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	02/21/22 11:35	02/22/22 01:50	1
o-Terphenyl	84		70 - 130	02/21/22 11:35	02/22/22 01:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	197		4.96	mg/Kg			02/22/22 19:52	1

Client Sample ID: PH24E

Lab Sample ID: 890-1978-6

Date Collected: 02/17/22 12:45

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		02/24/22 08:30	02/26/22 15:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/24/22 08:30	02/26/22 15:36	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/24/22 08:30	02/26/22 15:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/24/22 08:30	02/26/22 15:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/24/22 08:30	02/26/22 15:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/24/22 08:30	02/26/22 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	02/24/22 08:30	02/26/22 15:36	1
1,4-Difluorobenzene (Surr)	99		70 - 130	02/24/22 08:30	02/26/22 15:36	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24E

Lab Sample ID: 890-1978-6

Date Collected: 02/17/22 12:45

Matrix: Solid

Date Received: 02/18/22 12:17

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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 02:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/21/22 11:35	02/22/22 02:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/21/22 11:35	02/22/22 02:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	02/21/22 11:35	02/22/22 02:10	1
o-Terphenyl	86		70 - 130	02/21/22 11:35	02/22/22 02:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.4		4.97	mg/Kg			02/22/22 19:58	1

Client Sample ID: PH24F

Lab Sample ID: 890-1978-7

Date Collected: 02/17/22 13:30

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/24/22 08:30	02/26/22 15:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 15:57	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/24/22 08:30	02/26/22 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	02/24/22 08:30	02/26/22 15:57	1
1,4-Difluorobenzene (Surr)	112		70 - 130	02/24/22 08:30	02/26/22 15:57	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 02:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/21/22 11:35	02/22/22 02:31	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24F

Lab Sample ID: 890-1978-7

Date Collected: 02/17/22 13:30

Matrix: Solid

Date Received: 02/18/22 12:17

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)	<49.9	U	49.9	mg/Kg		02/21/22 11:35	02/22/22 02:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130			02/21/22 11:35	02/22/22 02:31	1
o-Terphenyl	88		70 - 130			02/21/22 11:35	02/22/22 02:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81.8		5.00	mg/Kg			02/22/22 20:04	1

Client Sample ID: PH24G

Lab Sample ID: 890-1978-8

Date Collected: 02/17/22 14:00

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 16:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 16:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 16:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 08:30	02/26/22 16:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 16:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 08:30	02/26/22 16:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			02/24/22 08:30	02/26/22 16:18	1
1,4-Difluorobenzene (Surr)	93		70 - 130			02/24/22 08:30	02/26/22 16:18	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 02:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 02:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 02:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130			02/21/22 11:35	02/22/22 02:52	1
o-Terphenyl	80		70 - 130			02/21/22 11:35	02/22/22 02:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.4		5.00	mg/Kg			02/22/22 20:11	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24H

Lab Sample ID: 890-1978-9

Date Collected: 02/17/22 15:00

Matrix: Solid

Date Received: 02/18/22 12:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 16:39	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 16:39	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 16:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/24/22 08:30	02/26/22 16:39	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/24/22 08:30	02/26/22 16:39	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/24/22 08:30	02/26/22 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	02/24/22 08:30	02/26/22 16:39	1
1,4-Difluorobenzene (Surr)	115		70 - 130	02/24/22 08:30	02/26/22 16:39	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			02/28/22 10:23	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			02/22/22 16:01	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		02/21/22 11:35	02/22/22 03:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 03:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/22/22 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	02/21/22 11:35	02/22/22 03:12	1
o-Terphenyl	83		70 - 130	02/21/22 11:35	02/22/22 03:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.1		5.02	mg/Kg			02/22/22 20:17	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1967-A-1-D MS	Matrix Spike	97	115
890-1967-A-1-E MSD	Matrix Spike Duplicate	101	118
890-1978-1	PH24	103	117
890-1978-2	PH24A	147 S1+	82
890-1978-3	PH24B	133 S1+	86
890-1978-4	PH24C	149 S1+	86
890-1978-5	PH24D	104	111
890-1978-6	PH24E	105	99
890-1978-7	PH24F	99	112
890-1978-8	PH24G	118	93
890-1978-9	PH24H	102	115
LCS 880-19711/1-A	Lab Control Sample	96	103
LCSD 880-19711/2-A	Lab Control Sample Dup	97	107
MB 880-19711/5-A	Method Blank	115	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-11473-A-1-D MS	Matrix Spike	63 S1-	53 S1-
880-11473-A-1-E MSD	Matrix Spike Duplicate	73	61 S1-
890-1978-1	PH24	71	81
890-1978-2	PH24A	71	80
890-1978-3	PH24B	72	81
890-1978-4	PH24C	74	83
890-1978-5	PH24D	74	84
890-1978-6	PH24E	76	86
890-1978-7	PH24F	72	88
890-1978-8	PH24G	72	80
890-1978-9	PH24H	73	83
LCS 880-19908/2-A	Lab Control Sample	114	114
LCSD 880-19908/3-A	Lab Control Sample Dup	118	122
MB 880-19908/1-A	Method Blank	74	88

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

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19711/5-A
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19711

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 08:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 08:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 08:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/24/22 08:30	02/26/22 08:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/24/22 08:30	02/26/22 08:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/24/22 08:30	02/26/22 08:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	02/24/22 08:30	02/26/22 08:37	1
1,4-Difluorobenzene (Surr)	101		70 - 130	02/24/22 08:30	02/26/22 08:37	1

Lab Sample ID: LCS 880-19711/1-A
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09405		mg/Kg		94	70 - 130
Toluene	0.100	0.08541		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08723		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1794		mg/Kg		90	70 - 130
o-Xylene	0.100	0.09139		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-19711/2-A
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1072		mg/Kg		107	70 - 130	13	35
Toluene	0.100	0.09105		mg/Kg		91	70 - 130	6	35
Ethylbenzene	0.100	0.09125		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1861		mg/Kg		93	70 - 130	4	35
o-Xylene	0.100	0.09413		mg/Kg		94	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-1967-A-1-D MS
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0994	0.09142		mg/Kg		92	70 - 130
Toluene	<0.00199	U F1	0.0994	0.06487	F1	mg/Kg		65	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: 890-1967-A-1-D MS
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00199	U F1	0.0994	0.06677	F1	mg/Kg		67	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1318	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00199	U	0.0994	0.07148		mg/Kg		72	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 890-1967-A-1-E MSD
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Benzene	<0.00199	U	0.0998	0.09905		mg/Kg		99	70 - 130	8	35	
Toluene	<0.00199	U F1	0.0998	0.06894	F1	mg/Kg		69	70 - 130	6	35	
Ethylbenzene	<0.00199	U F1	0.0998	0.06734	F1	mg/Kg		67	70 - 130	1	35	
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1358	F1	mg/Kg		68	70 - 130	3	35	
o-Xylene	<0.00199	U	0.0998	0.07305		mg/Kg		73	70 - 130	2	35	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

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

Lab Sample ID: MB 880-19908/1-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19908

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/21/22 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/21/22 19:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/21/22 11:35	02/21/22 19:55	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	74		70 - 130	02/21/22 11:35	02/21/22 19:55	1
o-Terphenyl	88		70 - 130	02/21/22 11:35	02/21/22 19:55	1

Lab Sample ID: LCS 880-19908/2-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19908

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	879.4		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1025		mg/Kg		102	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

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

Lab Sample ID: LCS 880-19908/2-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19908

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-19908/3-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19908

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	929.6		mg/Kg		93	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	1000	1117		mg/Kg		112	70 - 130	9	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	118		70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: 880-11473-A-1-D MS
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19908

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1018		mg/Kg		100	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1067		mg/Kg		104	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	63	S1-	70 - 130
o-Terphenyl	53	S1-	70 - 130

Lab Sample ID: 880-11473-A-1-E MSD
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19908

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1185		mg/Kg		117	70 - 130	15	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1241		mg/Kg		122	70 - 130	15	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	73		70 - 130
o-Terphenyl	61	S1-	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19898/1-A
Matrix: Solid
Analysis Batch: 19941

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			02/22/22 17:13	1

Lab Sample ID: LCS 880-19898/2-A
Matrix: Solid
Analysis Batch: 19941

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 880-19898/3-A
Matrix: Solid
Analysis Batch: 19941

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	258.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-1978-1 MS
Matrix: Solid
Analysis Batch: 19941

Client Sample ID: PH24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	491	F1	252	809.2	F1	mg/Kg		126	90 - 110

Lab Sample ID: 890-1978-1 MSD
Matrix: Solid
Analysis Batch: 19941

Client Sample ID: PH24
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	491	F1	252	834.6	F1	mg/Kg		136	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

GC VOA

Prep Batch: 19711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Total/NA	Solid	5035	
890-1978-2	PH24A	Total/NA	Solid	5035	
890-1978-3	PH24B	Total/NA	Solid	5035	
890-1978-4	PH24C	Total/NA	Solid	5035	
890-1978-5	PH24D	Total/NA	Solid	5035	
890-1978-6	PH24E	Total/NA	Solid	5035	
890-1978-7	PH24F	Total/NA	Solid	5035	
890-1978-8	PH24G	Total/NA	Solid	5035	
890-1978-9	PH24H	Total/NA	Solid	5035	
MB 880-19711/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19711/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19711/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1967-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-1967-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Total/NA	Solid	8021B	19711
890-1978-2	PH24A	Total/NA	Solid	8021B	19711
890-1978-3	PH24B	Total/NA	Solid	8021B	19711
890-1978-4	PH24C	Total/NA	Solid	8021B	19711
890-1978-5	PH24D	Total/NA	Solid	8021B	19711
890-1978-6	PH24E	Total/NA	Solid	8021B	19711
890-1978-7	PH24F	Total/NA	Solid	8021B	19711
890-1978-8	PH24G	Total/NA	Solid	8021B	19711
890-1978-9	PH24H	Total/NA	Solid	8021B	19711
MB 880-19711/5-A	Method Blank	Total/NA	Solid	8021B	19711
LCS 880-19711/1-A	Lab Control Sample	Total/NA	Solid	8021B	19711
LCSD 880-19711/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19711
890-1967-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	19711
890-1967-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19711

Analysis Batch: 20445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Total/NA	Solid	Total BTEX	
890-1978-2	PH24A	Total/NA	Solid	Total BTEX	
890-1978-3	PH24B	Total/NA	Solid	Total BTEX	
890-1978-4	PH24C	Total/NA	Solid	Total BTEX	
890-1978-5	PH24D	Total/NA	Solid	Total BTEX	
890-1978-6	PH24E	Total/NA	Solid	Total BTEX	
890-1978-7	PH24F	Total/NA	Solid	Total BTEX	
890-1978-8	PH24G	Total/NA	Solid	Total BTEX	
890-1978-9	PH24H	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 19889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Total/NA	Solid	8015B NM	19908
890-1978-2	PH24A	Total/NA	Solid	8015B NM	19908
890-1978-3	PH24B	Total/NA	Solid	8015B NM	19908

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
 SDG: 31403236.022.0129 TASK 03.02

GC Semi VOA (Continued)

Analysis Batch: 19889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-4	PH24C	Total/NA	Solid	8015B NM	19908
890-1978-5	PH24D	Total/NA	Solid	8015B NM	19908
890-1978-6	PH24E	Total/NA	Solid	8015B NM	19908
890-1978-7	PH24F	Total/NA	Solid	8015B NM	19908
890-1978-8	PH24G	Total/NA	Solid	8015B NM	19908
890-1978-9	PH24H	Total/NA	Solid	8015B NM	19908
MB 880-19908/1-A	Method Blank	Total/NA	Solid	8015B NM	19908
LCS 880-19908/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19908
LCSD 880-19908/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19908
880-11473-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	19908
880-11473-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19908

Prep Batch: 19908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Total/NA	Solid	8015NM Prep	
890-1978-2	PH24A	Total/NA	Solid	8015NM Prep	
890-1978-3	PH24B	Total/NA	Solid	8015NM Prep	
890-1978-4	PH24C	Total/NA	Solid	8015NM Prep	
890-1978-5	PH24D	Total/NA	Solid	8015NM Prep	
890-1978-6	PH24E	Total/NA	Solid	8015NM Prep	
890-1978-7	PH24F	Total/NA	Solid	8015NM Prep	
890-1978-8	PH24G	Total/NA	Solid	8015NM Prep	
890-1978-9	PH24H	Total/NA	Solid	8015NM Prep	
MB 880-19908/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19908/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19908/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11473-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11473-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Total/NA	Solid	8015 NM	
890-1978-2	PH24A	Total/NA	Solid	8015 NM	
890-1978-3	PH24B	Total/NA	Solid	8015 NM	
890-1978-4	PH24C	Total/NA	Solid	8015 NM	
890-1978-5	PH24D	Total/NA	Solid	8015 NM	
890-1978-6	PH24E	Total/NA	Solid	8015 NM	
890-1978-7	PH24F	Total/NA	Solid	8015 NM	
890-1978-8	PH24G	Total/NA	Solid	8015 NM	
890-1978-9	PH24H	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Soluble	Solid	DI Leach	
890-1978-2	PH24A	Soluble	Solid	DI Leach	
890-1978-3	PH24B	Soluble	Solid	DI Leach	
890-1978-4	PH24C	Soluble	Solid	DI Leach	
890-1978-5	PH24D	Soluble	Solid	DI Leach	
890-1978-6	PH24E	Soluble	Solid	DI Leach	

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QC Association Summary

Client: WSP USA Inc.
 Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
 SDG: 31403236.022.0129 TASK 03.02

HPLC/IC (Continued)

Leach Batch: 19898 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-7	PH24F	Soluble	Solid	DI Leach	
890-1978-8	PH24G	Soluble	Solid	DI Leach	
890-1978-9	PH24H	Soluble	Solid	DI Leach	
MB 880-19898/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19898/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19898/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1978-1 MS	PH24	Soluble	Solid	DI Leach	
890-1978-1 MSD	PH24	Soluble	Solid	DI Leach	

Analysis Batch: 19941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1978-1	PH24	Soluble	Solid	300.0	19898
890-1978-2	PH24A	Soluble	Solid	300.0	19898
890-1978-3	PH24B	Soluble	Solid	300.0	19898
890-1978-4	PH24C	Soluble	Solid	300.0	19898
890-1978-5	PH24D	Soluble	Solid	300.0	19898
890-1978-6	PH24E	Soluble	Solid	300.0	19898
890-1978-7	PH24F	Soluble	Solid	300.0	19898
890-1978-8	PH24G	Soluble	Solid	300.0	19898
890-1978-9	PH24H	Soluble	Solid	300.0	19898
MB 880-19898/1-A	Method Blank	Soluble	Solid	300.0	19898
LCS 880-19898/2-A	Lab Control Sample	Soluble	Solid	300.0	19898
LCSD 880-19898/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19898
890-1978-1 MS	PH24	Soluble	Solid	300.0	19898
890-1978-1 MSD	PH24	Soluble	Solid	300.0	19898

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24

Lab Sample ID: 890-1978-1

Date Collected: 02/17/22 10:00

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 13:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 00:06	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 19:01	CH	XEN MID

Client Sample ID: PH24A

Lab Sample ID: 890-1978-2

Date Collected: 02/17/22 10:20

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 14:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 00:27	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 19:20	CH	XEN MID

Client Sample ID: PH24B

Lab Sample ID: 890-1978-3

Date Collected: 02/17/22 10:50

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 14:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 00:47	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 19:26	CH	XEN MID

Client Sample ID: PH24C

Lab Sample ID: 890-1978-4

Date Collected: 02/17/22 11:15

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 14:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24C

Lab Sample ID: 890-1978-4

Date Collected: 02/17/22 11:15

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 01:29	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 19:45	CH	XEN MID

Client Sample ID: PH24D

Lab Sample ID: 890-1978-5

Date Collected: 02/17/22 12:00

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 15:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 01:50	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 19:52	CH	XEN MID

Client Sample ID: PH24E

Lab Sample ID: 890-1978-6

Date Collected: 02/17/22 12:45

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 15:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 02:10	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 19:58	CH	XEN MID

Client Sample ID: PH24F

Lab Sample ID: 890-1978-7

Date Collected: 02/17/22 13:30

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 15:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 02:31	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Client Sample ID: PH24F

Lab Sample ID: 890-1978-7

Date Collected: 02/17/22 13:30

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 20:04	CH	XEN MID

Client Sample ID: PH24G

Lab Sample ID: 890-1978-8

Date Collected: 02/17/22 14:00

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 16:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 02:52	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 20:11	CH	XEN MID

Client Sample ID: PH24H

Lab Sample ID: 890-1978-9

Date Collected: 02/17/22 15:00

Matrix: Solid

Date Received: 02/18/22 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	20287	02/26/22 16:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20445	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20082	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19908	02/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	19889	02/22/22 03:12	AJ	XEN MID
Soluble	Leach	DI Leach			19898	02/21/22 09:19	CH	XEN MID
Soluble	Analysis	300.0		1	19941	02/22/22 20:17	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.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

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

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Method Summary

Client: WSP USA Inc.
Project/Site: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

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: PLU 25 BD 901H

Job ID: 890-1978-1
SDG: 31403236.022.0129 TASK 03.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-1978-1	PH24	Solid	02/17/22 10:00	02/18/22 12:17
890-1978-2	PH24A	Solid	02/17/22 10:20	02/18/22 12:17
890-1978-3	PH24B	Solid	02/17/22 10:50	02/18/22 12:17
890-1978-4	PH24C	Solid	02/17/22 11:15	02/18/22 12:17
890-1978-5	PH24D	Solid	02/17/22 12:00	02/18/22 12:17
890-1978-6	PH24E	Solid	02/17/22 12:45	02/18/22 12:17
890-1978-7	PH24F	Solid	02/17/22 13:30	02/18/22 12:17
890-1978-8	PH24G	Solid	02/17/22 14:00	02/18/22 12:17
890-1978-9	PH24H	Solid	02/17/22 15:00	02/18/22 12:17

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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)

Chain of Custody

Work Order No: _____

Project Manager: *Kelci Jennings*
Company Name: WSP
Address: 3300 North A Street
City, State ZIP: Midland, TX 79705
Phone: 432.236.3849
Turn Around: Routine
P.O. Number: *WAPP 211654 6260*
Sampler's Name: *Bryan Bell*
Temp Blank: Yes No
Thermometer ID: *RMW003*
Received Inact: Yes No
Cooler Custody Seals: Yes No
Sample Custody Seals: Yes No
Correction Factor: *1.02*
Total Containers: *5*

Bill to: (if different)
Company Name: *Adrian Baker*
Address: 3104 E Green Street
City, State ZIP: Carlsbad, NM 88220
Email: *bryanbell@wsp.com; kelci.jennings@wsp.com*
Program: UST/PST PRP Brownfields RC Superfund
State of Project:
Reporting Level: Level II Level III ST/UST RP Level IV
Deliverables: EDD ADAPT Other:
Work Order Comments:
Work Order Notes: *16666 21001*

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
PH24	S	2/17/22	1000	1'	1	X	X	X	
PH24 A			1020	4'	1	X	X	X	
PH24 B			1050	6'	1	X	X	X	
PH24 C			1115	8'	1	X	X	X	
PH24 D			1200	10'	1	X	X	X	
PH24 E			1245	12'	1	X	X	X	
PH24 F			1330	14'	1	X	X	X	
PH24 G			1400	16'	1	X	X	X	
PH24 H			1500	17'	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 Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: _____
Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: _____
Relinquished by: (Signature) _____ Received by: (Signature) _____ Date/Time: _____

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)

Client Contact: _____
Shipping/Receiving: _____
Company: Eurofins Environment Testing South Cent
Address: 1211 W Florida Ave.
City: Midland
State, Zip: TX 79701
Phone: 432-704-5440(Tel)
Email: _____
Project Name: PLU 25 BD 901H
Site: _____

Sampler: _____
Phone: _____
Lab P.M.: Kramer, Jessica
E-Mail: jessica.kramer@eurofins.com

Carrier Tracking No(s): _____
State of Origin: New Mexico
Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas

COC No: 890-631 1
Page: Page 1 of 1
Job #: 890-1978-1

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 AsH2O2
P Na2CO3
Q Na2SO3
R Na2S2O3
S H2SO4
T TSP Dodecahydrate
U Acetone
V MCAA
W - pH 4.5
Z other (Specify)

Due Date Requested: 2/24/2022
TAT Requested (days):

Analysis Requested

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewat, BI=Issue, AA=AI)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	8016MOD_Calc	300_ORGFM_28/DI_LEACH Chloride	8021B/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
PH24 (890-1978-1)	2/17/22	10 00	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24A (890-1978-2)	2/17/22	10 20	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24B (890-1978-3)	2/17/22	10 50	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24C (890-1978-4)	2/17/22	11 15	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24D (890-1978-5)	2/17/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24E (890-1978-6)	2/17/22	12 45	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24F (890-1978-7)	2/17/22	13 30	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24G (890-1978-8)	2/17/22	14 00	Mountain	Solid		X	X	X	X	X	X	X	1	
PH24H (890-1978-9)	2/17/22	15 00	Mountain	Solid		X	X	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/estimation being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification

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

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: *Dave Corp 2/18/22* Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No: _____

Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1978-1
SDG Number: 31403236.022.0129 TASK 03.02

Login Number: 1978
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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1978-1
SDG Number: 31403236.022.0129 TASK 03.02

Login Number: 1978
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 02/21/22 08:09 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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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
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District III
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 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

QUESTIONS

Action 369720

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 369720
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2116546260
Incident Name	NAPP2116546260 POKER LAKE UNIT 25 BRUSHY DRAW 901H @ 30-015-45863
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Well	[30-015-45863] POKER LAKE UNIT 25 BD #901H

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	POKER LAKE UNIT 25 BRUSHY DRAW 901H
Date Release Discovered	06/01/2021
Surface Owner	Federal

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

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Corrosion Flow Line - Production Crude Oil Released: 16 BBL Recovered: 15 BBL Lost: 1 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 44 BBL Recovered: 42 BBL Lost: 2 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 369720

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	369720
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 08/02/2024
--	--

District I
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State of New Mexico
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Santa Fe, NM 87505

QUESTIONS, Page 3

Action 369720

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 369720
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Site Characterization
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1/2 and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	4310
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	11300
GRO+DRO (EPA SW-846 Method 8015M)	11250
BTEX (EPA SW-846 Method 8021B or 8260B)	51.3
Benzene (EPA SW-846 Method 8021B or 8260B)	1.5

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	09/13/2021
On what date will (or did) the final sampling or liner inspection occur	02/17/2022
On what date will (or was) the remediation complete(d)	02/17/2024
What is the estimated surface area (in square feet) that will be reclaimed	9200
What is the estimated volume (in cubic yards) that will be reclaimed	450
What is the estimated surface area (in square feet) that will be remediated	9200
What is the estimated volume (in cubic yards) that will be remediated	450

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

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

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 4

Action 369720

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	369720
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 08/02/2024
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

District I
 1625 N. French Dr., Hobbs, NM 88240
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District II
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 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

QUESTIONS, Page 5

Action 369720

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 369720
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Deferral Requests Only

Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.

Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	The impacted soil remains immediately adjacent to and below 11 active subsurface pipelines at approximately 5 feet bgs. There are six 4-inch high-pressure gas lines, three 2-inch high-pressure gas lines, and two 2-inch fiber optic lines. These lines are essential to the production operations at the Site and the high-pressure gas lines could pose severe safety hazards if the ground nearby is disturbed.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1115
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	1170

Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.

Enter the facility ID (##) on which this deferral should be granted	Not answered.
Enter the well API (30-) on which this deferral should be granted	30-015-45863 POKER LAKE UNIT 25 BD #901H
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 08/02/2024
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QUESTIONS, Page 6

Action 369720

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 369720
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

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

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CONDITIONS

Action 369720

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 369720
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
crystal.walker	Variance Request and Deferral Request received special one time case approval from BLM and OCD agrees as well. An estimated 1,170 cubic yards of impacted soil remains in place around the active subsurface pipelines, assuming an 18' depth remediation is needed based on data from samples collected in PH15, buffered by samples that were compliant with the Closure Criteria from PH16 and PH17. The approved deferral area and associated delineation samples are shown on Figure 4 of Application 369720. Approval is granted to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first.	8/8/2024