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

State of New Mexico Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2126639352
District RP	
Facility ID	
Application ID	_

Release Notification

Responsible Party

Responsible Party			OGRID			
Contact Name C			Contact Te	ntact Telephone		
Contact email I			Incident #	(assigned by OCD)	
Contact mail	ing address			1		
			Location	of Release So	ource	
Latitude Longitude						
			(NAD 83 in dec	cimal degrees to 5 decin	nal places)	
Site Name				Site Type		
Date Release	Discovered			API# (if app	olicable)	
Unit Letter	Section	Township	Range	Coun	nty	
Surface Owner	r: State	□ Fadaral □ Tr	ribal 🔲 Private (<i>I</i>	Nama:		
Surface Owner	i. State		iloai 🔲 Fiivate (i	vame		
			Nature and	l Volume of l	Release	
	Material	(s) Released (Select al	ll that annly and attach	calculations or specific	justification for th	e volumes provided below)
Material(s) Released (Select all that apply and attach calcular Crude Oil Volume Released (bbls)		carculations of specific	Volume Reco			
Produced	Water	Volume Release	ed (bbls)		Volume Recovered (bbls)	
		Is the concentrat	tion of total dissolv	ved solids (TDS)	Yes N	No
	4.		$\frac{\text{water} > 10,000 \text{ mg}}{1.0111}$:/1?	V.1 D. 1/111	
Condensa		Volume Release			Volume Recovered (bbls)	
Natural Gas Volume Released (Mcf)			Volume Reco	· · · ·		
Other (describe) Volume/Weight Released (provide units		e units)	Volume/Wei	ght Recovered (provide units)		
Cause of Rele	ease					

Received by OCD: 11/18/2022 1:44:33 PM State of New Mexico
Page 2 Oil Conservation Division

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	Page	12eo1	127	Z

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Was this a major release as defined by	If YES, for what reason(s) does the respon	nsible party consider this a major release?
19.15.29.7(A) NMAC?		
☐ Yes ☐ No		
If YES, was immediate no	ctice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial Ro	esponse
The responsible	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.	
	as been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or c	likes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and	d managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain	why:
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred clease attach all information needed for closure evaluation.
		best of my knowledge and understand that pursuant to OCD rules and
public health or the environr	ment. The acceptance of a C-141 report by the C	fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have
		at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name:	^	Title:
Signatura	ion Baks	Date:
email:		Telephone:
OCD Only		
Received by: Ramona	Marcus	Date: 9/23/2021

NAPP2126639352

Location:	PLU 78 B SWD		
Spill Date:	9/9/2021		
	Area 1		
Approximate A	rea =	1883.00	sq. ft.
Average Satura	tion (or depth) of spill =	4.00	inches
Average Porosi	ty Factor =	0.20	
	VOLUME OF LEAK		
Total Crude Oil	=	0.00	bbls
Total Produced Water = 62.36 I		bbls	
	TOTAL VOLUME OF LEAK		
Total Crude Oi	=	0.00	bbls
Total Produced Water = 62.3		62.36	bbls
	TOTAL VOLUME RECOVERED		
Total Crude Oi	=	0.00	bbls
Total Produced	Water =	40.00	bbls

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Incident ID	NAPP2126639352	
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (ft bgs)			
Did this release impact groundwater or surface water?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No			
Did the release impact areas not on an exploration, development, production, or storage site?	X Yes No			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
 Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release 				
Boring or excavation logs				

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

Topographic/Aerial maps

Photographs including date and GIS information

□ Laboratory data including chain of custody

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Incident ID	NAPP2126639352	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.				
Printed Name:Adrian Baker	Title:Environmental Coordinator			
Signature:Owion Baks	Date:06/06/2022			
email:adrian.baker@exxonmobil.com	Telephone:432-236-3808			
OCD Only				
Received by:	Date:			

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Incident ID	NAPP2126639352	
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Facility ID		
Application ID		

Remediation Plan

Remediation Plan Checklist: Each of the following items must be	e included in the plan.		
 ☑ Detailed description of proposed remediation technique ☑ Scaled sitemap with GPS coordinates showing delineation points ☑ Estimated volume of material to be remediated ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 			
Deferral Requests Only: Each of the following items must be co	nfirmed as part of any request for deferral of remediation.		
Contamination must be in areas immediately under or around p deconstruction.	roduction equipment where remediation could cause a major facility		
Extents of contamination must be fully delineated.			
Contamination does not cause an imminent risk to human healt	h, the environment, or groundwater.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.			
Printed Name:Adrian Baker	Title:Environmental Coordinator		
Signature:Odvion Baks	Date:06/06/2022		
email:adrian.baker@exxonmobil.com	Telephone:432-236-3808		
OCD Only			
Received by:	Date:		
☐ Approved with Attached Conditions of	Approval		
Signature: Jennifer Nobili	Date: 08/22/2022		

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Incident ID	NAPP2126639352	
District RP		
Facility ID		
Application ID		

Remediation Plan

Remediation Plan Checklist: Each of the following items must	be included in the plan.
☐ Detailed description of proposed remediation technique ☐ Scaled sitemap with GPS coordinates showing delineation poi ☐ Estimated volume of material to be remediated ☐ Closure criteria is to Table 1 specifications subject to 19.15.29	1.12(C)(4) NMAC
Proposed schedule for remediation (note if remediation plan ti	meline is more than 90 days OCD approval is required)
<u>Deferral Requests Only</u> : Each of the following items must be co	onfirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around deconstruction.	production equipment where remediation could cause a major facility
Contamination does not cause an imminent risk to human heal	th, the environment, or groundwater.
I however contifue that the information given shows is two and comm	ato to the heat of my lime aviled as and an demotion dethat management to OCD
rules and regulations all operators are required to report and/or file	Dacceptance of a C-141 report does not relieve the operator of
Printed Name: Garrett Green	Title: _SSHE Coordinator
Signature:Satt Surv	Date:11/09/2022
email:garrett.green@exxonmobil.com	Telephone:575-200-0729
OCD Only	
Received by: Jocelyn Harimon	Date:11/18/2022
Approved Approved with Attached Conditions of	f Approval Denied X Deferral Approved
Signature: Jannifan Nakui	Date: 12/16/2022



November 18, 2022

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

Re: Deferral Request PLU 78 B SWD

Incident Number NAPP2126639352

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 the site assessment, delineation and soil sampling activities completed at the PLU 78 B Saltwater Disposal (SWD) (Site). The purpose of the remediation activities was to address impacted soil resulting from a release of 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 additional remedial activites completed as outlined in an approved work plan, XTO is submitting this *Deferral Request*, describing site assessment and excavation activities that have occurred and requesting deferral of final remediation for Incident Numbers NAPP2126639352 until the Site is reconstructed, and/or the well pad is abandoned.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit A, Section 25, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.19442°N, 103.82817° W) and is associated with oil and gas exploration and production disposal operations on Federal Land managed by the Bureau of Land Management (BLM). Figure 1 depicts the site location on a topographic map.

On September 9, 2021, corrosion caused a leak on a flange connecting the ball valve to a stainless-steel pipeline, which resulted in the release of 62.36 barrels (bbls) of produced water onto the well pad and into the adjacent pasture. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 40 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on September 10, 2021 and submitted a Release Notification Form C-141 (Form C-141) on September 23, 2021. The release was assigned Incident Number NAPP2126639352. Site assessment and delineation of the release was completed in October 2021.

In October 2021 and November 2021, impacted soil was removed from the release area on pad; excavation samples collected from the on-pad excavation were compliant with the Site Closure Criteria. Impacted soil was removed from the top 4 feet of the pasture release areas to the maximum extent possible while complying with XTO safety policy regarding excavation within 2 feet of active pipelines. A hydro-vacuum (hydrovac) and hand shovels were used to remove as much soil as possible without disturbing the multiple surface and subsurface active electric lines, high-pressure gas lines, and fiberglass water lines within the release extent. Approximately 25 cubic yards of chloride-impacted soil remained in place immediately surrounding or beneath active pipelines. Following removal of the soil to

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Parks Highway | Carlsbad, New Mexico 88220 | ensolum.com

XTO Energy, Inc Deferral Request PLU 78 B SWD

the maximum extent possible, and a review of laboratory analytical results XTO submitted a *Remediation Work Plan (Work Plan)* on June 6, 2022 and proposed the following remediation activities:

- Continued Excavation: XTO will proceed with vertical excavation of the chloride impacted soil
 identified in floor samples FS09, FS10, and FS12 to below the Site Closure Criteria. Following
 removal of the impacted soil, 5-point composite samples will be collected at least every 200
 square feet from the floor of the excavations, effectively replacing the failing samples. The
 impacted soil will be disposed of at a licensed disposal facility.
- Additional Delineation: Delineation of impacted soil remaining in place beneath and within 2 feet
 of active pipelines is complete, except near the water line near sample SW06. XTO will complete
 delineation of the chloride impacted soil along the water line north of sidewall sample SW06 to
 below the reclamation standards in the top four feet.
- All new excavation and delineation samples will be 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 will be transported at or below 4 degrees Celsius (°C) under strict chainof-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of chloride following EPA Method 300.0.

The Work Plan was approved by NMOCD on August 22, 2022 via email with the following condition:

• Please submit a Deferral Request after implementing the Remediation Plan.

What follows is a description of the work completed in compliance with the approved Work Plan.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As documented in the Work Plan, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH applies to the top 4 feet of the pasture area that was impacted by the release.

DELINEATION AND EXCAVATION ACTIVITIES

On October 10, 2022 Ensolum personnel were at the Site to complete excavation and delineation activities as detailed in the *Work Plan*. The floor of the excavation in the areas of FS09, FS10, and FS12 were excavated to a maximum of 4.5 feet bgs. Confirmation floor samples, FS09A, FS10A, and FS12A were retaken at depths ranging from 4 feet bgs to 4.5 feet bgs. The samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil samples were handled as proposed in the *Work Plan* and delivered to Eurofins in Carlsbad, New Mexico.



XTO Energy, Inc Deferral Request PLU 78 B SWD

Following the excavation, a delineation pothole, PH01 was advanced just north of SW06 in order to delineate the soil remaining in place along the active pipeline (Appendix A). The delineation pothole was advanced via backhoe to a maximum depth of 4 feet bgs. Discrete soil samples were collected from the pothole at depths ranging from 0.5 feet bgs to 4 feet bgs. Soil from the pothole was field screened for VOCs and chloride. Field screening results and observations were logged on a lithologic/soil sampling log, which is included in Appendix B. The delineation soil samples were handled and analyzed as described above. The delineation soil sample locations are depicted on Figure 2. The additional excavation measured approximately 600 square feet. A total of approximately 15 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico

ANALYTICAL RESULTS

Laboratory analytical results for excavation floor samples FS09A, FS10A and FS12A indicated all COC concentrations were compliant with the Closure Criteria for samples collected deeper than 4 feet bgs. Laboratory analytical results for the delineation soil samples collected from pothole PH01 indicated that all COC concentrations were compliant with the Closure Criteria and compliant with the reclamation requirement. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C. Notifications of sampling events are included as Appendix D.

DEFERRAL REQUEST

Impacted soil was removed from the top four feet to comply with the reclamation requirement to the maximum extent possible near active surface and subsurface pipelines, as well as overhead lines and utility poles. The active pipelines are located immediately adjacent to the PLU 78 B SWD well pad in an area with significant belowground and aboveground hazards. Delineation of the remaining impacted soil beneath and near the active pipelines and overhead lines is complete. XTO requests to address the remaining estimated 25 cubic yards of chloride impacted soil at the time of facility abandonment and removal of the active pipelines. The area of soil remaining in place is depicted on Figure 3. XTO does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be greater than 100 feet bgs, the majority of the impacted soil was removed, and the residual impacted soil remaining in place is limited in areal and vertical extent.

XTO has completed the actions approved in the *Work Plan* and is submitting this deferral request as a condition of approval. XTO requests deferral of final remediation for Incident Number NAPP2126639352 until final reclamation of the well pad or major construction, whichever comes first.

XTO Energy, Inc Deferral Request PLU 78 B SWD

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

Sincerely, **Ensolum, LLC**

Anita Thapalia, Ph.D., P.G.

Project Geologist

Ashley L. Ager, M.S., P.G.

ashley L. ager

Principal

cc: Garrett Green, XTO

Shelby Pennington, XTO Bureau of Land Management

Appendices:

Figure 1 Site Receptor Map
Figure 2 Soil Sample Locations

Figure 3 Deferral Map

Table 1 Soil Sample Analytical Results

Appendix A Photographic Log

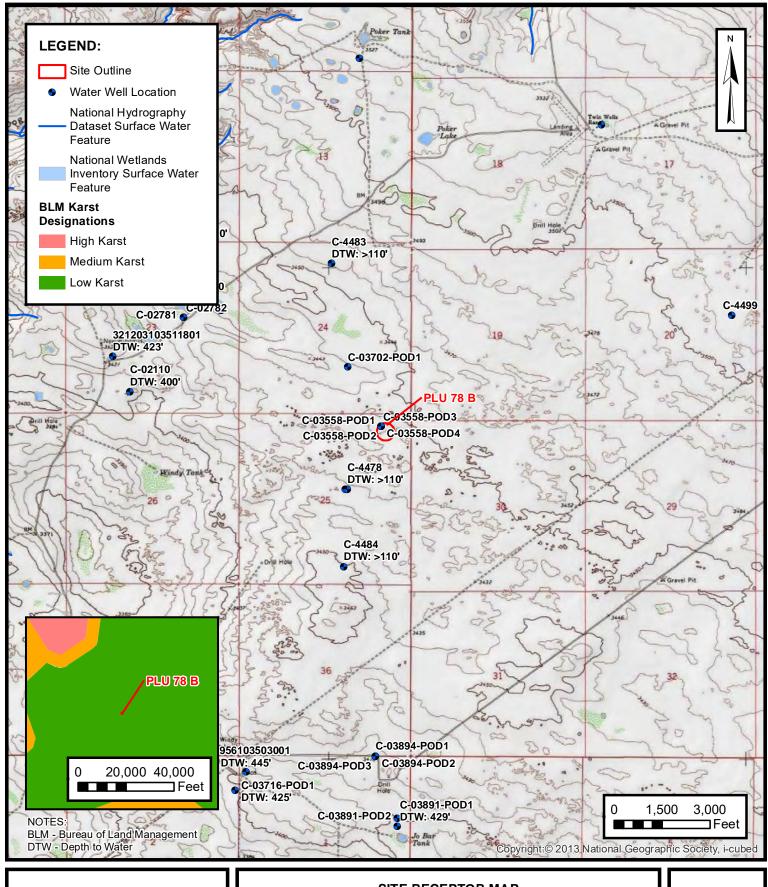
Appendix B Lithologic / Soil Sampling Logs

Appendix C Laboratory Analytical Reports and Chain of Custody Documentation

Appendix D NMOCD Notifications



FIGURES

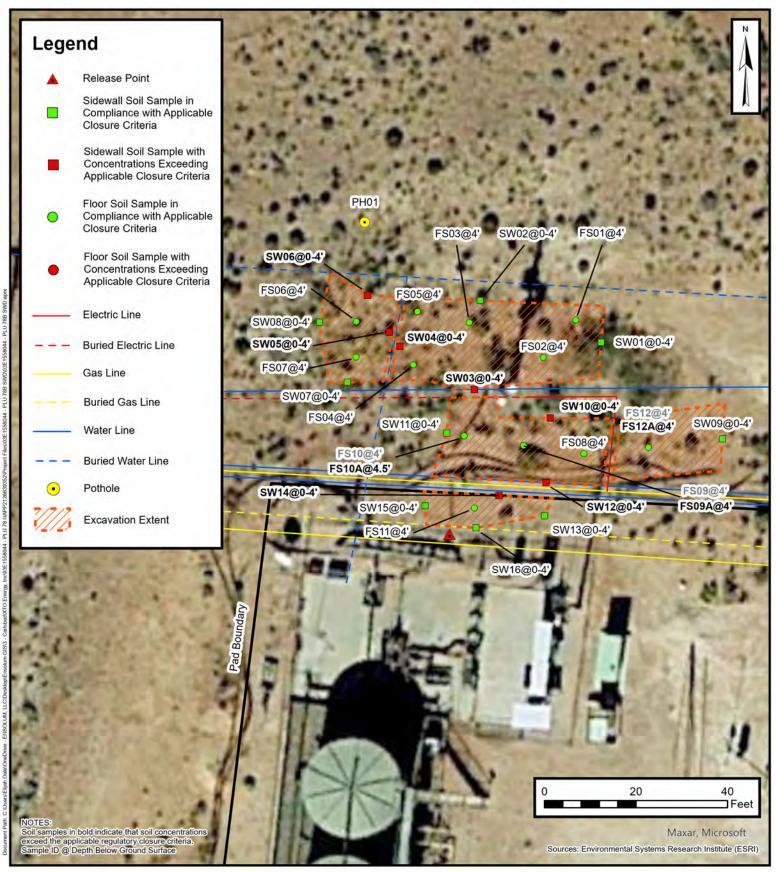




SITE RECEPTOR MAP

XTO ENERGY, INC PLU 78 B SWD NAPP2126639352 Unit A, Sec 23, T24S, R30E Eddy County, New Mexico FIGURE 1

1

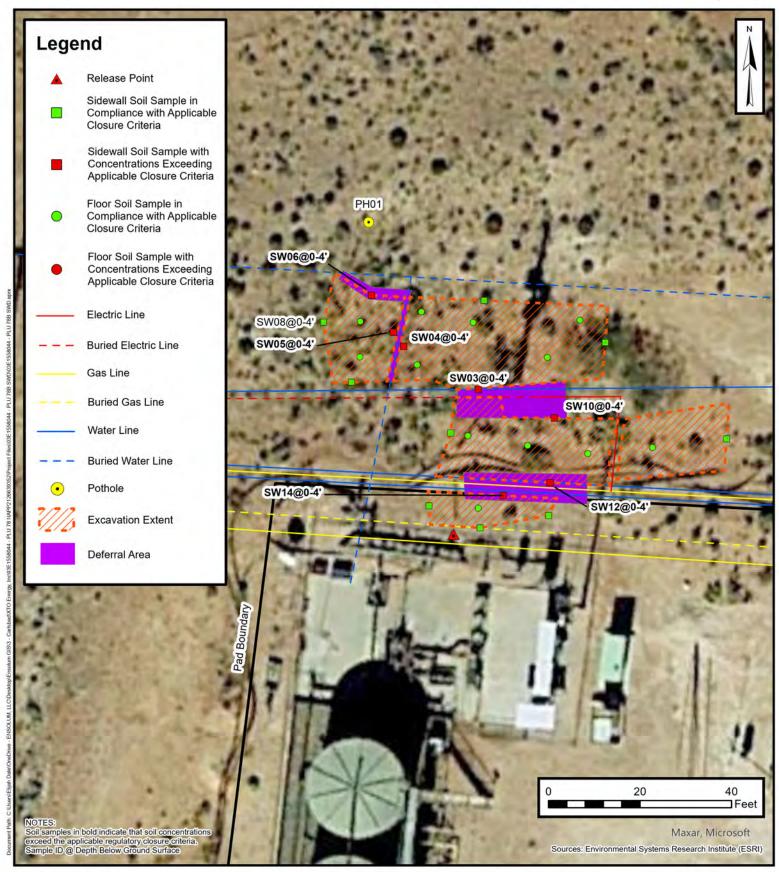




Soil Sample Locations

XTO Energy Inc. PLU 78B SWD

NAPP2126639352 Unit A, Sec 23, T24S, R30E Eddy County, New Mexico FIGURE 2





Deferral Map

XTO Energy Inc. PLU 78B SWD

NAPP2126639352 Unit A, Sec 23, T24S, R30E Eddy County, New Mexico FIGURE 3



TABLES



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS PLU 78 B SWD XTO Energy, LLC 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 Clo	osure Criteria (NM	IAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delina	tion Soil Sample	es				
PH01	10/10/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	15.2
PH01A	10/10/2022	2	< 0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	24.6
PH01B	10/10/2022	4	< 0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	30.1
BH01	10/19/2021	1	<0.00200	<0.00399	<49.9	65.1	<49.9	65.1	65.1	9,780
BH01A	10/19/2021	3	<0.00198	< 0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	6,000
BH01B	10/19/2021	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	12,000
BH02	10/19/2021	3	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	14,100
BH02A	10/19/2021	4	< 0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	10,300
BH03	10/19/2021	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	10,700
BH03A	10/19/2021	4	< 0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	7,690
				Confirmation	on Floor Soil Sa	mples				
FS01	11/10/2021	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	700
FS02	11/10/2021	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	709
FS03	11/10/2021	4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	14,100
FS04	11/10/2021	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	9,540
FS05	11/10/2021	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	740
FS06	11/10/2021	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	635
FS07	11/10/2021	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	888
FS08	11/10/2021	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	7,570
FS09	11/10/2021	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	20,400
FS09A	10/10/2022	4	NA	NA	NA	NA	NA	NA	NA	1,040
FS10	11/10/2021	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	22,600
FS10A	10/10/2022	4.5	NA	NA	NA	NA	NA	NA	NA	6,280
FS11	11/10/2021	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	13,500
FS12	11/10/2021	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	21,300
FS12A	10/10/2022	4	NA	NA	NA	NA	NA	NA	NA	123

Ensolum 1 of 2



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS PLU 78 B SWD XTO Energy, LLC 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 Clos	sure Criteria (NM	AC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Confirmation	Sidewall Soil S	Samples				
SW01	10/27/2021	0 - 4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<4.98
SW02	10/27/2021	0 - 4	<0.00198	< 0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	17.1
SW03	10/27/2021	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5,970
SW04	10/27/2021	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5,900
SW05	10/27/2021	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	7,210
SW06	10/27/2021	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	6,420
SW07	10/27/2021	0 - 4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	20.9
SW09	10/27/2021	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	338
SW10	10/27/2021	0 - 4	<0.00200	< 0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	6,410
SW11	10/27/2021	0 - 4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	96.4
SW12	10/27/2021	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,810
SW13	10/27/2021	0 - 4	<0.00198	<0.00396	<50.0	229	<50.0	229	229	10,900
SW14	10/27/2021	0 - 4	<0.00199	<0.00398	<49.8	61.9	<49.8	61.9	61.9	6,550
SW15	10/27/2021	0 - 4	<0.00198	<0.00397	<50.0	75.6	<50.0	75.6	75.6	10,700
SW16	10/27/2022	0 - 4	<0.00200	<0.00400	<49.8	74.3	<49.8	74.3	74.3	10,400

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.

Grey text represents samples that have been excavated

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NA: Not Analyzed



APPENDIX A

Photographic Log

ENSOLUM

Photographic Log

XTO Energy, Inc.
PLU 78 B SWD
Incident No. NAPP2126639352



Photograph: 1

Description: Photo of excavation extent.

View: South

Date: October 10, 2022



Photograph: 2

Description: Photo of Potholing event.

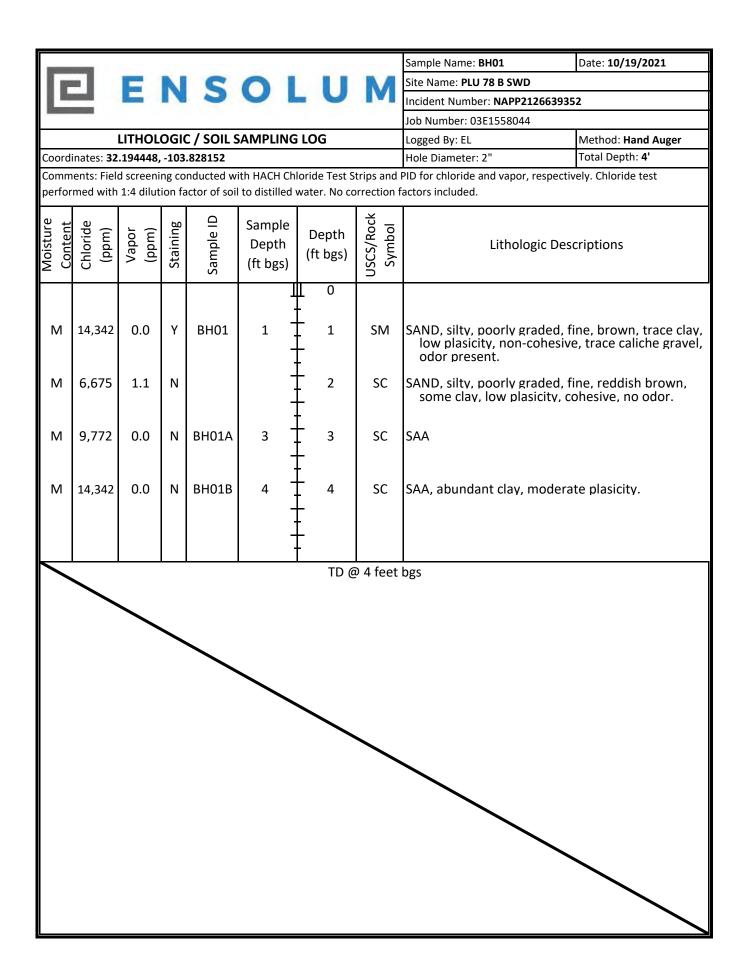
View: Northwest

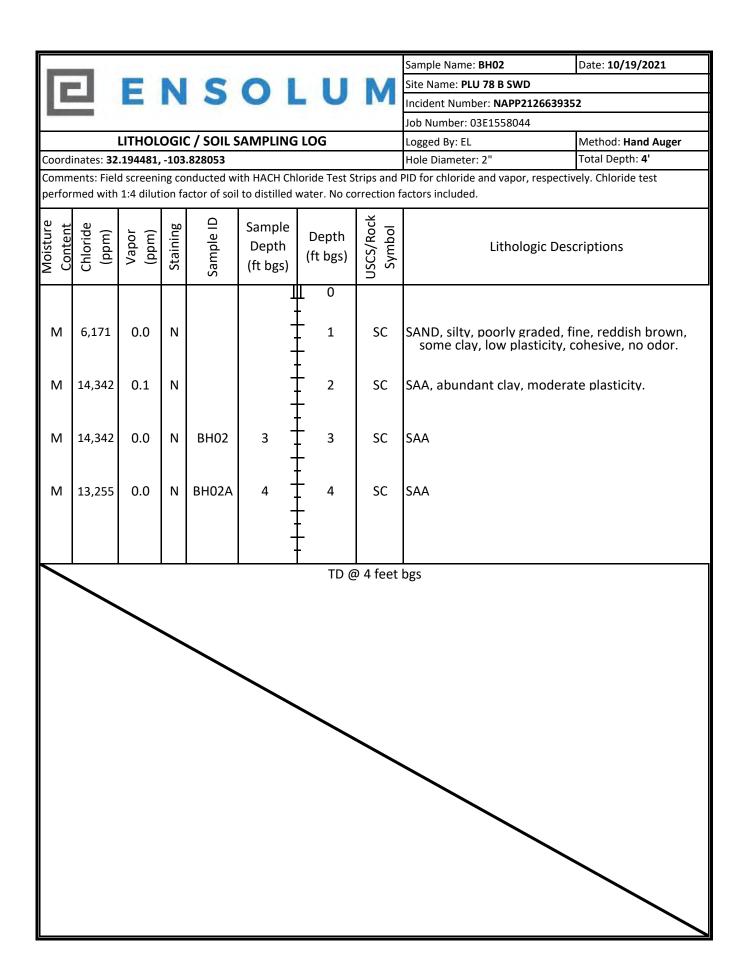
Date: October 10, 2022

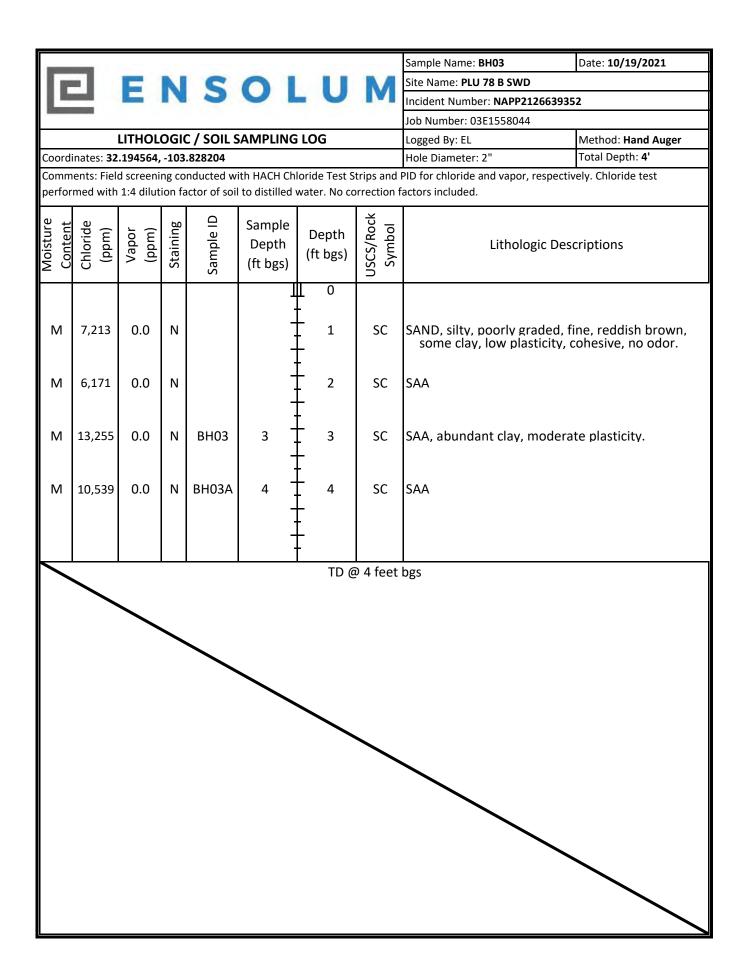


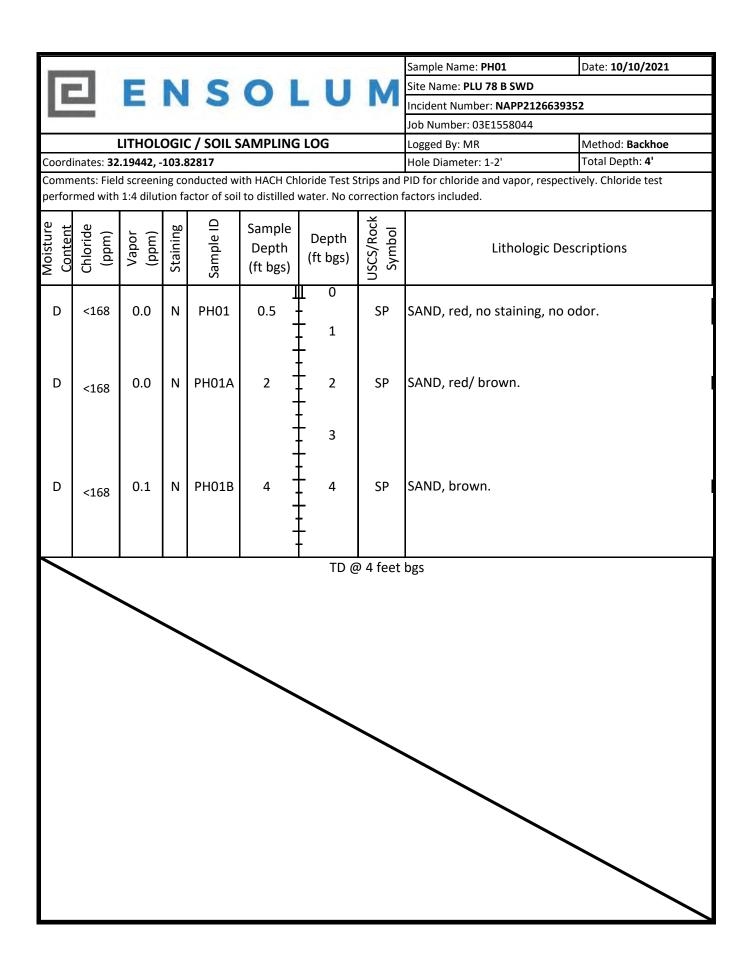
APPENDIX B

Lithologic Soil Sampling Logs











APPENDIX C

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: 890-1450-1

Laboratory Sample Delivery Group: 31403236.020.0129

Client Project/Site: PLU 78 B

For:

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

Attn: Dan Moir

MEAMER

Authorized for release by: 10/28/2021 3:12:47 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Overtion?



www.eurofinsus.com/Env

Visit us at:

Released to Imaging: 12/16/2022 9:35:28 AM

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.
 Laboratory Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

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Definitions/Glossary

 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Qualifiers

		11	$\overline{}$	Α.
G	U	v	U	А

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.
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.
00.0	•

GC Semi VOA

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

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

HPLC/IC

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

Glossary

DL, RA, RE, IN

DLC

EDL

LOD

LOQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit

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)

Decision Level Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

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.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Job ID: 890-1450-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1450-1

Receipt

The samples were received on 10/19/2021 3:54 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-10011 and analytical batch 880-10332 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH01 (890-1450-1). 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

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

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Lab Sample ID: 890-1450-1

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

Client Sample ID: BH01

Date Collected: 10/19/21 10:34 Date Received: 10/19/21 15:54

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 18:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 18:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 18:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/20/21 14:16	10/24/21 18:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 18:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/20/21 14:16	10/24/21 18:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			10/20/21 14:16	10/24/21 18:49	1
1,4-Difluorobenzene (Surr)	123		70 - 130			10/20/21 14:16	10/24/21 18:49	1
· Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/26/21 15:12	1
Method: 8015 NM - Diesel Range			DI.		ь	Drawarad	Analysis	Dil Foo
		O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range			RL 49.9		<u>D</u>	Prepared	Analyzed 10/27/21 11:09	Dil Fac
Method: 8015 NM - Diesel Range Analyte	Result 65.1	Qualifier		Unit	<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	Result 65.1 ge Organics (D	Qualifier		Unit	<u>D</u>	Prepared Prepared		1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Result 65.1 ge Organics (D	Qualifier RO) (GC) Qualifier	49.9	Unit mg/Kg		<u> </u>	10/27/21 11:09	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 65.1 ge Organics (Di Result	Qualifier RO) (GC) Qualifier	49.9	Unit mg/Kg		Prepared	10/27/21 11:09 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 65.1 ge Organics (Di Result <49.9	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 10/27/21 13:40	10/27/21 11:09 Analyzed 10/27/21 20:29	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/27/21 13:40 10/27/21 13:40	10/27/21 11:09 Analyzed 10/27/21 20:29 10/27/21 20:29	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 65.1 ge Organics (Di Result <49.9 65.1 <49.9	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/27/21 13:40 10/27/21 13:40 10/27/21 13:40	10/27/21 11:09 Analyzed 10/27/21 20:29 10/27/21 20:29 10/27/21 20:29	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9 49.9 49.9 Limits	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/27/21 13:40 10/27/21 13:40 10/27/21 13:40 Prepared	Analyzed 10/27/21 20:29 10/27/21 20:29 10/27/21 20:29 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier RO) (GC) Qualifier U Qualifier S1+	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/27/21 13:40 10/27/21 13:40 10/27/21 13:40 Prepared 10/27/21 13:40	Analyzed 10/27/21 20:29 10/27/21 20:29 10/27/21 20:29 Analyzed 10/27/21 20:29	Dil Fac 1 1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier RO) (GC) Qualifier U Qualifier S1+	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/27/21 13:40 10/27/21 13:40 10/27/21 13:40 Prepared 10/27/21 13:40	Analyzed 10/27/21 20:29 10/27/21 20:29 10/27/21 20:29 Analyzed 10/27/21 20:29	Dil Fac 1 1 1 Dil Fac 1

Client Sample ID: BH01A

Date Collected: 10/19/21 10:47 Date Received: 10/19/21 15:54

Released to Imaging: 12/16/2022 9:35:28 AM

Sample Depth: 3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/20/21 14:16	10/24/21 20:13	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/20/21 14:16	10/24/21 20:13	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/20/21 14:16	10/24/21 20:13	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/20/21 14:16	10/24/21 20:13	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/20/21 14:16	10/24/21 20:13	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/20/21 14:16	10/24/21 20:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130			10/20/21 14:16	10/24/21 20:13	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1450-2

Matrix: Solid

Lab Sample ID: 890-1450-2

 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Client Sample ID: BH01A

Date Collected: 10/19/21 10:47 Date Received: 10/19/21 15:54

Sample Depth: 3

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	10/20/21 14:16	10/24/21 20:13	1

Method: Tot	al BTEX - Tota	al BTEX Ca	alculation
mounou. Tot	u. D. L		aiouiutioii

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/26/21 15:12	1

ш				
ш	Method: 8015 NI	A - Diocol Pane	no Organice	(DPO) (CC)

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 L	J	49.9	mg/Kg			10/27/21 11:09	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/27/21 21:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/27/21 21:29	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/27/21 21:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108	70 - 130	10/27/21 13:40	10/27/21 21:29	1
o-Terphenyl	128	70 - 130	10/27/21 13:40	10/27/21 21:29	1

Method: 300.0 - Anions, Ion C	hromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6000		49.9	mg/Kg			10/25/21 19:57	10

Client Sample ID: BH01B

Date Collected: 10/19/21 10:54

Lab Sample ID: 890-1450-3

Matrix: Solid

Date Collected: 10/19/21 10:54 Date Received: 10/19/21 15:54

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/20/21 14:16	10/24/21 20:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/20/21 14:16	10/24/21 20:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/20/21 14:16	10/24/21 20:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/20/21 14:16	10/24/21 20:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/20/21 14:16	10/24/21 20:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/20/21 14:16	10/24/21 20:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			10/20/21 14:16	10/24/21 20:34	1
1,4-Difluorobenzene (Surr)	108		70 - 130			10/20/21 14:16	10/24/21 20:34	1

Mothod:	Total RTFX	. Total RTFX	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/26/21 15:12	1

	Method: 8015 NM - Diesel	Range Organics (DRO	D) (GC)	۱
ı	Michiga. 00 to Min - Diese	i italige Organics (Ditt		,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/27/21 11:09	1

Eurofins Xenco, Carlsbad

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Lab Sample ID: 890-1450-3

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

Client Sample ID: BH01B

Date Collected: 10/19/21 10:54 Date Received: 10/19/21 15:54

Sample Depth: 4

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 21:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 21:49	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 21:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/27/21 13:40	10/27/21 21:49	1
o-Terphenyl	115		70 - 130			10/27/21 13:40	10/27/21 21:49	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12000		99.0	mg/Kg			10/25/21 22:04	20

Client Sample ID: BH02 Lab Sample ID: 890-1450-4 Date Collected: 10/19/21 11:25 Matrix: Solid

Date Received: 10/19/21 15:54

Sample Depth: 3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 20:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 20:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 20:54	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/20/21 14:16	10/24/21 20:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 20:54	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/20/21 14:16	10/24/21 20:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			10/20/21 14:16	10/24/21 20:54	1
1,4-Difluorobenzene (Surr)	104		70 - 130			10/20/21 14:16	10/24/21 20:54	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			10/26/21 15:12	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/27/21 11:09	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 22:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 22:10	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 22:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			10/27/21 13:40	10/27/21 22:10	1
o-Terphenyl	126		70 - 130			10/27/21 13:40	10/27/21 22:10	1

Eurofins Xenco, Carlsbad

10/28/2021

Job ID: 890-1450-1 SDG: 31403236.020.0129

Client Sample ID: BH02

Client: WSP USA Inc.

Project/Site: PLU 78 B

Date Collected: 10/19/21 11:25 Date Received: 10/19/21 15:54

Sample Depth: 3

Lab Sample ID: 890-1450-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	natography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14100		101	mg/Kg			10/25/21 22:22	20

Client Sample ID: BH02A

Date Collected: 10/19/21 11:30

Lab Sample ID: 890-1450-5

Matrix: Solid

Date Collected: 10/19/21 11:30 Date Received: 10/19/21 15:54

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 21:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 21:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 21:15	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/20/21 14:16	10/24/21 21:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 21:15	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/20/21 14:16	10/24/21 21:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			10/20/21 14:16	10/24/21 21:15	1
1,4-Difluorobenzene (Surr)	107		70 - 130			10/20/21 14:16	10/24/21 21:15	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			10/26/21 15:12	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/27/21 11:09	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/27/21 13:40	10/27/21 22:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/27/21 13:40	10/27/21 22:31	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/27/21 13:40	10/27/21 22:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			10/27/21 13:40	10/27/21 22:31	1
o-Terphenyl	116		70 - 130			10/27/21 13:40	10/27/21 22:31	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	resuit	Quannon		O.I.I.	_	rioparoa	Allalyzou	D ac

Lab Sample ID: 890-1450-6

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

Client Sample ID: BH03

Date Collected: 10/19/21 11:59 Date Received: 10/19/21 15:54

Sample Depth: 3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:36	
Toluene	< 0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:36	•
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/20/21 14:16	10/24/21 21:36	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:36	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/20/21 14:16	10/24/21 21:36	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130			10/20/21 14:16	10/24/21 21:36	
1,4-Difluorobenzene (Surr)	105		70 - 130			10/20/21 14:16	10/24/21 21:36	:
- Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/26/21 15:12	-
Analyte Total TPH	Result < 50.0	Qualifier U	RL 50.0	Unit mg/Kg	D	Prepared	Analyzed 10/27/21 11:09	Dil Fa
Total TPH	<50.0	U	50.0	mg/Kg			10/27/21 11:09	
•							10/2//21 11:00	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)					10/21/21 11:00	·
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte	• •	Qualifier	RL	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared 10/27/21 13:40		Dil Fac
Analyte Gasoline Range Organics	Result	Qualifier U			<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result < 50.0	Qualifier U	50.0	mg/Kg	<u> </u>	10/27/21 13:40	Analyzed 10/27/21 22:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 <50.0	Qualifier U U U	50.0	mg/Kg	<u>D</u>	10/27/21 13:40 10/27/21 13:40	Analyzed 10/27/21 22:51 10/27/21 22:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0 <50.0	Qualifier U U U	50.0 50.0 50.0	mg/Kg	<u>D</u>	10/27/21 13:40 10/27/21 13:40 10/27/21 13:40	Analyzed 10/27/21 22:51 10/27/21 22:51 10/27/21 22:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U U U	50.0 50.0 50.0 <i>Limits</i>	mg/Kg	<u> </u>	10/27/21 13:40 10/27/21 13:40 10/27/21 13:40 Prepared	Analyzed 10/27/21 22:51 10/27/21 22:51 10/27/21 22:51 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	10/27/21 13:40 10/27/21 13:40 10/27/21 13:40 Prepared 10/27/21 13:40	Analyzed 10/27/21 22:51 10/27/21 22:51 10/27/21 22:51 Analyzed 10/27/21 22:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	10/27/21 13:40 10/27/21 13:40 10/27/21 13:40 Prepared 10/27/21 13:40	Analyzed 10/27/21 22:51 10/27/21 22:51 10/27/21 22:51 Analyzed 10/27/21 22:51	Dil Fac

Client Sample ID: BH03A

Date Collected: 10/19/21 12:05 Date Received: 10/19/21 15:54

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/20/21 14:16	10/24/21 21:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/20/21 14:16	10/24/21 21:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/20/21 14:16	10/24/21 21:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/20/21 14:16	10/24/21 21:57	

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Lab Sample ID: 890-1450-7

Matrix: Solid

Lab Sample ID: 890-1450-7

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

Client Sample ID: BH03A

Date Collected: 10/19/21 12:05 Date Received: 10/19/21 15:54

Analyte

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130			10/20/21 14:16	10/24/21 21:57	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			10/26/21 15:12	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
- J				•	_			
Total TPH	<49.8		49.8	mg/Kg	— <u>-</u>		10/27/21 11:09	1
Total TPH	<49.8	U			_ =			1
Total TPH Method: 8015B NM - Diesel Rang	<49.8 ge Organics (DI	U				Prepared		Dil Fac
Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<49.8 ge Organics (DI	CO) (GC) Qualifier	49.8	mg/Kg	-	<u> </u>	10/27/21 11:09	Dil Fac
Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.8 ge Organics (DI Result	COO (GC) Qualifier U	49.8	mg/Kg	-	Prepared	10/27/21 11:09 Analyzed	
Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	<49.8 ge Organics (DI Result <49.8	RO) (GC) Qualifier U	49.8 RL 49.8	mg/Kg Unit mg/Kg	-	Prepared 10/27/21 13:40	10/27/21 11:09 Analyzed 10/27/21 23:11	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8 ge Organics (DI Result <49.8 <49.8	RO) (GC) Qualifier U	49.8 RL 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg	-	Prepared 10/27/21 13:40 10/27/21 13:40	10/27/21 11:09 Analyzed 10/27/21 23:11 10/27/21 23:11	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.8 ge Organics (DI Result <49.8 <49.8 <49.8	RO) (GC) Qualifier U	49.8 RL 49.8 49.8 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg	-	Prepared 10/27/21 13:40 10/27/21 13:40 10/27/21 13:40	Analyzed 10/27/21 23:11 10/27/21 23:11 10/27/21 23:11	

50.0

Unit

mg/Kg

D

Prepared

Analyzed

10/25/21 22:39

Dil Fac

Result Qualifier

7690

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Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-7292-A-1-B MS	Matrix Spike	8 S1-	127	
880-7292-A-1-C MSD	Matrix Spike Duplicate	21 S1-	0.006 S1-	
890-1450-1	BH01	126	123	
890-1450-2	BH01A	128	111	
890-1450-3	BH01B	88	108	
890-1450-4	BH02	89	104	
890-1450-5	BH02A	90	107	
890-1450-6	BH03	106	105	
890-1450-7	BH03A	101	107	
LCS 880-10011/1-A	Lab Control Sample	90	105	
LCSD 880-10011/2-A	Lab Control Sample Dup	93	101	
MB 880-10009/5-A	Method Blank	119	99	
	Method Blank	107	107	

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

DFBZ = 1,4-Difluorobenzene (Surr)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1450-1	BH01	126	140 S1+	
390-1450-1 MS	BH01	111	113	
890-1450-1 MSD	BH01	127	129	
390-1450-2	BH01A	108	128	
390-1450-3	BH01B	102	115	
390-1450-4	BH02	112	126	
390-1450-5	BH02A	99	116	
390-1450-6	BH03	100	115	
390-1450-7	вноза	100	115	
_CS 880-10752/2-A	Lab Control Sample	87	94	
_CSD 880-10752/3-A	Lab Control Sample Dup	87	92	
MB 880-10752/1-A	Method Blank	124	143 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-1450-1 SDG: 31403236.020.0129 Project/Site: PLU 78 B

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-10009/5-A

Matrix: Solid

Analysis Batch: 10332

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10009

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:10	10/24/21 04:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:10	10/24/21 04:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:10	10/24/21 04:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/20/21 14:10	10/24/21 04:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:10	10/24/21 04:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/20/21 14:10	10/24/21 04:18	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	119		70 - 130	10/20/21 14:10	10/24/21 04:18
1,4-Difluorobenzene (Surr)	99		70 - 130	10/20/21 14:10	10/24/21 04:18

Lab Sample ID: MB 880-10011/5-A

Matrix: Solid

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

Prep Batch: 10011

Dil Fac

|--|

	1410	W.D						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 15:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 15:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 15:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/20/21 14:16	10/24/21 15:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:16	10/24/21 15:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/20/21 14:16	10/24/21 15:20	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	10/20/21 14:	16 10/24/21 15:20	1
1,4-Difluorobenzene (Surr)	107		70 - 130	10/20/21 14:	16 10/24/21 15:20	1

Lab Sample ID: LCS 880-10011/1-A

Matrix: Solid

Analysis Batch: 10332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 10011

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1028		mg/Kg		103	70 - 130	
Toluene	0.100	0.07866		mg/Kg		79	70 - 130	
Ethylbenzene	0.100	0.07910		mg/Kg		79	70 - 130	
m-Xylene & p-Xylene	0.200	0.1485		mg/Kg		74	70 - 130	
o-Xylene	0.100	0.07658		mg/Kg		77	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	90	70 - 130
1.4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: LCSD 880-10011/2-A

Matrix: Solid

Analysis Batch: 10332

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 10011

Spike LCSD LCSD %Rec. RPD Result Qualifier Analyte Added Unit %Rec Limits RPD Limit Benzene 0.100 0.08414 mg/Kg 84 70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-10011/2-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Prep Batch: 10011

Analysis Batch: 10332

•									
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.07026		mg/Kg		70	70 - 130	11	35
Ethylbenzene	0.100	0.07046		mg/Kg		70	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1400		mg/Kg		70	70 - 130	6	35
o-Xylene	0.100	0.07068		mg/Kg		71	70 - 130	8	35

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 93 1,4-Difluorobenzene (Surr) 101 70 - 130

Lab Sample ID: 880-7292-A-1-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 10332

-	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0580	F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130
Toluene	0.195	F1	0.101	0.02703	F1	mg/Kg		-166	70 - 130
Ethylbenzene	0.714	E	0.101	0.006642	4	mg/Kg		-700	70 - 130
m-Xylene & p-Xylene	0.138	F1	0.202	<0.00404	U F1	mg/Kg		-68	70 - 130
o-Xylene	2.20	E	0.101	0.06402	4	mg/Kg		-2117	70 - 130

MS MS %Recovery Qualifier Surrogate Limits S1-70 - 130 4-Bromofluorobenzene (Surr) 8 1,4-Difluorobenzene (Surr) 127 70 - 130

Lab Sample ID: 880-7292-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 10332									Prep	Batch:	10011
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0580	F1	0.0998	<0.00200	U F1	mg/Kg		-58	70 - 130	NC	35
Toluene	0.195	F1	0.0998	<0.00200	U F1 F2	mg/Kg		-194	70 - 130	180	35
Ethylbenzene	0.714	E	0.0998	0.05093	4 F2	mg/Kg		-664	70 - 130	154	35
m-Xylene & p-Xylene	0.138	F1	0.200	0.02850	F1 F2	mg/Kg		-55	70 - 130	183	35
o-Xylene	2.20	E	0.0998	0.1697	4 F2	mg/Kg		-2037	70 - 130	90	35

	WISD	IIISD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	21	S1-	70 - 130
1,4-Difluorobenzene (Surr)	0.006	S1-	70 - 130

MSD MSD

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

Lab Sample ID: MB 880-10752/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 10661

мв мв Result Qualifier Unit Prepared <50.0 U 50.0 mg/Kg 10/27/21 13:40 10/27/21 19:28 Gasoline Range Organics

(GRO)-C6-C10

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Prep Batch: 10011

Prep Type: Total/NA

Prep Batch: 10752

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

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

Lab Sample ID: MB 880-10752/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Total/NA** Analysis Batch: 10661 Prep Batch: 10752

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 19:28	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/27/21 19:28	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130			10/27/21 13:40	10/27/21 19:28	1
o-Terphenyl	143	S1+	70 - 130			10/27/21 13:40	10/27/21 19:28	1

	Spike Added 1000		LCS Qualifier	- <mark>Unit</mark> mg/Kg	Client	%Rec 93	Prep Type: Tot Prep Batch: 6 %Rec. Limits 70 - 130	tal/NA
	Added	Result			<u>D</u>		Prep Batch: ' %Rec. Limits	
	Added	Result			_ <u>D</u>		%Rec.	10752
	Added	Result			_ <u>D</u>		Limits	
			Qualifier		_ <u>D</u>			
	1000	927.4		mg/Kg		93	70 - 130	
	1000	920.2		mg/Kg		92	70 - 130	
.CS LCS								
ery Qualifier	Limits							
87	70 - 130							
94	70 - 130							
		very Qualifier Limits 70 - 130	very Representation Compared to the second	very Representation R	very 87 Qualifier Limits 94 70 - 130 94 70 - 130	very 87 Qualifier Limits 94 70 - 130	very 87 Qualifier Limits 94 70 - 130	very 87 Qualifier Limits 70 - 130

Matrix: Solid							Prep 7	Type: To	tal/NA
Analysis Batch: 10661							Prep	Batch:	10752
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1115		mg/Kg		111	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	1000	770.0		mg/Kg		77	70 - 130	18	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-1450-1 MS Matrix: Solid Analysis Batch: 10661									Prep Ty	pe: Total/NA Batch: 10752
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1192		mg/Kg		120	70 - 130	
Diesel Range Organics (Over C10-C28)	65.1		997	1095		mg/Kg		103	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	111		70 - 130							
o-Terphenyl	113		70 - 130							

Job ID: 890-1450-1 Client: WSP USA Inc. SDG: 31403236.020.0129 Project/Site: PLU 78 B

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

Lab Sample ID: 890-1450-1 MS

Matrix: Solid

Analysis Batch: 10661

Client Sample ID: BH01	ISD
Prep Type: Total/NA	

Prep Batch: 10752

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	1000	1221		mg/Kg		122	70 - 130	2	20
(GRO)-C6-C10											
Diesel Range Organics (Over	65.1		1000	1233		mg/Kg		117	70 - 130	12	20
C10 C28)											

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	129		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-10300/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 10506

мв мв

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 10/25/21 16:31

Lab Sample ID: LCS 880-10300/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 10506

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	250.8	-	mg/Kg		100	90 - 110	

Lab Sample ID: LCSD 880-10300/3-A

Matrix: Solid

Analysis Batch: 10506

-	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	251.0		ma/Ka		100	90 - 110		20	

Lab Sample ID: 890-1449-A-10-C MS

Matrix: Solid

Analysis Batch: 10506

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	181		251	443.2		ma/Ka		105	90 110	

Lab Sample ID: 890-1449-A-10-D MSD

Matrix: Solid Analysis Batch: 10506

Analysis Dateil. 10000											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	181		251	426.9		mg/Kg		98	90 - 110	4	20

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Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-10301/1-A

Matrix: Solid

Analysis Batch: 10621

MB MB

 Analyte
 Result Chloride
 Qualifier
 RL Unit
 Unit
 D mg/Kg
 Prepared
 Analyzed
 Dil Fac

 C mg/Kg
 10/25/21 21:11
 1

Lab Sample ID: LCS 880-10301/2-A

Matrix: Solid

Analysis Batch: 10621

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 259.2 mg/Kg 104 90 - 110

Lab Sample ID: LCSD 880-10301/3-A

Matrix: Solid

Analysis Batch: 10621

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 256.5 mg/Kg 103 90 - 110

Lab Sample ID: 880-7343-A-21-B MS

Matrix: Solid

Analysis Batch: 10621

MS MS Sample Sample Spike %Rec. Analyte Qualifier Added Result Result Qualifier Unit %Rec Limits Chloride 7590 2480 10100 101 90 - 110 mg/Kg

Lab Sample ID: 880-7343-A-21-C MSD

Matrix: Solid

Analysis Batch: 10621

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 2480 Chloride 7590 10080 mg/Kg 100 90 - 110 0 20

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 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

GC VOA

Prep Batch: 10009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-10009/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 10011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-1	BH01	Total/NA	Solid	5035	
890-1450-2	BH01A	Total/NA	Solid	5035	
890-1450-3	BH01B	Total/NA	Solid	5035	
890-1450-4	BH02	Total/NA	Solid	5035	
890-1450-5	BH02A	Total/NA	Solid	5035	
890-1450-6	BH03	Total/NA	Solid	5035	
890-1450-7	ВН03А	Total/NA	Solid	5035	
MB 880-10011/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-10011/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-10011/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-7292-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-7292-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 10332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-1	BH01	Total/NA	Solid	8021B	10011
890-1450-2	BH01A	Total/NA	Solid	8021B	10011
890-1450-3	BH01B	Total/NA	Solid	8021B	10011
890-1450-4	BH02	Total/NA	Solid	8021B	10011
890-1450-5	BH02A	Total/NA	Solid	8021B	10011
890-1450-6	BH03	Total/NA	Solid	8021B	10011
890-1450-7	BH03A	Total/NA	Solid	8021B	10011
MB 880-10009/5-A	Method Blank	Total/NA	Solid	8021B	10009
MB 880-10011/5-A	Method Blank	Total/NA	Solid	8021B	10011
LCS 880-10011/1-A	Lab Control Sample	Total/NA	Solid	8021B	10011
LCSD 880-10011/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	10011
880-7292-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	10011
880-7292-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	10011

Analysis Batch: 10619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-1	BH01	Total/NA	Solid	Total BTEX	_
890-1450-2	BH01A	Total/NA	Solid	Total BTEX	
890-1450-3	BH01B	Total/NA	Solid	Total BTEX	
890-1450-4	BH02	Total/NA	Solid	Total BTEX	
890-1450-5	BH02A	Total/NA	Solid	Total BTEX	
890-1450-6	BH03	Total/NA	Solid	Total BTEX	
890-1450-7	BH03A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 10661

Lab Sample ID 890-1450-1	Client Sample ID BH01	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 10752
890-1450-2	BH01A	Total/NA	Solid	8015B NM	10752
890-1450-3	BH01B	Total/NA	Solid	8015B NM	10752
890-1450-4	BH02	Total/NA	Solid	8015B NM	10752

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 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

GC Semi VOA (Continued)

Analysis Batch: 10661 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-5	BH02A	Total/NA	Solid	8015B NM	10752
890-1450-6	BH03	Total/NA	Solid	8015B NM	10752
890-1450-7	BH03A	Total/NA	Solid	8015B NM	10752
MB 880-10752/1-A	Method Blank	Total/NA	Solid	8015B NM	10752
LCS 880-10752/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10752
LCSD 880-10752/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10752
890-1450-1 MS	BH01	Total/NA	Solid	8015B NM	10752
890-1450-1 MSD	BH01	Total/NA	Solid	8015B NM	10752

Analysis Batch: 10676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-1	BH01	Total/NA	Solid	8015 NM	
890-1450-2	BH01A	Total/NA	Solid	8015 NM	
890-1450-3	BH01B	Total/NA	Solid	8015 NM	
890-1450-4	BH02	Total/NA	Solid	8015 NM	
890-1450-5	BH02A	Total/NA	Solid	8015 NM	
890-1450-6	BH03	Total/NA	Solid	8015 NM	
890-1450-7	BH03A	Total/NA	Solid	8015 NM	

Prep Batch: 10752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-1	BH01	Total/NA	Solid	8015NM Prep	
890-1450-2	BH01A	Total/NA	Solid	8015NM Prep	
890-1450-3	BH01B	Total/NA	Solid	8015NM Prep	
890-1450-4	BH02	Total/NA	Solid	8015NM Prep	
890-1450-5	BH02A	Total/NA	Solid	8015NM Prep	
890-1450-6	BH03	Total/NA	Solid	8015NM Prep	
890-1450-7	BH03A	Total/NA	Solid	8015NM Prep	
MB 880-10752/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10752/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10752/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1450-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-1450-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 10300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1450-1	BH01	Soluble	Solid	DI Leach	-
890-1450-2	BH01A	Soluble	Solid	DI Leach	
MB 880-10300/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10300/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10300/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1449-A-10-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1449-A-10-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 10301

Lab Sample ID 890-1450-3	Client Sample ID BH01B	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
890-1450-4	BH02	Soluble	Solid	DI Leach	
890-1450-5	BH02A	Soluble	Solid	DI Leach	

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Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

HPLC/IC (Continued)

Leach Batch: 10301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-6	BH03	Soluble	Solid	DI Leach	
890-1450-7	BH03A	Soluble	Solid	DI Leach	
MB 880-10301/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-10301/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-10301/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7343-A-21-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7343-A-21-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 10506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-1	BH01	Soluble	Solid	300.0	10300
890-1450-2	BH01A	Soluble	Solid	300.0	10300
MB 880-10300/1-A	Method Blank	Soluble	Solid	300.0	10300
LCS 880-10300/2-A	Lab Control Sample	Soluble	Solid	300.0	10300
LCSD 880-10300/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10300
890-1449-A-10-C MS	Matrix Spike	Soluble	Solid	300.0	10300
890-1449-A-10-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10300

Analysis Batch: 10621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1450-3	BH01B	Soluble	Solid	300.0	10301
890-1450-4	BH02	Soluble	Solid	300.0	10301
890-1450-5	BH02A	Soluble	Solid	300.0	10301
890-1450-6	BH03	Soluble	Solid	300.0	10301
890-1450-7	BH03A	Soluble	Solid	300.0	10301
MB 880-10301/1-A	Method Blank	Soluble	Solid	300.0	10301
LCS 880-10301/2-A	Lab Control Sample	Soluble	Solid	300.0	10301
LCSD 880-10301/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	10301
880-7343-A-21-B MS	Matrix Spike	Soluble	Solid	300.0	10301
880-7343-A-21-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	10301

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

Client Sample ID: BH01 Lab Sample ID: 890-1450-1

Date Collected: 10/19/21 10:34 Matrix: Solid Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 18:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 20:29	AJ	XEN MID
Soluble	Leach	DI Leach			10300	10/22/21 17:44	SC	XEN MID
Soluble	Analysis	300.0		10	10506	10/25/21 19:50	CH	XEN MID

Client Sample ID: BH01A Lab Sample ID: 890-1450-2

Date Collected: 10/19/21 10:47 Matrix: Solid Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 20:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 21:29	AJ	XEN MID
Soluble	Leach	DI Leach			10300	10/22/21 17:44	SC	XEN MID
Soluble	Analysis	300.0		10	10506	10/25/21 19:57	CH	XEN MID

Client Sample ID: BH01B Lab Sample ID: 890-1450-3 Date Collected: 10/19/21 10:54

Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 20:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 21:49	AJ	XEN MID
Soluble	Leach	DI Leach			10301	10/22/21 17:46	SC	XEN MID
Soluble	Analysis	300.0		20	10621	10/25/21 22:04	CH	XEN MID

Client Sample ID: BH02 Lab Sample ID: 890-1450-4 Date Collected: 10/19/21 11:25 **Matrix: Solid**

Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 20:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID

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Matrix: Solid

Released to Imaging: 12/16/2022 9:35:28 AM

Client: WSP USA Inc. Job ID: 890-1450-1 Project/Site: PLU 78 B SDG: 31403236.020.0129

Client Sample ID: BH02

Lab Sample ID: 890-1450-4

Matrix: Solid

Date Collected: 10/19/21 11:25 Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 22:10	AJ	XEN MID
Soluble	Leach	DI Leach			10301	10/22/21 17:46	SC	XEN MID
Soluble	Analysis	300.0		20	10621	10/25/21 22:22	CH	XEN MID

Client Sample ID: BH02A Lab Sample ID: 890-1450-5 Date Collected: 10/19/21 11:30

Matrix: Solid

Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 21:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 22:31	AJ	XEN MID
Soluble	Leach	DI Leach			10301	10/22/21 17:46	SC	XEN MID
Soluble	Analysis	300.0		10	10621	10/25/21 22:28	CH	XEN MID

Client Sample ID: BH03 Lab Sample ID: 890-1450-6

Date Collected: 10/19/21 11:59 **Matrix: Solid**

Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 21:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 22:51	AJ	XEN MID
Soluble	Leach	DI Leach			10301	10/22/21 17:46	SC	XEN MID
Soluble	Analysis	300.0		10	10621	10/25/21 22:34	CH	XEN MID

Client Sample ID: BH03A Lab Sample ID: 890-1450-7

Date Collected: 10/19/21 12:05 **Matrix: Solid** Date Received: 10/19/21 15:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10011	10/20/21 14:16	KL	XEN MID
Total/NA	Analysis	8021B		1	10332	10/24/21 21:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10619	10/26/21 15:12	KL	XEN MID
Total/NA	Analysis	8015 NM		1	10676	10/27/21 11:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10752	10/27/21 13:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1	10661	10/27/21 23:11	AJ	XEN MID

Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Lab Sample ID: 890-1450-7

Client Sample ID: BH03A

Date Collected: 10/19/21 12:05

Lab Sa

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			10301	10/22/21 17:46	SC	XEN MID
Soluble	Analysis	300.0		10	10621	10/25/21 22:39	CH	XEN MID

Laboratory References:

Date Received: 10/19/21 15:54

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.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority		ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report bu	t the laboratory is not certifi	ed by the governing authority. This list ma	v include analytes for v
the agency does not of	' '	t the laboratory to not corum	ed by the governing additionty. This list the	ly include analytes for v
the agency does not of Analysis Method	' '	Matrix	Analyte	y include analytes for v
9 ,	fer certification.	•	, , ,	

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Method Summary

 Client: WSP USA Inc.
 Job ID: 890-1450-1

 Project/Site: PLU 78 B
 SDG: 31403236.020.0129

Method **Method Description** Protocol Laboratory 8021B Volatile Organic Compounds (GC) SW846 XEN MID **Total BTEX Calculation** TAL SOP Total BTEX 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 SW846 XEN MID Closed System Purge and Trap 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

Eurofins Xenco, Carlsbad

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Sample Summary

Client: WSP USA Inc. Project/Site: PLU 78 B Job ID: 890-1450-1

SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1450-1	BH01	Solid	10/19/21 10:34	10/19/21 15:54	1
890-1450-2	BH01A	Solid	10/19/21 10:47	10/19/21 15:54	3
890-1450-3	BH01B	Solid	10/19/21 10:54	10/19/21 15:54	4
890-1450-4	BH02	Solid	10/19/21 11:25	10/19/21 15:54	3
890-1450-5	BH02A	Solid	10/19/21 11:30	10/19/21 15:54	4
890-1450-6	BH03	Solid	10/19/21 11:59	10/19/21 15:54	3
890-1450-7	BH03A	Solid	10/19/21 12:05	10/19/21 15:54	4

						<u></u>	dIII	<u>C</u>	Chain of Custody		Work Order No:	NO:
×	XMZ00	Ŋ		Houston, ¹ Midland,	'X (281) 240-42 TX (432-704-54	00 Dalla 140) EL	s,TX (2 Paso,T)	14) 902 < (915)s	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-333 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296	:10) 509-3334 06)794-1296		
			Hobbs,	NM (575-392-7	550) Phoenix,	AZ (480-	355-090	0) Atla	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	[ampa,FL (813-620-200	WW.	om _age or
Project Manager:	Dan Moir				BIII to: (if different)		Adrian Baker	daker		 		
Company Name: \	WSP Permian office	lg.			Company Name:		XTO Energy	ergy		Prog	□ RP	□ rownfields □ RC □ perfund □
Address:	3300 North A Street	*			Address:		104 E	3104 E Green Street	Street		ı II]
te ZIP:	Midland, Tx 79705				City, State ZIP:		arisba	Carlsbad, NM, 88220	88220	Repo	Reporting:Level II	_\$T/USTRP UBveLIV
	(432) 236-3849			Email:	Elliot.Lee@ws	p.com,	Tacom	a.Morr	Email: Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com	Deliv	Deliverables: EDD AC	ADaPT Other:
Project Name:	PL	PLU 78 B		Tur	Turn Around				ANALYSIS	YSIS REQUEST		Work Order Notes
Project Number:	31403236.020.0129	36.020.0)129	Routine	ř							Cost Center # 1080781001
P.O. Number:				Rush:						-		Incident # NAPP2126639352
Sampler's Name:	E	Elliot Lee		Due Date)ate:				-			
SAMPLE RECEIPT	PT Temp Blank:		(es) No	Wet Ice:	Yes No	3						
Temperature (°C):	42/4	4.0	7	Thermometer ID		iner)) 	890-1450 Chain of Custody	n of Custody	
Received Intact:			Lyw-	NM-00	<u>.</u>	onta	5)	8021	300.	-		
Sample Custody Seals:	Yes No	NIR	Total	Total Containers:		of (A 80	PA 0	(EP			lab, if received by 4:30pm
Sample Identification	ication	Matrix	Date Sampled	Time Sampled	Depth	Numbe	TPH (EF	BTEX (E	Chlorid			Sample Comments
BH01		S 10	10/19/2021	10:34	- <u>i</u>	_	×	×	×			Discrete
BH01A	<i>ν</i>	S 10	10/19/2021	10:47	ယ္	-1	×	×	×			Discrete
BH01B	a l		10/19/2021	10:54	4'		×	×	×			Discrete
ВН02		S 10	10/19/2021	11:25	ω		×	×	×			Discrete
вно2А		S 10	10/19/2021	11:30	4	_	×	×	×			Discrete
вноз		S 10	10/19/2021	11:59	ယ္	_	×	×	×			Discrete
вноза		S 10	10/19/2021	12:05	4.		×	×	×			Discrete
		-										
		_	-									
Total 200.7 / 6010 Circle Method(s) a	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed); be anal ₎	ا چ	8RCRA 13PPM TCLP/SPLP6	RCRA 13PPM Texas 11 A TCLP/SPLP 6010: 8RCRA		Sb As	Ba E	Sb As Ba Be B Cd Ca Cr Co Co Sb As Ba Be Cd Cr Co Cu Pb N	u Fe Pb Mg An Mo Ni Se	Mn Mo Ni K Se Ag SiO2 Ag TI U	2 Na Sr Tl Sn U V Zn 1631/245.1/7470 /7471∵Hg
otice: 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 sarvice. 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 pt \$7,5.00 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.	ocument and relinquish be only for the cost of ge ff \$75.00 will be app	nent of sar samples a lied to eac	nples constitu ind shall not a h project and i	tes a valid purc ssume any resp a charge of \$5 f	hase order from consibility for any or each sample s	client co losses ubmitted	mpany to to Xenc	xenco ses incu	its affiliates and subcontr red by the client if such It t analyzed. These terms w		s. It assigns standard terms and conditions are due to circumstances beyond the control enforced unless previously negotiated.	
Relinquished by	(Sjgnature)	,	Received b	Received by: (Signature)	е)		Date/Time	ime	Relinquishe	Relinquished by: (Signature)	Received by: (Signature)	nature) Date/Time
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1089 N Canal St.

Eurofins Xenco, Carlsbad

Chain of Custody Record

eurofins |

Environment Testing

Project Name^{*} PLU 78 B Vote: 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/tests/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. BH03A (890-1450-7) BH03 (890-1450-6) BH02A (890-1450-5) BH02 (890-1450-4) BH01B (890-1450-3) BH01A (890-1450-2) BH01 (890-1450-1) State Zip TX, 79701 Sample Identification - Client ID (Lab ID) Deliverable Requested | II III IV Other (specify) Midland Shipping/Receiving Client Information (Sub Contract Lab) Carlsbad NM 88220 Phone 575-988-3199 Fax: 575-988-3199 ossible Hazard Identification 432-704-5440(Tel) impty Kit Relinquished by 1211 W Florida Ave elinquished by elinquished by: linquished by urofins Xenco S Custody Seal No 0 600 Date/Time Date/Time Primary Deliverable Rank WO # TAT Requested (days) Due Date Requested 10/25/2021 Phone 39000004 roject #: 10/19/21 10/19/21 10/19/21 10/19/21 10/19/21 10/19/21 10/19/21 Date Mountain 12 05 Mountain 11 30 Mountain 10 47 Mountain Mountain 11 59 Mountain 11 25 Mountain 10 54 10 34 (C=Comp G=grab) Sample Preservation Code: Type Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Kramer, Jessica essica kramer@eurofinset.com Time. Field Filtered Sample (Yes or No) Accreditations Required (See note)
NELAP - Louisiana NELAP - Texas Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Received by: 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks × \times × × × × \times Return To Client × × × \times × 8015MOD_Calc \times × × × × × 300_ORGFM_28D/DI_LEACH Chloride × × × × × × × 8021B/5035FP Calc (MOD) BTEX × Analysis Requested Total_BTEX_GCV Disposal By Lab State of Origin New Mexico Carrier Tracking No(s) Date/Time Date/Time Archive For Total Number of containers *** C 6 COC No⁻ 890-471 1 890-1450-1 Preservation Codes Page 1 of 1 I DI Water C EDTA EDA NaOH
Control Acetate
Control 된 Special Instructions/Note Company Company TSP Dodecahydrate
Acetone Hexane None AsNaO2 Na2O4S Na2SO3 Na2S2O3 other (specify) MCAA

Ver: 06/08/2021

Login Sample Receipt Checklist

Job Number: 890-1450-1

SDG Number: 31403236.020.0129

Login Number: 1450 List Source: Eurofins Xenco, Carlsbad

List Number: 1

Client: WSP USA Inc.

Creator: Olivas, Nathaniel

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 ampered 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	
s 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 <6 mm (1/4").	N/A	

Eurofins Xenco, Carlsbad Page 28 of 29

Released to Imaging: 12/16/2022 9:35:28 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1450-1

SDG Number: 31403236.020.0129

List Source: Eurofins Xenco, Midland

List Creation: 10/21/21 10:24 AM

Creator: Kramer, Jessica

Login Number: 1450

List Number: 2

<6mm (1/4").

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	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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	N/A	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1497-1

Laboratory Sample Delivery Group: 31403236.020.0129

Client Project/Site: PLU 78B

For:

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

Attn: Kalei Jennings

MRAMER

Authorized for release by: 11/2/2021 8:07:38 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

Review your project

results through
Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 12/16/2022 9:35:28 AM

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.
 Laboratory Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

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**

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

HPLC/IC

Qualifier **Qualifier Description**

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)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML 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 Positive / Present POS

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

Job ID: 890-1497-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1497-1

Receipt

The samples were received on 10/28/2021 2:48 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 2.2°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11018 and analytical batch 880-11030 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.

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Lab Sample ID: 890-1497-1

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

Client Sample ID: SW01

Date Collected: 10/27/21 14:04 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 15:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 15:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 15:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/01/21 08:33	11/01/21 15:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 15:29	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/01/21 08:33	11/01/21 15:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			11/01/21 08:33	11/01/21 15:29	1
1,4-Difluorobenzene (Surr)	103		70 - 130			11/01/21 08:33	11/01/21 15:29	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/01/21 14:19	1
Analyte	Result	Qualifier	RL	Unit	D	Prepared		
					_		Analyzed	DII Fac
Total TPH	<49.9	U	49.9	mg/Kg	=		11/01/21 12:47	Dil Fac
- -			49.9	mg/Kg	_ =			
Method: 8015B NM - Diesel Ran	ge Organics (D		49.9 RL	mg/Kg		Prepared		
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	RO) (GC) Qualifier			=	<u> </u>	11/01/21 12:47	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	RL	Unit	=	Prepared	11/01/21 12:47 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	<mark>Unit</mark> mg/Kg	=	Prepared 11/01/21 08:28	11/01/21 12:47 Analyzed 11/01/21 17:39	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:28 11/01/21 08:28	Analyzed 11/01/21 17:39 11/01/21 17:39	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:28 11/01/21 08:28 11/01/21 08:28	Analyzed 11/01/21 17:39 11/01/21 17:39 11/01/21 17:39	Dil Face 1 1 1 Dil Face
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:28 11/01/21 08:28 11/01/21 08:28 Prepared	Analyzed 11/01/21 12:47 Analyzed 11/01/21 17:39 11/01/21 17:39 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery** 83 93	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:28 11/01/21 08:28 11/01/21 08:28 Prepared 11/01/21 08:28	Analyzed 11/01/21 17:39 11/01/21 17:39 11/01/21 17:39 Analyzed 11/01/21 17:39	1
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 83 93 **comatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:28 11/01/21 08:28 11/01/21 08:28 Prepared 11/01/21 08:28	Analyzed 11/01/21 17:39 11/01/21 17:39 11/01/21 17:39 Analyzed 11/01/21 17:39	Dil Fac

Client Sample ID: SW02

Date Collected: 10/27/21 14:06 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/01/21 08:33	11/01/21 15:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/01/21 08:33	11/01/21 15:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/01/21 08:33	11/01/21 15:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/01/21 08:33	11/01/21 15:49	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/01/21 08:33	11/01/21 15:49	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/01/21 08:33	11/01/21 15:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/01/21 08:33	11/01/21 15:49	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1497-2

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Matrix: Solid

Job ID: 890-1497-1

Project/Site: PLU 78B SDG: 31403236.020.0129 Lab Sample ID: 890-1497-2

Client Sample ID: SW02

Date Collected: 10/27/21 14:06 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Client: WSP USA Inc.

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70	70 - 130	11/01/21 08:33	11/01/21 15:49	1

Mothod:	Total RTEX	- Total BTE	Calculation
welliou.	TOTAL DIEV	- IUIAI DIE	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/01/21 14:19	1

Method: 8015 NM - Diese	I Range Organics (DRO) (GC)
motification bicot	in italigo organios (bito) (oo)

Analyte	Result Qu	ualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/01/21 12:47	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/01/21 08:28	11/01/21 18:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/21 08:28	11/01/21 18:01	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/21 08:28	11/01/21 18:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzea	DII Fac
1-Chlorooctane	90	70 - 130	11/01/21 08:28	11/01/21 18:01	1
o-Terphenyl	104	70 - 130	11/01/21 08:28	11/01/21 18:01	1
_					

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.1	5.00	mg/Kg			11/01/21 16:51	1

Client Sample ID: SW06 Lab Sample ID: 890-1497-3 **Matrix: Solid**

Date Collected: 10/27/21 14:42 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

		()						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 17:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 17:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 17:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/01/21 08:33	11/01/21 17:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 17:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/01/21 08:33	11/01/21 17:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130			11/01/21 08:33	11/01/21 17:12	1
1,4-Difluorobenzene (Surr)	104		70 - 130			11/01/21 08:33	11/01/21 17:12	1

Mothod:	Total RTEY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			11/01/21 14:19	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			11/01/21 12:47	1

Lab Sample ID: 890-1497-3

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

Client Sample ID: SW06

Date Collected: 10/27/21 14:42 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/01/21 08:28	11/01/21 18:22	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/01/21 08:28	11/01/21 18:22	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/21 08:28	11/01/21 18:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			11/01/21 08:28	11/01/21 18:22	1
o-Terphenyl	89		70 - 130			11/01/21 08:28	11/01/21 18:22	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			50.4	mg/Kg			11/01/21 17:08	10

Client Sample ID: SW07 Lab Sample ID: 890-1497-4 Date Collected: 10/27/21 08:38 Matrix: Solid

Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		11/01/21 08:33	11/01/21 17:33	1
Toluene	< 0.00201	U	0.00201	mg/Kg		11/01/21 08:33	11/01/21 17:33	1
Ethylbenzene	< 0.00201	U	0.00201	mg/Kg		11/01/21 08:33	11/01/21 17:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/01/21 08:33	11/01/21 17:33	1
o-Xylene	< 0.00201	U	0.00201	mg/Kg		11/01/21 08:33	11/01/21 17:33	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/01/21 08:33	11/01/21 17:33	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	112		70 - 130			11/01/21 08:33	11/01/21 17:33	1
1,4-Difluorobenzene (Surr)	73		70 - 130			11/01/21 08:33	11/01/21 17:33	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
T. L. I DTEV							11/01/01 11 10	
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/01/21 14:19	1
Iotal BTEX : Method: 8015 NM - Diesel Range			0.00402	mg/Kg			11/01/21 14:19	1
- ^{'''} -	Organics (DR		0.00402 RL	mg/Kg Unit	D	Prepared	11/01/21 14:19 Analyzed	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier			<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte	Organics (DR Result <49.8	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	Organics (DR Result <49.8	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Organics (DR Result <49.8	Qualifier U RO) (GC) Qualifier	RL 49.8	Unit mg/Kg		<u> </u>	Analyzed 11/01/21 12:47	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Organics (DR/Result <49.8	Qualifier U RO) (GC) Qualifier U	RL 49.8	Unit mg/Kg Unit mg/Kg		Prepared	Analyzed 11/01/21 12:47 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Organics (DR/Result <49.8 e Organics (D/Result <49.8)	Qualifier U RO) (GC) Qualifier U	RL 49.8	Unit mg/Kg		Prepared 11/01/21 08:28	Analyzed 11/01/21 12:47 Analyzed 11/01/21 18:44	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Organics (DR/Result <49.8 e Organics (D/Result <49.8)	Qualifier U RO) (GC) Qualifier U U U U	RL 49.8	Unit mg/Kg Unit mg/Kg		Prepared 11/01/21 08:28	Analyzed 11/01/21 12:47 Analyzed 11/01/21 18:44	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Organics (DR/Result <49.8 e Organics (D/Result <49.8) <p>449.8</p>	Qualifier U RO) (GC) Qualifier U U U U	RL 49.8 RL 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/01/21 08:28 11/01/21 08:28	Analyzed 11/01/21 12:47 Analyzed 11/01/21 18:44 11/01/21 18:44	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Organics (DR/Result	Qualifier U RO) (GC) Qualifier U U U U	RL 49.8 RL 49.8 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 11/01/21 08:28 11/01/21 08:28 11/01/21 08:28	Analyzed 11/01/21 12:47 Analyzed 11/01/21 18:44 11/01/21 18:44 11/01/21 18:44	Dil Fac Dil Fac 1 Dil Fac 1 Dil Fac 1

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

Client Sample ID: SW07

Date Collected: 10/27/21 08:38 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Lab Sample ID: 890-1497-4

Matrix: Solid

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.9	4.97	mg/Kg			11/01/21 17:14	1

Client Sample ID: SW09 Lab Sample ID: 890-1497-5

Date Collected: 10/27/21 13:25 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 17:53	
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 17:53	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 17:53	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 17:53	
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 17:53	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 17:53	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130			11/01/21 08:33	11/01/21 17:53	
1,4-Difluorobenzene (Surr)	92		70 - 130			11/01/21 08:33	11/01/21 17:53	
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/21 14:19	-
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
					_			
Analyte		Qualifier	RL 49.9		<u>D</u>	Prepared	Analyzed 11/01/21 12:47	
Analyte Total TPH	Result <49.9	Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Ranç	Result <49.9 ge Organics (Di	Qualifier U RO) (GC)	49.9	mg/Kg			11/01/21 12:47	
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Result <49.9 ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9	mg/Kg	<u>D</u>	Prepared	11/01/21 12:47 Analyzed	
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9	mg/Kg			11/01/21 12:47	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (D	Qualifier U RO) (GC) Qualifier U	49.9	mg/Kg		Prepared	11/01/21 12:47 Analyzed	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/01/21 08:28 11/01/21 08:28	11/01/21 12:47 Analyzed 11/01/21 19:06 11/01/21 19:06	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 ge Organics (Di Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 11/01/21 08:28	11/01/21 12:47 Analyzed 11/01/21 19:06	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/01/21 08:28 11/01/21 08:28	11/01/21 12:47 Analyzed 11/01/21 19:06 11/01/21 19:06	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/01/21 08:28 11/01/21 08:28 11/01/21 08:28	Analyzed 11/01/21 19:06 11/01/21 19:06 11/01/21 19:06	Dil Fac

Eurofins Xenco, Carlsbad

Analyzed 11/02/21 12:50

RL

4.95

Unit

mg/Kg

D

Prepared

Result Qualifier

338

Dil Fac

Analyte

Chloride

Lab Sample ID: 890-1497-6

Client Sample Results

Job ID: 890-1497-1 Client: WSP USA Inc. Project/Site: PLU 78B SDG: 31403236.020.0129

Client Sample ID: SW11

Date Collected: 10/27/21 10:21 Date Received: 10/28/21 14:48

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 18:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 18:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 18:14	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/01/21 08:33	11/01/21 18:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 18:14	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/01/21 08:33	11/01/21 18:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			11/01/21 08:33	11/01/21 18:14	1
1,4-Difluorobenzene (Surr)	103		70 - 130			11/01/21 08:33	11/01/21 18:14	1
- Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/01/21 14:19	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	11						
-		U	49.9	mg/Kg			11/01/21 12:47	1
Method: 8015B NM - Diesel Rang	ge Organics (Di		49.9	mg/Kg			11/01/21 12:47	1
Method: 8015B NM - Diesel Ranç Analyte	•		49.9 RL	mg/Kg Unit	D	Prepared	11/01/21 12:47 Analyzed	1 Dil Fac
Analyte Gasoline Range Organics	•	RO) (GC) Qualifier			<u>D</u>	Prepared 11/01/21 08:28		
	Result	RO) (GC) Qualifier	RL	Unit	<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	RO) (GC) Qualifier U	RL 49.9	Unit mg/Kg	<u>D</u>	11/01/21 08:28	Analyzed 11/01/21 19:27	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9	Unit mg/Kg mg/Kg	<u> </u>	11/01/21 08:28	Analyzed 11/01/21 19:27 11/01/21 19:27	Dil Fac 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	Unit mg/Kg mg/Kg	<u>D</u>	11/01/21 08:28 11/01/21 08:28 11/01/21 08:28	Analyzed 11/01/21 19:27 11/01/21 19:27 11/01/21 19:27	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9 <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	Unit mg/Kg mg/Kg	<u> </u>	11/01/21 08:28 11/01/21 08:28 11/01/21 08:28 Prepared	Analyzed 11/01/21 19:27 11/01/21 19:27 11/01/21 19:27 Analyzed	Dil Fac 1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg mg/Kg	<u> </u>	11/01/21 08:28 11/01/21 08:28 11/01/21 08:28 Prepared 11/01/21 08:28	Analyzed 11/01/21 19:27 11/01/21 19:27 11/01/21 19:27 Analyzed 11/01/21 19:27	Dil Fac 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	11/01/21 08:28 11/01/21 08:28 11/01/21 08:28 Prepared 11/01/21 08:28	Analyzed 11/01/21 19:27 11/01/21 19:27 11/01/21 19:27 Analyzed 11/01/21 19:27	Dil Fac 1 1 1 Dil Fac

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-1497-1	SW01	122	103	
890-1497-2	SW02	122	70	
890-1497-3	SW06	112	104	
890-1497-4	SW07	112	73	
890-1497-5	SW09	141 S1+	92	
890-1497-6	SW11	111	103	
390-1498-A-1-A MS	Matrix Spike	117	99	
390-1498-A-1-B MSD	Matrix Spike Duplicate	119	103	
LCS 880-11021/1-A	Lab Control Sample	121	103	
LCSD 880-11021/2-A	Lab Control Sample Dup	110	100	
MB 880-11021/5-A	Method Blank	106	101	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-1497-1	SW01	83	93	
390-1497-2	SW02	90	104	
90-1497-3	SW06	80	89	
90-1497-4	SW07	81	91	
90-1497-5	SW09	79	86	
90-1497-6	SW11	75	81	
90-1499-A-2-D MS	Matrix Spike	75	76	
90-1499-A-2-E MSD	Matrix Spike Duplicate	85	86	
CS 880-11018/2-A	Lab Control Sample	71	77	
CSD 880-11018/3-A	Lab Control Sample Dup	81	91	
MB 880-11018/1-A	Method Blank	95	113	
Surrogate Legend				

OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-1497-1 SDG: 31403236.020.0129 Project/Site: PLU 78B

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11021/5-A

Matrix: Solid Analysis Batch: 11022 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11021

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/01/21 08:33	11/01/21 12:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/01/21 08:33	11/01/21 12:08	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	_	11/01/21 08:33	11/01/21 12:08	1
1,4-Difluorobenzene (Surr)	101		70 - 130		11/01/21 08:33	11/01/21 12:08	1

Lab Sample ID: LCS 880-11021/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 11022

Prep Type: Total/NA

Prep Batch: 11021

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08284	-	mg/Kg		83	70 - 130	
Toluene	0.100	0.08405		mg/Kg		84	70 - 130	
Ethylbenzene	0.100	0.08962		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1923		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09704		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	121	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: LCSD 880-11021/2-A

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11021

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07647		mg/Kg		76	70 - 130	8	35
Toluene	0.100	0.07398		mg/Kg		74	70 - 130	13	35
Ethylbenzene	0.100	0.07944		mg/Kg		79	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1712		mg/Kg		86	70 - 130	12	35
o-Xylene	0.100	0.08722		mg/Kg		87	70 - 130	11	35

LCSD LCSD

<0.00199 U

Surrogate	%Recovery Qua	alifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1.4-Difluorobenzene (Surr)	100		70 ₋ 130

Lab Sample ID: 890-1498-A-1-B MSD

Matrix: Solid

Toluene

Analysis Batch: 11022

Prep Type: Total/NA

Prep Batch: 11021

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Limit Unit %Rec Limits **RPD** <0.00199 U 0.0998 Benzene 0.07206 mg/Kg

0.0998

0.07077 Eurofins Xenco, Carlsbad

mg/Kg

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Job ID: 890-1497-1 Client: WSP USA Inc. Project/Site: PLU 78B SDG: 31403236.020.0129

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

Lab Sample ID: 890-1498-A-1-B MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11022** Prep Batch: 11021 Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Ethylbenzene <0.00199 U 0.0998 0.07668 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.200 0.1630 mg/Kg 0.0998 o-Xylene <0.00199 U 0.08213 mg/Kg MSD MSD Surrogate %Recovery Qualifier Limits

70 - 130

70 - 130

Lab Sample ID: 890-1498-A-1-A MS

Matrix: Solid

Analysis Batch: 11022

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

119

103

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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

Lab Sample ID: MB 880-11018/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11030** Prep Batch: 11018 MR MR

	IND	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/01/21 08:28	11/01/21 11:33	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/01/21 08:28	11/01/21 11:33	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/21 08:28	11/01/21 11:33	1
	MB	MB						

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	11/01/21 08:28	11/01/21 11:33	1
o-Terphenyl	113		70 - 130	11/01/21 08:28	11/01/21 11:33	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-11018/2-A **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11030 Prep Batch: 11018

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1022		mg/Kg		102	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	733.9		mg/Kg		73	70 - 130	
C10-C28)								

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	77		70 - 130

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Client Sample ID: Matrix Spike

Prep Type: Total/NA

Client: WSP USA Inc. Project/Site: PLU 78B

Job ID: 890-1497-1 SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-11018/3-A

Matrix: Solid

Analysis Batch: 11030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11018

Prep Batch: 11018

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1013		mg/Kg		101	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	775.2		mg/Kg		78	70 - 130	5	20
C10-C28)									

LCSD LCSD

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 890-1499-A-2-D MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 11030

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	889.3		mg/Kg		89	70 - 130	
Diesel Range Organics (Over	<49.9	U F1	997	663.3	F1	mg/Kg		67	70 - 130	

C10-C28)

	mo mo	
Surrogate	%Recovery Qual	ifier Limits
1-Chlorooctane	75	70 - 130
o-Terphenyl	76	70 - 130

Lab Sample ID: 890-1499-A-2-E MSD

Matrix: Solid

Analysis Batch: 11030

Prep Type: Total/NA Prep Batch: 11018

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	940.4		mg/Kg		94	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	783.6		mg/Kg		78	70 - 130	17	20

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 85 70 - 130 86 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11038/1-A

Matrix: Solid

Analysis Batch: 11110

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/01/21 12:38	1

Eurofins Xenco, Carlsbad

Client Sample ID: Method Blank

Prep Type: Soluble

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-11038/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11110

Spike LCS LCS %Rec. Analyte Added Result Qualifier %Rec Limits Unit Chloride 250 240.3 mg/Kg 96 90 - 110

Lab Sample ID: LCSD 880-11038/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11110

Spike LCSD LCSD %Rec. RPD Added Analyte Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 236.8 mg/Kg 90 - 110

Lab Sample ID: 890-1499-A-9-E MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11110

MS MS Spike %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 155 249 416.2 mg/Kg 105 90 - 110

Lab Sample ID: 890-1499-A-9-F MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11110

Sample Sample MSD MSD RPD Spike %Rec. Added RPD Limit Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 155 249 409.1 102 90 - 110 20 mg/Kg

Lab Sample ID: MB 880-11106/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 11131

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac <5.00 U 5.00 Chloride mg/Kg 11/01/21 16:33

MR MR

Lab Sample ID: LCS 880-11106/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11131

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Chloride 250 242 9 mg/Kg 97 90 - 110

Lab Sample ID: LCSD 880-11106/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11131

LCSD LCSD %Rec. RPD Spike Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 250 239.8 mg/Kg 96 90 - 110 20

Lab Sample ID: 890-1497-2 MS Client Sample ID: SW02 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 11131

Analysis Batom 11101										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	17.1		250	281.1		mg/Kg		106	90 - 110	

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1497-2 MSD Client Sample ID: SW02 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11131

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	17.1		250	279.5		mg/Kg		105	90 - 110	1	20

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

GC VOA

Prep Batch: 11021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-1	SW01	Total/NA	Solid	5035	
890-1497-2	SW02	Total/NA	Solid	5035	
890-1497-3	SW06	Total/NA	Solid	5035	
890-1497-4	SW07	Total/NA	Solid	5035	
890-1497-5	SW09	Total/NA	Solid	5035	
890-1497-6	SW11	Total/NA	Solid	5035	
MB 880-11021/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11021/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11021/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1498-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 11022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-1	SW01	Total/NA	Solid	8021B	11021
890-1497-2	SW02	Total/NA	Solid	8021B	11021
890-1497-3	SW06	Total/NA	Solid	8021B	11021
890-1497-4	SW07	Total/NA	Solid	8021B	11021
890-1497-5	SW09	Total/NA	Solid	8021B	11021
890-1497-6	SW11	Total/NA	Solid	8021B	11021
MB 880-11021/5-A	Method Blank	Total/NA	Solid	8021B	11021
LCS 880-11021/1-A	Lab Control Sample	Total/NA	Solid	8021B	11021
LCSD 880-11021/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11021
890-1498-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1498-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	11021

Analysis Batch: 11149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-1	SW01	Total/NA	Solid	Total BTEX	
890-1497-2	SW02	Total/NA	Solid	Total BTEX	
890-1497-3	SW06	Total/NA	Solid	Total BTEX	
890-1497-4	SW07	Total/NA	Solid	Total BTEX	
890-1497-5	SW09	Total/NA	Solid	Total BTEX	
890-1497-6	SW11	Total/NA	Solid	Total BTEX	

GC Semi VOA

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-1	SW01	Total/NA	Solid	8015NM Prep	
890-1497-2	SW02	Total/NA	Solid	8015NM Prep	
890-1497-3	SW06	Total/NA	Solid	8015NM Prep	
890-1497-4	SW07	Total/NA	Solid	8015NM Prep	
890-1497-5	SW09	Total/NA	Solid	8015NM Prep	
890-1497-6	SW11	Total/NA	Solid	8015NM Prep	
MB 880-11018/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11018/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11018/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1499-A-2-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1499-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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Prep Batch: 11018

 Client: WSP USA Inc.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

GC Semi VOA

Analysis Batch: 11030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-1	SW01	Total/NA	Solid	8015B NM	11018
890-1497-2	SW02	Total/NA	Solid	8015B NM	11018
890-1497-3	SW06	Total/NA	Solid	8015B NM	11018
890-1497-4	SW07	Total/NA	Solid	8015B NM	11018
890-1497-5	SW09	Total/NA	Solid	8015B NM	11018
890-1497-6	SW11	Total/NA	Solid	8015B NM	11018
MB 880-11018/1-A	Method Blank	Total/NA	Solid	8015B NM	11018
LCS 880-11018/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11018
LCSD 880-11018/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11018
890-1499-A-2-D MS	Matrix Spike	Total/NA	Solid	8015B NM	11018
890-1499-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	11018

Analysis Batch: 11118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-1	SW01	Total/NA	Solid	8015 NM	_
890-1497-2	SW02	Total/NA	Solid	8015 NM	
890-1497-3	SW06	Total/NA	Solid	8015 NM	
890-1497-4	SW07	Total/NA	Solid	8015 NM	
890-1497-5	SW09	Total/NA	Solid	8015 NM	
890-1497-6	SW11	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 11038

Lab Sample ID 890-1497-1	Client Sample ID SW01	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-11038/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11038/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11038/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1499-A-9-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1499-A-9-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 11106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-2	SW02	Soluble	Solid	DI Leach	
890-1497-3	SW06	Soluble	Solid	DI Leach	
890-1497-4	SW07	Soluble	Solid	DI Leach	
890-1497-5	SW09	Soluble	Solid	DI Leach	
890-1497-6	SW11	Soluble	Solid	DI Leach	
MB 880-11106/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11106/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11106/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1497-2 MS	SW02	Soluble	Solid	DI Leach	
890-1497-2 MSD	SW02	Soluble	Solid	DI Leach	

Analysis Batch: 11110

Lab Sample ID 890-1497-1	Client Sample ID SW01	Prep Type Soluble	Solid	Method 300.0	Prep Batch 11038
MB 880-11038/1-A	Method Blank	Soluble	Solid	300.0	11038
LCS 880-11038/2-A	Lab Control Sample	Soluble	Solid	300.0	11038
LCSD 880-11038/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11038

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QC Association Summary

Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

HPLC/IC (Continued)

Analysis Batch: 11110 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1499-A-9-E MS	Matrix Spike	Soluble	Solid	300.0	11038
890-1499-A-9-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	11038

Analysis Batch: 11131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1497-2	SW02	Soluble	Solid	300.0	11106
890-1497-3	SW06	Soluble	Solid	300.0	11106
890-1497-4	SW07	Soluble	Solid	300.0	11106
890-1497-5	SW09	Soluble	Solid	300.0	11106
890-1497-6	SW11	Soluble	Solid	300.0	11106
MB 880-11106/1-A	Method Blank	Soluble	Solid	300.0	11106
LCS 880-11106/2-A	Lab Control Sample	Soluble	Solid	300.0	11106
LCSD 880-11106/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11106
890-1497-2 MS	SW02	Soluble	Solid	300.0	11106
890-1497-2 MSD	SW02	Soluble	Solid	300.0	11106

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Client: WSP USA Inc. Job ID: 890-1497-1 Project/Site: PLU 78B SDG: 31403236.020.0129

Client Sample ID: SW01 Lab Sample ID: 890-1497-1

Date Collected: 10/27/21 14:04 Matrix: Solid Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 15:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11018	11/01/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11030	11/01/21 17:39	AJ	XEN MID
Soluble	Leach	DI Leach			11038	11/01/21 09:55	СН	XEN MID
Soluble	Analysis	300.0		1	11110	11/01/21 15:34	CH	XEN MID

Client Sample ID: SW02 Lab Sample ID: 890-1497-2

Date Collected: 10/27/21 14:06 Matrix: Solid

Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 15:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11018	11/01/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11030	11/01/21 18:01	AJ	XEN MID
Soluble	Leach	DI Leach			11106	11/01/21 11:53	SC	XEN MID
Soluble	Analysis	300.0		1	11131	11/01/21 16:51	CH	XEN MID

Client Sample ID: SW06 Lab Sample ID: 890-1497-3 Date Collected: 10/27/21 14:42 **Matrix: Solid**

Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 17:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11018	11/01/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11030	11/01/21 18:22	AJ	XEN MID
Soluble	Leach	DI Leach			11106	11/01/21 11:53	SC	XEN MID
Soluble	Analysis	300.0		10	11131	11/01/21 17:08	CH	XEN MID

Client Sample ID: SW07 Lab Sample ID: 890-1497-4

Date Collected: 10/27/21 08:38 Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 17:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:19	AJ	XEN MID

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Matrix: Solid

 Client: WSP USA Inc.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

Client Sample ID: SW07

Lab Sample ID: 890-1497-4

Matrix: Solid

Date Collected: 10/27/21 08:38 Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11018	11/01/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11030	11/01/21 18:44	AJ	XEN MID
Soluble	Leach	DI Leach			11106	11/01/21 11:53	SC	XEN MID
Soluble	Analysis	300.0		1	11131	11/01/21 17:14	CH	XEN MID

Client Sample ID: SW09 Lab Sample ID: 890-1497-5

Date Collected: 10/27/21 13:25 Matrix: Solid

Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 17:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11018	11/01/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11030	11/01/21 19:06	AJ	XEN MID
Soluble	Leach	DI Leach			11106	11/01/21 11:53	SC	XEN MID
Soluble	Analysis	300.0		1	11131	11/02/21 12:50	CH	XEN MID

Client Sample ID: SW11 Lab Sample ID: 890-1497-6

Date Collected: 10/27/21 10:21 Date Received: 10/28/21 14:48

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 18:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11018	11/01/21 08:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11030	11/01/21 19:27	AJ	XEN MID
Soluble	Leach	DI Leach			11106	11/01/21 11:53	SC	XEN MID
Soluble	Analysis	300.0		1	11131	11/01/21 17:26	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

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Matrix: Solid

ofins Xenco, Carisba

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority Texas		Program	Identification Number	Expiration Date
		NELAP	T104704400-21-22	06-30-22
The following analytes the agency does not of	• •	but the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for which
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.
 Job ID: 890-1497-1

 Project/Site: PLU 78B
 SDG: 31403236.020.0129

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
3015NM Prep	Microextraction	SW846	XEN MID
OI 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

Eurofins Xenco, Carlsbad

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Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 78B

Job ID: 890-1497-1 SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1497-1	SW01	Solid	10/27/21 14:04	10/28/21 14:48	0 - 4
890-1497-2	SW02	Solid	10/27/21 14:06	10/28/21 14:48	0 - 4
890-1497-3	SW06	Solid	10/27/21 14:42	10/28/21 14:48	0 - 4
890-1497-4	SW07	Solid	10/27/21 08:38	10/28/21 14:48	0 - 4
890-1497-5	SW09	Solid	10/27/21 13:25	10/28/21 14:48	0 - 4
890-1497-6	SW11	Solid	10/27/21 10:21	10/28/21 14:48	0 - 4

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roject Manager:	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Kalei Jennings	XENCO ABORATORIES
	Hob

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334

Property Name WISP USA	Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg ature) Date/Time					_		V	(1	1
Ag SiO2 Na Ag SiO2 Na 163 by: (Signatur	Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg ature) Date/Time			ı				ı	(1
Ag SiO2 Na Ag SiO2 Na 163	Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg ature) Date/Time			14.00 16.00 16.00	28:21	10.		\sim		ING	WHON
Ag SiO2 Na	Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	Received by: (Signa	Relinquished by: (Signature)	me	Date/Ti		(Signature)	Received by:)	y: (Signature	Relinquished b
Ag SiO2 Na Ag Si	Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	eviously negotiated.	ed. These terms will be enforced unless pr	but not analyze	to Xenco,	submitte	arge of \$5 for each sample:	ach project and a ch	ili be applied to e	narge of \$75.00 w	Xenco. A minimum ch
Hobbs NM (975-982-7550) Picentic, AZ (480-385-0000) Allama (CA (770-448-9800) Tempa FL (873-802-2000) Work Order Co.	Na Sr TI Sn U V Zn 1631/245.1/7470/7471:Hg	rd terms and conditions	ates and subcontractors. It assigns standa the client if such losses are due to circums	Xenco, its affilia	or expense	ı client co y losses	a valid purchase order from me any responsibility for an	samples constitutes s and shall not assu	elinquishment of ne cost of sample	document and re	otice: Signature of this service. Xenco will be
Hobbs NM (575-592/7550) Promin. ZZ (480-385-0920) Admin. GA (770-449-8800) Tampa FL (873-820-2000) Work Order Co.	Na Sr Tl Sn U V Zn			Ba Be Cd	Sb As		LP / SPLP 6010: 8F		al(s) to be an	d(s) and Met	Circle Method
Hobbs NM (575-982-7850) Phoenw AZ (480-9850) Campa FL (813-860-2000) Work AZ (180-1875) Campa Morris year Wasp Comp. Travis Case year Stock Tampa Blank: Campa Florent Campa Morris year Wasp Comp. Travis Case year Stock Work Case		I K Se Ag SiO2		Ba Be B	Sb As	E	RA 13PPM Texas	8RCF	8 / 6020:	ı	Total 200.7/6
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Hobbs NM (575-392/765) Phoenix AZ (480-355-0900) Allama GA (770-449-8800) Tampa FL (813-820/2600) Work Order C.											
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Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) Www.xenco.com Page 1_of Work Order Comments WSP USA Company Name: Xto Energy State of Project: State of Project: City, State ZIP: Midland, Texas 79705 Email: Tacoma.Morrissey@wsp.com, Travis,Casey@wsp.com Deliverables: EDD ADaPT Other:	Work Order Notes		ANALYSIS REQUEST				Turn Around			PLU 78B	roject Name:
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Work Order No:

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

Chain of Custody Record

Environment Testing America

Client Information (Sub Contract Lab)	Sampler			Lab PM Kramer	Lab PM Kramer Jessica	_				Carn	Carrier Tracking No(s)	king No)(s)			COC No 890-488 1	
Client Contact: Shipping/Receiving	Phone:			E-Mail iessica	E-Mail lessica kramer@eurofinset.com	Deurofir	nset.cc	ă		State	State of Origin	g B				Page:	
Company: Eurofins Xenco				Z Ac	Accreditations Required (See note) NELAP - Louisiana NELAP -	s Require	d (See	P (#)	Texas	ł		l				Job#:	
Address 1211 W Florida Ave	Due Date Requested 11/2/2021	ш.						Analysis Requested	is Re	QUes	ted					Preservation Codes	des
City Midland	TAT Requested (days)	/s)		in A				_	-				\dashv	\dashv	n/adamilia	A HCL B NaOH	
State Zip: TX 79701				Mistelet and its rese	ТРН				************						basherasa.	D Nitric Acid E NaHSO4	O ASNAOZ P Na2O4S Q Na2SO3
Phone: 432-704-5440(TeI)	PO #:)	D) Full		····		***************************************						as maline	_	
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Complete Control Control Control)	TO .		Matrix (W=water S=solid O=waste/oil,	erform MS/I 16MOD_NM/	16MOD_Calc	0_ORGFM_2 	tal_BTEX_G	***************************************						tal Number		
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SW01 (890-1497-1)	10/27/21	14 04 Mountain	S	Solid	×	×	×	×		1000					2	Part of the second of the seco	
SW02 (890-1497-2)	10/27/21	14 06 Mountain	S	Solid	×	×	×	×		\dashv		_	-	1	4		
SW06 (890-1497-3)	10/27/21	14 42 Mountain	S	Solid	×	×	×	×	_	1		_			*		***************************************
SW07 (890-1497-4)	10/27/21	08 38 Mountain	S	Solid	×	×	×	×		_				-	*1		
SW09 (890-1497-5)	10/27/21	13 25 Mountain	S	Solid	×	×	×	×	-	\dashv			\dashv	\dashv	•		
SW11 (890-1497-6)	10/27/21	10 21 Mountain	S	Solid	×	×	×	×							34		
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 maintain accreditation in the State of Origin listed above for analysis/tests/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 attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	C places the ownership o rix being analyzed the sar the signed Chain of Cust	f method analy mples must be tody attesting to	rte & accreditation of the shipped back to the said complicance	compliance use Eurofins Xer to Eurofins X	pon out su nco LLC la enco LLC.	bcontract boratory	t laborat or other	ories. Ti	his sampons will	ble ship	ment is	forwar ny cha	ded un	der cha	in-of-c litation	ustody If the labora	If the laboratory does not currently should be brought to Eurofins Xenco LLC
Possible Hazard Identification Unconfirmed					Sample Disposal (A	le Disposal (A Return To Clien	sal (/		ay be	asse:	assessed if san Disposal By Lab	if san v Lab	ples	□are r	Arch	fee may be assessed if samples are retained longer than	1 month) Months
Deliverable Requested II III IV Other (specify)	Primary Deliverable Rank	ble Rank 2			Special Instructions/Qu	Instruc	tions/C	C)	Requirements	ents		ĺ					
Empty Kit Relinquished by	J -m-1	Date		=!	Time	200	7				Metho	Method of Shipment:	iipmen		١		
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Custody Seals Intact: Custody Seal No			-		C ₈₀	Cooler Temperature(s)	erature(s	റ്	and Other Remarks	Remark	100	<u>À</u>	9	Ų			
											Ì		+	l			Ver 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1497-1

SDG Number: 31403236.020.0129

List Source: Eurofins Xenco, Carlsbad

Login Number: 1497 List Number: 1 Creator: Clifton, Cloe

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	

Released to Imaging: 12/16/2022 9:35:28 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1497-1

SDG Number: 31403236.020.0129

List Source: Eurofins Xenco, Midland

List Creation: 11/01/21 08:46 AM

List Number: 2 Creator: Kramer, Jessica

Login Number: 1497

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	2.6/2.7
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	N/A	

Released to Imaging: 12/16/2022 9:35:28 AM

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1498-1

Laboratory Sample Delivery Group: 3140326.020.0129

Client Project/Site: PLU 78B

For:

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

Attn: Kalei Jennings

JURAMER

Authorized for release by: 11/1/2021 4:07:18 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

Review your project results through

Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 12/16/2022 9:35:28 AM

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.
 Laboratory Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Table of Contents

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QC Association Summary	13
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Sample Summary	18
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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1498-1 Project/Site: PLU 78B SDG: 3140326.020.0129

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**

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

HPLC/IC

Qualifier **Qualifier Description**

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

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DFR 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL 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

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Eurofins Xenco, Carlsbad

Case Narrative

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Job ID: 890-1498-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1498-1

Receipt

The samples were received on 10/29/2021 10:16 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 1.8°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11038 and analytical batch 880-11110 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.

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Lab Sample ID: 890-1498-1

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Client Sample ID: SW03

Date Collected: 10/27/21 08:32 Date Received: 10/29/21 10:16

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 12:45	1
Toluene	< 0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 12:45	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 12:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 12:45	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 12:45	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 12:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/01/21 08:33	11/01/21 12:45	
1,4-Difluorobenzene (Surr)	105		70 - 130			11/01/21 08:33	11/01/21 12:45	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/21 14:01	1
Analyte	Result	Qualifier	RL	Unit	D			
			• • • •	Ollit	ט	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/21 12:47	
- -								
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)	49.9	mg/Kg	=	<u> </u>	11/01/21 12:47	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier			<u>D</u>	Prepared 11/01/21 08:22		1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (Di	RO) (GC) Qualifier U F1	49.9	mg/Kg	=	Prepared	11/01/21 12:47 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1	49.9 RL 49.9	mg/Kg Unit mg/Kg	=	Prepared 11/01/21 08:22	11/01/21 12:47 Analyzed 11/01/21 12:30	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1	49.9 RL 49.9	mg/Kg Unit mg/Kg	=	Prepared 11/01/21 08:22	11/01/21 12:47 Analyzed 11/01/21 12:30	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DI Result <49.9	RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:22 11/01/21 08:22	Analyzed 11/01/21 12:30 11/01/21 12:30	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D) Result <49.9 <49.9	RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:22 11/01/21 08:22 11/01/21 08:22	Analyzed 11/01/21 12:30 11/01/21 12:30 11/01/21 12:30	Dil Face 1 1 1 Dil Face
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	ge Organics (D) Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:22 11/01/21 08:22 11/01/21 08:22 Prepared	Analyzed 11/01/21 12:47 Analyzed 11/01/21 12:30 11/01/21 12:30 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D) Result <49.9 <49.9 <49.9 **Recovery** 80 93	RO) (GC) Qualifier U F1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:22 11/01/21 08:22 11/01/21 08:22 Prepared 11/01/21 08:22	Analyzed 11/01/21 12:30 11/01/21 12:30 11/01/21 12:30 Analyzed 11/01/21 12:30	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D) Result <49.9 <49.9 <49.9 **Recovery 80 93 omatography -	RO) (GC) Qualifier U F1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/01/21 08:22 11/01/21 08:22 11/01/21 08:22 Prepared 11/01/21 08:22	Analyzed 11/01/21 12:30 11/01/21 12:30 11/01/21 12:30 Analyzed 11/01/21 12:30	Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: SW04

Date Collected: 10/27/21 08:34 Date Received: 10/29/21 10:16

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:06	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:06	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 13:06	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:06	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 13:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130			11/01/21 08:33	11/01/21 13:06	

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Lab Sample ID: 890-1498-2

Matrix: Solid

Lab Sample ID: 890-1498-2

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Client Sample ID: SW04

Date Collected: 10/27/21 08:34 Date Received: 10/29/21 10:16

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compou	unds (GC) (Continued)
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Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103	70 - 130	11/01/21 08:33	11/01/21 13:06	1

Method:	Total	RTFX	- Total	RTFX	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/01/21 14:01	1

Method: 8015 NM - Diesel	Dange Organice		
i welliou, ou la min - Diesei	Range Organics	ונטאטו	901

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/01/21 12:47	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/01/21 08:22	11/01/21 13:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/21 08:22	11/01/21 13:30	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/21 08:22	11/01/21 13:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

%Recovery Qualifier	Limits	Prepared	Analyzea	DII Fac
96	70 - 130	11/01/21 08:22	11/01/21 13:30	1
109	70 - 130	11/01/21 08:22	11/01/21 13:30	1
	96	96 70 - 130	96 70 - 130 11/01/21 08:22	96 70 - 130 11/01/21 08:22 11/01/21 13:30

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5900		49.5	mg/Kg			11/01/21 13:14	10

Client Sample ID: SW05

Date Collected: 10/27/21 08:35

Lab Sample ID: 890-1498-3

Matrix: Solid

Date Collected: 10/27/21 08:35 Date Received: 10/29/21 10:16

Sample Depth: 0 - 4

Method: 8021B -	Volatile Organ	ic Compounds	s (GC)
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:26	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 13:26	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/01/21 08:33	11/01/21 13:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/21 08:33	11/01/21 13:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			11/01/21 08:33	11/01/21 13:26	1
1,4-Difluorobenzene (Surr)	95		70 - 130			11/01/21 08:33	11/01/21 13:26	1

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	ma/Ka			11/01/21 14:01	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/01/21 12:47	1

Eurofins Xenco, Carlsbad

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Lab Sample ID: 890-1498-3

11/01/21 13:20

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Client Sample ID: SW05

Date Collected: 10/27/21 08:35 Date Received: 10/29/21 10:16

Sample Depth: 0 - 4

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/01/21 08:22	11/01/21 13:50	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/01/21 08:22	11/01/21 13:50	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/21 08:22	11/01/21 13:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			11/01/21 08:22	11/01/21 13:50	1
o-Terphenyl	99		70 - 130			11/01/21 08:22	11/01/21 13:50	1
Method: 200 0 Anione Jon Chy		Calubia						
Method: 300.0 - Anions, Ion Chro	0 . ,							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

50.4

mg/Kg

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Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1498-1	SW03	119	105	
890-1498-1 MS	SW03	117	99	
890-1498-1 MSD	SW03	119	103	
890-1498-2	SW04	133 S1+	103	
890-1498-3	SW05	125	95	
LCS 880-11021/1-A	Lab Control Sample	121	103	
LCSD 880-11021/2-A	Lab Control Sample Dup	110	100	
MB 880-11021/5-A	Method Blank	106	101	

 ${\sf BFB = 4\text{-}Bromofluorobenzene (Surr)}$

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1498-1	SW03	80	93
890-1498-1 MS	SW03	95	93
890-1498-1 MSD	SW03	93	92
890-1498-2	SW04	96	109
890-1498-3	SW05	90	99
LCS 880-11017/2-A	Lab Control Sample	86	88
LCSD 880-11017/3-A	Lab Control Sample Dup	104	108
MB 880-11017/1-A	Method Blank	98	112

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

Released to Imaging: 12/16/2022 9:35:28 AM

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Client: WSP USA Inc. Job ID: 890-1498-1 Project/Site: PLU 78B SDG: 3140326.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11021/5-A

Matrix: Solid Analysis Batch: 11022 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11021

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/01/21 08:33	11/01/21 12:08	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/21 08:33	11/01/21 12:08	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/01/21 08:33	11/01/21 12:08	

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106	70 - 130	11/01/21 08:33	11/01/21 12:08	1
1 4-Difluorobenzene (Surr)	101	70 130	11/01/21 08:33	11/01/21 12:08	1

Lab Sample ID: LCS 880-11021/1-A

Matrix: Solid

Analysis Batch: 11022

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

Prep Batch: 11021

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08284 mg/Kg 83 70 - 130 Toluene 0.100 0.08405 mg/Kg 84 70 - 130 0.08962 Ethylbenzene 0.100 mg/Kg 90 70 - 130 0.200 0.1923 96 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09704 o-Xylene mg/Kg 70 - 130

LCS LCS

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	121	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: LCSD 880-11021/2-A

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11021

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.07647 mg/Kg 76 70 - 130 8 35 Toluene 0.100 0.07398 mg/Kg 74 70 - 130 13 35 Ethylbenzene 0.100 0.07944 mg/Kg 79 70 - 130 12 35 m-Xylene & p-Xylene 0.200 0.1712 mg/Kg 86 70 - 130 12 35 0.100 0.08722 o-Xylene mg/Kg 70 - 130 35

LCSD LCSD

Surrogate	%Recovery (Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1.4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1498-1 MSD

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: SW03 Prep Type: Total/NA

Prep Batch: 11021

MSD MSD RPD Sample Sample Spike %Rec. Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit <0.00199 U 0.0998 Benzene 0.07206 mg/Kg

Toluene <0.00199 U 0.0998 0.07077 mg/Kg

Eurofins Xenco, Carlsbad

Client: WSP USA Inc. Job ID: 890-1498-1 Project/Site: PLU 78B SDG: 3140326.020.0129

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

Lab Sample ID: 890-1498-1 MSD Client Sample ID: SW03 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11022 Prep Batch: 11021 Snike MSD MSD Sample Sample

	Sample	Sample	Spike	MISD	MISD				70Rec.		KPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ethylbenzene	<0.00199	U	0.0998	0.07668		mg/Kg					
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1630		mg/Kg					
o-Xylene	<0.00199	U	0.0998	0.08213		mg/Kg					

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 119 1,4-Difluorobenzene (Surr) 103 70 - 130

Client Sample ID: SW03 Lab Sample ID: 890-1498-1 MS **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11022

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 117 70 - 130 1,4-Difluorobenzene (Surr) 70 - 130 99

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

Lab Sample ID: MB 880-11017/1-A Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA Prep Batch: 11017

Analysis Batch: 11034

мв мв Result Qualifier Unit Prepared Analyte Analyzed Dil Fac <50.0 U 50.0 11/01/21 08:22 11/01/21 11:29 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.0 11/01/21 08:22 11/01/21 11:29 Diesel Range Organics (Over <50.0 U mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 11/01/21 08:22 11/01/21 11:29 mg/Kg

MB MB			ИВ				
	Surrogate	%Recovery (Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	98		70 - 130	11/01/21 08:22	11/01/21 11:29	1
	o-Ternhenyl	112		70 130	11/01/21 08:22	11/01/21 11:20	1

11/01/21 11:29 11/01/21 08:22 Lab Sample ID: LCS 880-11017/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Analysis Batch: 11034

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1010		mg/Kg		101	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	737.8		mg/Kg		74	70 - 130	

C10-C28)

	LCS					
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	86		70 - 130			
o-Terphenyl	88		70 - 130			

Eurofins Xenco, Carlsbad

Prep Type: Total/NA

Prep Batch: 11017

Lab Sample ID: LCSD 880-11017/3-A

Matrix: Solid

Analysis Batch: 11034

QC Sample Results

Job ID: 890-1498-1 Client: WSP USA Inc. Project/Site: PLU 78B SDG: 3140326.020.0129

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11017

-	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1140		mg/Kg		114	70 - 130	12	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	877.8		mg/Kg		88	70 - 130	17	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 890-1498-1 MS Client Sample ID: SW03

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 11034** Prep Batch: 11017

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U F1 997 1296 130 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 997 894.2 mg/Kg 87 70 - 130

C10-C28)

	mo mo	
Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	95	70 - 130
o-Terphenyl	93	70 - 130

MS MS

Lab Sample ID: 890-1498-1 MSD Client Sample ID: SW03

Matrix: Solid Prep Type: Total/NA Analysis Batch: 11034 Prep Batch: 11017

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1510	F1	mg/Kg		151	70 - 130	15	20	
Diesel Range Organics (Over	<49.9	U	1000	891.0		mg/Kg		86	70 - 130	0	20	

C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenvl	92		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11038/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 11110

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5 00	ma/Ka			11/01/21 12:38	1

Eurofins Xenco, Carlsbad

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-11038/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 11110

 Analyte
 LCS LCS
 %Rec.

 Chloride
 250
 240.3
 mg/Kg
 96
 90 - 110

Lab Sample ID: LCSD 880-11038/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 11110

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Limit Analyte Unit D %Rec Limits RPD Chloride 250 236.8 mg/Kg 95 90 - 110

Lab Sample ID: 890-1498-1 MS

Matrix: Solid

Client Sample ID: SW03

Prep Type: Soluble

Analysis Batch: 11110

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 5970 F1 2500 8764 F1 112 90 - 110 mg/Kg

Lab Sample ID: 890-1498-1 MSD

Matrix: Solid

Analysis Batch: 11110

Spike MSD MSD %Rec. RPD Sample Sample Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result Limits Chloride 5970 2500 8663 F1 108 90 - 110 20 mg/Kg

Eurofins Xenco, Carlsbad

Client Sample ID: SW03

Prep Type: Soluble

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

GC VOA

Prep Batch: 11021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Total/NA	Solid	5035	
890-1498-2	SW04	Total/NA	Solid	5035	
890-1498-3	SW05	Total/NA	Solid	5035	
MB 880-11021/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11021/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11021/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1498-1 MSD	SW03	Total/NA	Solid	5035	

Analysis Batch: 11022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Total/NA	Solid	8021B	11021
890-1498-2	SW04	Total/NA	Solid	8021B	11021
890-1498-3	SW05	Total/NA	Solid	8021B	11021
MB 880-11021/5-A	Method Blank	Total/NA	Solid	8021B	11021
LCS 880-11021/1-A	Lab Control Sample	Total/NA	Solid	8021B	11021
LCSD 880-11021/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11021
890-1498-1 MS	SW03	Total/NA	Solid	8021B	
890-1498-1 MSD	SW03	Total/NA	Solid	8021B	11021

Analysis Batch: 11149

Lab Sample ID 890-1498-1	Client Sample ID SW03	Prep Type Total/NA	Matrix Solid	Method Total BTEX	Prep Batch
890-1498-2	SW04	Total/NA	Solid	Total BTEX	
890-1498-3	SW05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 11017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Total/NA	Solid	8015NM Prep	<u> </u>
890-1498-2	SW04	Total/NA	Solid	8015NM Prep	
890-1498-3	SW05	Total/NA	Solid	8015NM Prep	
MB 880-11017/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11017/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11017/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1498-1 MS	SW03	Total/NA	Solid	8015NM Prep	
890-1498-1 MSD	SW03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 11034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Total/NA	Solid	8015B NM	11017
890-1498-2	SW04	Total/NA	Solid	8015B NM	11017
890-1498-3	SW05	Total/NA	Solid	8015B NM	11017
MB 880-11017/1-A	Method Blank	Total/NA	Solid	8015B NM	11017
LCS 880-11017/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11017
LCSD 880-11017/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11017
890-1498-1 MS	SW03	Total/NA	Solid	8015B NM	11017
890-1498-1 MSD	SW03	Total/NA	Solid	8015B NM	11017

Eurofins Xenco, Carlsbad

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QC Association Summary

Client: WSP USA Inc. Job ID: 890-1498-1 Project/Site: PLU 78B SDG: 3140326.020.0129

GC Semi VOA

Analysis Batch: 11118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Total/NA	Solid	8015 NM	
890-1498-2	SW04	Total/NA	Solid	8015 NM	
890-1498-3	SW05	Total/NA	Solid	8015 NM	
-					

HPLC/IC

Leach Batch: 11038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Soluble	Solid	DI Leach	
890-1498-2	SW04	Soluble	Solid	DI Leach	
890-1498-3	SW05	Soluble	Solid	DI Leach	
MB 880-11038/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11038/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11038/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1498-1 MS	SW03	Soluble	Solid	DI Leach	
890-1498-1 MSD	SW03	Soluble	Solid	DI Leach	

Analysis Batch: 11110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1498-1	SW03	Soluble	Solid	300.0	11038
890-1498-2	SW04	Soluble	Solid	300.0	11038
890-1498-3	SW05	Soluble	Solid	300.0	11038
MB 880-11038/1-A	Method Blank	Soluble	Solid	300.0	11038
LCS 880-11038/2-A	Lab Control Sample	Soluble	Solid	300.0	11038
LCSD 880-11038/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11038
890-1498-1 MS	SW03	Soluble	Solid	300.0	11038
890-1498-1 MSD	SW03	Soluble	Solid	300.0	11038

Eurofins Xenco, Carlsbad

Job ID: 890-1498-1 SDG: 3140326.020.0129

Client: WSP USA Inc. Project/Site: PLU 78B

Lab Sample ID: 890-1498-1

Matrix: Solid

Client Sample ID: SW03

Date Collected: 10/27/21 08:32 Date Received: 10/29/21 10:16

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 12:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11017	11/01/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11034	11/01/21 12:30	AJ	XEN MID
Soluble	Leach	DI Leach			11038	11/01/21 09:55	CH	XEN MID
Soluble	Analysis	300.0		10	11110	11/01/21 12:56	CH	XEN MID

Client Sample ID: SW04 Lab Sample ID: 890-1498-2 **Matrix: Solid**

Date Collected: 10/27/21 08:34 Date Received: 10/29/21 10:16

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab 5035 XEN MID Total/NA Prep 11021 11/01/21 08:33 KL 8021B Total/NA 11/01/21 13:06 XEN MID Analysis 1 11022 KL Total/NA Total BTEX 11/01/21 14:01 XEN MID Analysis 1 11149 A.I Total/NA Analysis 8015 NM 11118 11/01/21 12:47 XEN MID Total/NA 8015NM Prep 11017 11/01/21 08:22 XEN MID Prep DM Total/NA Analysis 8015B NM 11034 11/01/21 13:30 AJ XEN MID Soluble XEN MID Leach DI Leach 11038 11/01/21 09:55 CH Soluble Analysis 300.0 10 11110 11/01/21 13:14 CH XEN MID

Lab Sample ID: 890-1498-3 Client Sample ID: SW05 Date Collected: 10/27/21 08:35 **Matrix: Solid**

Date Received: 10/29/21 10:16

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11021	11/01/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	11022	11/01/21 13:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11149	11/01/21 14:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11118	11/01/21 12:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11017	11/01/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11034	11/01/21 13:50	AJ	XEN MID
Soluble	Leach	DI Leach			11038	11/01/21 09:55	CH	XEN MID
Soluble	Analysis	300.0		10	11110	11/01/21 13:20	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.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Pre	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report bu	t the laboratory is not certifi	ed by the governing authority. This list ma	v include analytes for v
the agency does not of	' '	t the laboratory to not contin	ed by the governing additionty. This list the	ly include analytes for v
the agency does not of Analysis Method	' '	Matrix	Analyte	y include analytes for v
9 ,	fer certification.	•	, , ,	

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Method Summary

Job ID: 890-1498-1 Client: WSP USA Inc. Project/Site: PLU 78B SDG: 3140326.020.0129

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

Eurofins Xenco, Carlsbad

Sample Summary

 Client: WSP USA Inc.
 Job ID: 890-1498-1

 Project/Site: PLU 78B
 SDG: 3140326.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Dej
890-1498-1	SW03	Solid	10/27/21 08:32	10/29/21 10:16	0 - 4
890-1498-2	SW04	Solid	10/27/21 08:34	10/29/21 10:16	0 - 4
890-1498-3	SW05	Solid	10/27/21 08:35	10/29/21 10:16	0 - 4

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Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 051418 Rev 2018 1

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10 29-21 1016

			Cha]. 	i Cui	Chain of Custody			Work	Work Order No:	
XMZCO		Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334	00 Dallas,7	X (214) 9	02-0300 8	an Antonio,T	X (210) 509-3334				
		midiand, IX (ط32-704-9440)	7 (480-355	5-0900) A	tlanta,GA	770-449-880	0) Tampa,FL (813	-620-2000)	C.WWW	www.xenco.com	Page of
Project Manager: Tacoma Morrissey		Bill to: (if different)	t) Kyl	Kyle Littrell					Wc	Work Order Comments	mments
	ermian office	Company Name:	¥.	XTO Energy				Program: U	ST/PST DR	Program: UST/PST □PRP □Brownfields	elds ☐RC ☐uperfund ☐
	Bldg 1, Unit 222	Address:		3104 E Greene	ene St.			State of	State of Project: NM	4	
e ZIP:	55	City, State ZIP:		Carlsbad, NM	M			Reporting:Le	Reporting:Level II	HIII □ST/UST	ST TAP Quelly
		Email: travis.casey@wsp.com, kalei.jennings@wsp.com, dan.rr	wsp.co	m, kalei	jennings	@wsp.con	դ, dan.moir@w	Deliverables: EDD	E00	ADaPT 🗆	Other:
Project Name: PLU 78 B		Turn Around				AN	ANALYSIS REQUEST	JEST			Work Order Notes
er:	29	Routine									IN:NAPP2126639352
P.O. Number:		Rush: 24hr.									CC:1080781001
Sampler's Name: Travis Casey		Due Date:				_			-		API:30-015-27536
SAMPLE RECEIPT Temp	Temp Blank: Yes No V	Wet ice: Yes No		_							
Temperature (°C): 2.0/1.8		Thermometer ID	ners)						
Received Intact: Yes No.	No Correction Eactor:	N OO J			300.	8	890-1498 Chain c	Chain of Custody		_	TAT state the decrees seed by the
;: Yes					e (EP		_	_	_		lab, if received by 4:30pm
Sample Identification	Matrix Date Ti	Time Depth	Numbe	BTEX (I	Chlorid						Sample Comments
SW03	S 10/27/2021 6	32 0-4	1 ×	×	×						Composite
SW04	S 10/27/2021	34 0-4	1 ×	×	×						Composite
SW05	S 10/27/2021 0 8	35 0-4	- ×	×	×						Composite
			-	-							
			-	-							
								+			
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	. %	CRA 13PPM Texas 11 AITCLP / SPLP 6010: 8RCRA	Al Sb	As Ba As Ba	Be Be	Cd Ca Cr	B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo N Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Pb Mg Mn Mo o Ni Se Ag Tl	K Se	Ag SiO2 Na 163 1	Na Sr Ti Sn U V Zn 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.	hment of samples constitutes a v	alid purchase order from c	lient compa	any to Xen	co, its affili	ites and subc	ontractors. It assign	It assigns standard terms and conditions	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 cilent if such losses are due to circumstances beyond the control	of samples and shall not assume	any responsibility for any	losses or e	kpenses in	curred by t	he client if suc	h losses are due to	circumstances bey	ond the control		

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1498-1

SDG Number: 3140326.020.0129

List Source: Eurofins Xenco, Carlsbad

Login Number: 1498 List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1498-1

SDG Number: 3140326.020.0129

List Source: Eurofins Xenco, Midland

List Creation: 11/01/21 08:46 AM

List Number: 2 Creator: Kramer, Jessica

Login Number: 1498

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	2.6/2.7
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	N/A	

<6mm (1/4").

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1526-1

Laboratory Sample Delivery Group: 31403236.20.0129

Client Project/Site: PLU 78 B

For:

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

Attn: Tacoma Morrissey

JURAMER

Authorized for release by: 11/9/2021 1:57:32 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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Have a Question?



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www.eurofinsus.com/Env

Released to Imaging: 12/16/2022 9:35:28 AM

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 78 B

Laboratory Job ID: 890-1526-1

SDG: 31403236.20.0129

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Qualifiers

GC VOA	
Qualifier	

Qualifier Description S1+ Surrogate recovery exceeds control limits, high biased. 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, 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

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)
ND	Not betedted at the reporting limit (or MDL or EDL if Shown)

NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive

PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

 relative Error reads (readisorierment)	
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RL	Reporting Limit of Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

111 5	redative i crociit Dilicience, a measi
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Xenco, Carlsbad

Case Narrative

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

Job ID: 890-1526-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1526-1

Receipt

The samples were received on 11/3/2021 4:54 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 2.2°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with preparation batch 880-11444 and analytical batch 880-11509 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Diesel Range Organics (Over C10-C28) and Oll Range Organics (Over C28-C36) in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

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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Lab Sample ID: 890-1526-1

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

Client Sample ID: SW10

Date Collected: 10/27/21 10:20 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 14:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 14:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 14:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/05/21 09:00	11/05/21 14:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 14:08	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/05/21 09:00	11/05/21 14:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130			11/05/21 09:00	11/05/21 14:08	1
1,4-Difluorobenzene (Surr)	98		70 - 130			11/05/21 09:00	11/05/21 14:08	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/05/21 13:34	1
Analyte Total TPH		Qualifier U	49.9	Unit mg/Kg	D	Prepared	Analyzed 11/05/21 13:50	Dil Fa
TOTAL TPH - -	<49.9	U	49.9	mg/Kg			11/05/21 13:50	
Method: 8015B NM - Diesel Rang	O! (D							
	ge Organics (D	RO) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	•	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared 11/04/21 10:41	Analyzed 11/05/21 14:11	
Gasoline Range Organics	Result	Qualifier U			<u>D</u>			1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	11/04/21 10:41	11/05/21 14:11	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	11/04/21 10:41	11/05/21 14:11	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U U U	49.9 49.9 49.9 Limits	mg/Kg	<u>D</u>	11/04/21 10:41 11/04/21 10:41 11/04/21 10:41 Prepared	11/05/21 14:11 11/05/21 14:11 11/05/21 14:11 Analyzed	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9	Qualifier U U U	49.9 49.9 49.9	mg/Kg	<u> </u>	11/04/21 10:41 11/04/21 10:41 11/04/21 10:41	11/05/21 14:11 11/05/21 14:11 11/05/21 14:11	1 1 1 Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U U U	49.9 49.9 49.9 Limits	mg/Kg	<u>D</u>	11/04/21 10:41 11/04/21 10:41 11/04/21 10:41 Prepared	11/05/21 14:11 11/05/21 14:11 11/05/21 14:11 Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier S1+ Soluble	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u> </u>	11/04/21 10:41 11/04/21 10:41 11/04/21 10:41 Prepared 11/04/21 10:41	11/05/21 14:11 11/05/21 14:11 11/05/21 14:11 Analyzed 11/05/21 14:11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier S1+ Soluble Qualifier	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	11/04/21 10:41 11/04/21 10:41 11/04/21 10:41 Prepared 11/04/21 10:41	11/05/21 14:11 11/05/21 14:11 11/05/21 14:11 Analyzed 11/05/21 14:11	Dil Fac

Client Sample ID: SW12

Date Collected: 10/27/21 10:23 Date Received: 11/03/21 16:54

Date Received. 11/00/21 10

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 14:29	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 14:29	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 14:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/05/21 09:00	11/05/21 14:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 14:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/05/21 09:00	11/05/21 14:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130			11/05/21 09:00	11/05/21 14:29	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1526-2

Matrix: Solid

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Released to Imaging: 12/16/2022 9:35:28 AM

Lab Sample ID: 890-1526-2

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Client Sample ID: SW12

Date Collected: 10/27/21 10:23 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	11/05/21 09:00	11/05/21 14:29	1

Method:	Total BT	FX - Tota	al BTFX	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/05/21 13:34	1

Mothod: 8015 NM - Diosal Rango	Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/05/21 13:50	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD()) /CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 14:33	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 14:33	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 14:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Surroyate		Quaiillei	LIIIIII			riepareu	Analyzeu	Dil Fac

Surrogate	70Necovery	Qualifier	Lillits		rrepareu	Allalyzeu	DII Fac
1-Chlorooctane	120		70 - 130	-	11/04/21 10:41	11/05/21 14:33	1
o-Terphenyl	135	S1+	70 - 130		11/04/21 10:41	11/05/21 14:33	1
_							

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3810		25.0	mg/Kg			11/09/21 04:34	5

Client Sample ID: SW13 Lab Sample ID: 890-1526-3

Date Collected: 10/27/21 10:28 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 14:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 14:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 14:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/05/21 09:00	11/05/21 14:49	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 14:49	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/05/21 09:00	11/05/21 14:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/05/21 09:00	11/05/21 14:49	1
1,4-Difluorobenzene (Surr)	96		70 - 130			11/05/21 09:00	11/05/21 14:49	1

Mothod:	Total RT	EY Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00396	U	0.00396	ma/Ka			11/05/21 13:34	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	229	50.0	mg/Kg			11/05/21 13:50	1

Eurofins Xenco, Carlsbad

Matrix: Solid

Lab Sample ID: 890-1526-3

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Client Sample ID: SW13

Date Collected: 10/27/21 10:28 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 14:54	1
Diesel Range Organics (Over C10-C28)	229		50.0	mg/Kg		11/04/21 10:41	11/05/21 14:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 14:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130			11/04/21 10:41	11/05/21 14:54	1
o-Terphenyl	144	S1+	70 - 130			11/04/21 10:41	11/05/21 14:54	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10900		99.6	mg/Kg			11/09/21 04:41	20

Lab Sample ID: 890-1526-4 **Client Sample ID: SW14** Date Collected: 10/28/21 10:29 **Matrix: Solid**

Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 15:10	1
Toluene	< 0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 15:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 15:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/05/21 09:00	11/05/21 15:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/05/21 09:00	11/05/21 15:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/05/21 09:00	11/05/21 15:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130			11/05/21 09:00	11/05/21 15:10	1
1,4-Difluorobenzene (Surr)	80		70 - 130			11/05/21 09:00	11/05/21 15:10	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			11/05/21 13:34	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	61.9		49.8	mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		11/04/21 10:41	11/05/21 15:17	1
Diesel Range Organics (Over C10-C28)	61.9		49.8	mg/Kg		11/04/21 10:41	11/05/21 15:17	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/04/21 10:41	11/05/21 15:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			11/04/21 10:41	11/05/21 15:17	1
o-Terphenyl	136	S1+	70 - 130			11/04/21 10:41	11/05/21 15:17	1

Matrix: Solid

Lab Sample ID: 890-1526-4

Job ID: 890-1526-1

SDG: 31403236.20.0129

Client Sample ID: SW14

Date Collected: 10/28/21 10:29 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Client: WSP USA Inc.

Project/Site: PLU 78 B

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6550		49.5	mg/Kg]		11/09/21 04:49	10	

Client Sample ID: SW15 Lab Sample ID: 890-1526-5

Date Collected: 10/29/21 10:29 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 15:30	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 15:30	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 15:30	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		11/05/21 09:00	11/05/21 15:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/05/21 09:00	11/05/21 15:30	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		11/05/21 09:00	11/05/21 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			11/05/21 09:00	11/05/21 15:30	1
1,4-Difluorobenzene (Surr)	105		70 - 130			11/05/21 09:00	11/05/21 15:30	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			11/05/21 13:34	1
Analyte Total TPH	75.6	Qualifier		mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 15:39	1
Diesel Range Organics (Over C10-C28)	75.6		50.0	mg/Kg		11/04/21 10:41	11/05/21 15:39	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 15:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			11/04/21 10:41	11/05/21 15:39	1
o-Terphenyl	128		70 - 130			11/04/21 10:41	11/05/21 15:39	1
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble						
mounou, occió Amono, ion om	a. gpy							
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1526-6

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Client Sample ID: SW16

Date Collected: 10/30/21 10:30 Date Received: 11/03/21 16:54

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 15:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 15:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 15:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/05/21 09:00	11/05/21 15:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 15:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/05/21 09:00	11/05/21 15:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			11/05/21 09:00	11/05/21 15:51	1
1,4-Difluorobenzene (Surr)	102		70 - 130			11/05/21 09:00	11/05/21 15:51	1
Method: Total BTEX - Total BTE	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			11/05/21 13:34	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.3		49.8	mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		11/04/21 10:41	11/05/21 16:01	1
Diesel Range Organics (Over C10-C28)	74.3		49.8	mg/Kg		11/04/21 10:41	11/05/21 16:01	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/04/21 10:41	11/05/21 16:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130			11/04/21 10:41	11/05/21 16:01	1
o-Terphenyl	89		70 - 130			11/04/21 10:41	11/05/21 16:01	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Method: 300.0 - Anions, Ion Chro Analyte	• • •	Soluble Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-1526-1	SW10	121	98	
390-1526-2	SW12	127	98	
390-1526-3	SW13	117	96	
390-1526-4	SW14	142 S1+	80	
390-1526-5	SW15	126	105	
390-1526-6	SW16	124	102	
390-1537-A-1-B MS	Matrix Spike	111	103	
390-1537-A-1-C MSD	Matrix Spike Duplicate	119	102	
_CS 880-11475/1-A	Lab Control Sample	107	106	
_CSD 880-11475/2-A	Lab Control Sample Dup	103	106	
MB 880-11475/5-A	Method Blank	110	94	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Accepta
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-7973-A-1-B MS	Matrix Spike	101	84	
880-7973-A-1-C MSD	Matrix Spike Duplicate	101	90	
890-1526-1	SW10	118	135 S1+	
890-1526-2	SW12	120	135 S1+	
890-1526-3	SW13	126	144 S1+	
890-1526-4	SW14	122	136 S1+	
890-1526-5	SW15	111	128	
890-1526-6	SW16	79	89	
LCS 880-11444/2-A	Lab Control Sample	102	112	
LCSD 880-11444/3-A	Lab Control Sample Dup	97	108	
MB 880-11444/1-A	Method Blank	109	129	
Surrogate Legend 1CO = 1-Chlorooctane				

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11475/5-A

Matrix: Solid

Analysis Batch: 11515

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11475

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 12:28	
Toluene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 12:28	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 12:28	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/05/21 09:00	11/05/21 12:28	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/05/21 09:00	11/05/21 12:28	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/05/21 09:00	11/05/21 12:28	

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	11/05/21 09:00	11/05/21 12:28	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/05/21 09:00	11/05/21 12:28	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-11475/1-A

Matrix: Solid

Analysis Batch: 11515

Prep Type: Total/NA

Prep Batch: 11475

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08097		mg/Kg		81	70 - 130	
Toluene	0.100	0.07362		mg/Kg		74	70 - 130	
Ethylbenzene	0.100	0.07723		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	0.200	0.1612		mg/Kg		81	70 - 130	
o-Xylene	0.100	0.08159		mg/Kg		82	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	107	70 - 130
1,4-Difluorobenzene (Surr)	106	70 - 130

Lab Sample ID: LCSD 880-11475/2-A

Matrix: Solid

Analysis Batch: 11515

Prep Type: Total/NA

Prep Batch: 11475

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08404		mg/Kg		84	70 - 130	4	35	
Toluene	0.100	0.07617		mg/Kg		76	70 - 130	3	35	
Ethylbenzene	0.100	0.07848		mg/Kg		78	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1634		mg/Kg		82	70 - 130	1	35	
o-Xylene	0.100	0.08158		mg/Kg		82	70 - 130	0	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	103	70 - 130
1.4-Difluorobenzene (Surr)	106	70 - 130

Lab Sample ID: 890-1537-A-1-B MS

Matrix: Solid

Analysis Batch: 11515

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

Prep Batch: 11475

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0998	0.09141		mg/Kg		91	70 - 130	
Toluene	<0.00199	U	0.0998	0.08545		mg/Kg		85	70 - 130	

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QC Sample Results

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

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

Lab Sample ID: 890-1537-A-1-B MS

Matrix: Solid

Analysis Batch: 11515

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 11475

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00199 Ethylbenzene U 0.0998 0.08783 88 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.200 0.1844 mg/Kg 92 70 - 130 <0.00199 U 0.0998 o-Xylene 0.09241 mg/Kg 92 70 - 130

MS MS

Surrogate	%Recovery Qualif	ier Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11475

Lab Sample ID: 890-1537-A-1-C MSD **Matrix: Solid**

Analysis Batch: 11515

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.0996	0.08206		mg/Kg		82	70 - 130	11	35
Toluene	< 0.00199	U	0.0996	0.07797		mg/Kg		78	70 - 130	9	35
Ethylbenzene	<0.00199	U	0.0996	0.08478		mg/Kg		85	70 - 130	4	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1813		mg/Kg		91	70 - 130	2	35
o-Xylene	< 0.00199	U	0.0996	0.09187		mg/Kg		92	70 - 130	1	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-11444/1-A

Matrix: Solid

Analysis Batch: 11509

Client	t Samp	le ID:	Method	Blank

Prep Type: Total/NA

Prep Batch: 11444

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 11:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 11:16	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/04/21 10:41	11/05/21 11:16	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	11/04/21 10:41	11/05/21 11:16	1
o-Terphenyl	129		70 - 130	11/04/21 10:41	11/05/21 11:16	1

Lab Sample ID: LCS 880-11444/2-A

Matrix: Solid

Analysis Batch: 11509

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

Prep Batch: 11444

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1120		mg/Kg		112	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1093		mg/Kg		109	70 - 130	
C10-C28)								

Eurofins Xenco, Carlsbad

Released to Imaging: 12/16/2022 9:35:28 AM

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

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

LCS LCS

%Recovery Qualifier

102

Lab Sample ID: LCS 880-11444/2-A Client Sample ID: Lab Control Sample

Limits

70 - 130

Matrix: Solid

Surrogate

C10-C28)

1-Chlorooctane

Analysis Batch: 11509

Prep Type: Total/NA

Prep Batch: 11444

o-Terphenyl 112 70 - 130

Lab Sample ID: LCSD 880-11444/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 11509 Prep Batch: 11444

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1145 114 70 - 1302 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over 1146 mg/Kg 115 70 - 13020 5

LCSD LCSD

Surrogate %Recovery Qualifier Limits 97 70 - 130 1-Chlorooctane 108 70 - 130 o-Terphenyl

Lab Sample ID: 880-7973-A-1-B MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 11509 Prep Batch: 11444 MS MS Sample Sample Spike %Rec.

Analyte Result Qualifier hahhA Result Qualifier Unit %Rec Limits D Gasoline Range Organics <249 U F1 F2 997 1598 F1 mg/Kg 160 70 - 130

(GRO)-C6-C10

Qualifier %Recovery I imits Surrogate 1-Chlorooctane 101 70 - 130 o-Terphenyl 84 70 - 130

MS MS

MSD MSD

MB MB

Lab Sample ID: 880-7973-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 11509** Prep Batch: 11444

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit

Gasoline Range Organics <249 U F1 F2 1000 1220 F2 mg/Kg 122 70 - 13027 20

(GRO)-C6-C10

Qualifier Limits Surrogate %Recovery

1-Chlorooctane 101 70 - 130 o-Terphenyl 90 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11667/1-A Client Sample ID: Method Blank

Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 11702

Result Qualifier RLUnit D Dil Fac Analyte Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/09/21 03:48

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-11667/2-A

Client Sample ID: Lab Control Sample
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 11702

 Analyte
 LCS LCS
 %Rec.

 Chloride
 250
 256.9
 mg/Kg
 103
 90 - 110

Lab Sample ID: LCSD 880-11667/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 11702

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Unit Limit Analyte D %Rec Limits RPD Chloride 250 259.3 mg/Kg 104

Lab Sample ID: 890-1526-1 MS

Matrix: Solid

Client Sample ID: SW10

Prep Type: Soluble

Analysis Batch: 11702

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 6410 F1 2530 9341 F1 90 - 110 mg/Kg 116

Lab Sample ID: 890-1526-1 MSD

Matrix: Solid

Analysis Batch: 11702

Spike MSD MSD RPD Sample Sample %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec RPD Limit Limits Chloride 2530 9322 F1 6410 F1 115 90 - 110 20 mg/Kg

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Client Sample ID: SW10

Prep Type: Soluble

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

GC VOA

Prep Batch: 11475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Total/NA	Solid	5035	_
890-1526-2	SW12	Total/NA	Solid	5035	
890-1526-3	SW13	Total/NA	Solid	5035	
890-1526-4	SW14	Total/NA	Solid	5035	
890-1526-5	SW15	Total/NA	Solid	5035	
890-1526-6	SW16	Total/NA	Solid	5035	
MB 880-11475/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11475/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11475/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1537-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-1537-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 11515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Total/NA	Solid	8021B	11475
890-1526-2	SW12	Total/NA	Solid	8021B	11475
890-1526-3	SW13	Total/NA	Solid	8021B	11475
890-1526-4	SW14	Total/NA	Solid	8021B	11475
890-1526-5	SW15	Total/NA	Solid	8021B	11475
890-1526-6	SW16	Total/NA	Solid	8021B	11475
MB 880-11475/5-A	Method Blank	Total/NA	Solid	8021B	11475
LCS 880-11475/1-A	Lab Control Sample	Total/NA	Solid	8021B	11475
LCSD 880-11475/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11475
890-1537-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	11475
890-1537-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	11475

Analysis Batch: 11588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Total/NA	Solid	Total BTEX	
890-1526-2	SW12	Total/NA	Solid	Total BTEX	
890-1526-3	SW13	Total/NA	Solid	Total BTEX	
890-1526-4	SW14	Total/NA	Solid	Total BTEX	
890-1526-5	SW15	Total/NA	Solid	Total BTEX	
890-1526-6	SW16	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 11444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Total/NA	Solid	8015NM Prep	
890-1526-2	SW12	Total/NA	Solid	8015NM Prep	
890-1526-3	SW13	Total/NA	Solid	8015NM Prep	
890-1526-4	SW14	Total/NA	Solid	8015NM Prep	
890-1526-5	SW15	Total/NA	Solid	8015NM Prep	
890-1526-6	SW16	Total/NA	Solid	8015NM Prep	
MB 880-11444/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11444/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11444/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7973-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7973-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

GC Semi VOA

Analysis Batch: 11509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Total/NA	Solid	8015B NM	11444
890-1526-2	SW12	Total/NA	Solid	8015B NM	11444
890-1526-3	SW13	Total/NA	Solid	8015B NM	11444
890-1526-4	SW14	Total/NA	Solid	8015B NM	11444
890-1526-5	SW15	Total/NA	Solid	8015B NM	11444
890-1526-6	SW16	Total/NA	Solid	8015B NM	11444
MB 880-11444/1-A	Method Blank	Total/NA	Solid	8015B NM	11444
LCS 880-11444/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11444
LCSD 880-11444/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11444
880-7973-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	11444
880-7973-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	11444

Analysis Batch: 11598

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
SW10	Total/NA	Solid	8015 NM	_
SW12	Total/NA	Solid	8015 NM	
SW13	Total/NA	Solid	8015 NM	
SW14	Total/NA	Solid	8015 NM	
SW15	Total/NA	Solid	8015 NM	
SW16	Total/NA	Solid	8015 NM	
	SW10 SW12 SW13 SW14 SW15	SW10 Total/NA SW12 Total/NA SW13 Total/NA SW14 Total/NA SW15 Total/NA	SW10 Total/NA Solid SW12 Total/NA Solid SW13 Total/NA Solid SW14 Total/NA Solid SW15 Total/NA Solid	SW10 Total/NA Solid 8015 NM SW12 Total/NA Solid 8015 NM SW13 Total/NA Solid 8015 NM SW14 Total/NA Solid 8015 NM SW15 Total/NA Solid 8015 NM

HPLC/IC

Leach Batch: 11667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Soluble	Solid	DI Leach	
890-1526-2	SW12	Soluble	Solid	DI Leach	
890-1526-3	SW13	Soluble	Solid	DI Leach	
890-1526-4	SW14	Soluble	Solid	DI Leach	
890-1526-5	SW15	Soluble	Solid	DI Leach	
890-1526-6	SW16	Soluble	Solid	DI Leach	
MB 880-11667/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11667/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11667/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1526-1 MS	SW10	Soluble	Solid	DI Leach	
890-1526-1 MSD	SW10	Soluble	Solid	DI Leach	

Analysis Batch: 11702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1526-1	SW10	Soluble	Solid	300.0	11667
890-1526-2	SW12	Soluble	Solid	300.0	11667
890-1526-3	SW13	Soluble	Solid	300.0	11667
890-1526-4	SW14	Soluble	Solid	300.0	11667
890-1526-5	SW15	Soluble	Solid	300.0	11667
890-1526-6	SW16	Soluble	Solid	300.0	11667
MB 880-11667/1-A	Method Blank	Soluble	Solid	300.0	11667
LCS 880-11667/2-A	Lab Control Sample	Soluble	Solid	300.0	11667
LCSD 880-11667/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11667
890-1526-1 MS	SW10	Soluble	Solid	300.0	11667
890-1526-1 MSD	SW10	Soluble	Solid	300.0	11667

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SDG: 31403236.20.0129

Client Sample ID: SW10

Date Received: 11/03/21 16:54

Client: WSP USA Inc.

Project/Site: PLU 78 B

Lab Sample ID: 890-1526-1 Date Collected: 10/27/21 10:20

Matrix: Solid

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst 5035 Total/NA Prep 11475 11/05/21 09:00 MR XEN MID 8021B Total/NA Analysis 1 11515 11/05/21 14:08 KLXEN MID Total/NA Analysis Total BTEX 11588 11/05/21 13:34 ΑJ XEN MID Total/NA 8015 NM XEN MID Analysis 1 11598 11/05/21 13:50 AJ Total/NA 8015NM Prep XEN MID Prep 11444 11/04/21 10:41 DM Total/NA Analysis 8015B NM 11509 11/05/21 14:11 AJ XEN MID Soluble DI Leach 11667 11/08/21 11:05 СН XEN MID Leach Soluble Analysis 300.0 10 11702 11/09/21 04:11 СН XEN MID

Client Sample ID: SW12 Lab Sample ID: 890-1526-2

Date Collected: 10/27/21 10:23 **Matrix: Solid**

Date Received: 11/03/21 16:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11475	11/05/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	11515	11/05/21 14:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11588	11/05/21 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11444	11/04/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11509	11/05/21 14:33	AJ	XEN MID
Soluble	Leach	DI Leach			11667	11/08/21 11:05	CH	XEN MID
Soluble	Analysis	300.0		5	11702	11/09/21 04:34	CH	XEN MID

Client Sample ID: SW13 Lab Sample ID: 890-1526-3 Date Collected: 10/27/21 10:28 **Matrix: Solid**

Date Received: 11/03/21 16:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11475	11/05/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	11515	11/05/21 14:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11588	11/05/21 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11444	11/04/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11509	11/05/21 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			11667	11/08/21 11:05	CH	XEN MID
Soluble	Analysis	300.0		20	11702	11/09/21 04:41	CH	XEN MID

Client Sample ID: SW14 Lab Sample ID: 890-1526-4 Date Collected: 10/28/21 10:29 Matrix: Solid

Date Received: 11/03/21 16:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11475	11/05/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	11515	11/05/21 15:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11588	11/05/21 13:34	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1526-1 Project/Site: PLU 78 B SDG: 31403236.20.0129

Client Sample ID: SW14

Date Received: 11/03/21 16:54

Lab Sample ID: 890-1526-4 Date Collected: 10/28/21 10:29

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11444	11/04/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11509	11/05/21 15:17	AJ	XEN MID
Soluble	Leach	DI Leach			11667	11/08/21 11:05	СН	XEN MID
Soluble	Analysis	300.0		10	11702	11/09/21 04:49	CH	XEN MID

Client Sample ID: SW15 Lab Sample ID: 890-1526-5

Date Collected: 10/29/21 10:29 **Matrix: Solid**

Date Received: 11/03/21 16:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11475	11/05/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	11515	11/05/21 15:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11588	11/05/21 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11444	11/04/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11509	11/05/21 15:39	AJ	XEN MID
Soluble	Leach	DI Leach			11667	11/08/21 11:05	CH	XEN MID
Soluble	Analysis	300.0		20	11702	11/09/21 04:57	CH	XEN MID

Client Sample ID: SW16 Lab Sample ID: 890-1526-6

Date Collected: 10/30/21 10:30 **Matrix: Solid** Date Received: 11/03/21 16:54

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11475	11/05/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	11515	11/05/21 15:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	11588	11/05/21 13:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11444	11/04/21 10:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11509	11/05/21 16:01	AJ	XEN MID
Soluble	Leach	DI Leach			11667	11/08/21 11:05	CH	XEN MID
Soluble	Analysis	300.0		10	11702	11/09/21 05:20	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.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	it the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for wh
the agency does not of	fer certification.	•	, , ,	.,
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	-,
0 ,		Matrix Solid	Analyte Total TPH	

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Method Summary

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

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

Eurofins Xenco, Carlsbad

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Sample Summary

 Client: WSP USA Inc.
 Job ID: 890-1526-1

 Project/Site: PLU 78 B
 SDG: 31403236.20.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1526-1	SW10	Solid	10/27/21 10:20	11/03/21 16:54	0 - 4
890-1526-2	SW12	Solid	10/27/21 10:23	11/03/21 16:54	0 - 4
890-1526-3	SW13	Solid	10/27/21 10:28	11/03/21 16:54	0 - 4
890-1526-4	SW14	Solid	10/28/21 10:29	11/03/21 16:54	0 - 4
890-1526-5	SW15	Solid	10/29/21 10:29	11/03/21 16:54	0 - 4
890-1526-6	SW16	Solid	10/30/21 10:30	11/03/21 16:54	0 - 4

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Chain of Custody

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	1		Relinquished by: (Signature)	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.	Circle Method(s) and Metal(s) to be analyzed	7-1-1 000 7 / 00					SW16	SW15	SW14	SW13	SW12	SW10	Sample Identification	Sample Custody Seals:	Cooler Custody Seals:	Received Intact:	Temperature (°C):	SAMPLE RECEIPT	Sampler's Name: T	P.O. Number:	Project Number: 3	Project Name: P	Phone: (4	City, State ZIP: N	Address: 3		Project Manager: T	LABI
			(Signature)	cument and relinquible only for the coage of \$75.00 will be	and Metal(s) to b												fication	Yes No	Yes No	(Y)	2.4/2		Travis Casey		31403236.020.0129	PLU 78 B	(432) 704-5178	Midland, TX 79705	3300 North A St. Bldg 1, Unit 222	WSP USA Inc., Permian office	Tacoma Morrissey	ABERATURES
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	(100 (bd	Received t	f samples constitues and shall not a each project and	nalyzed	00					10/30/2021	10/29/2021	10/28/2021	10/27/2021	10/27/2021	10/27/2021	Date Sampled	Tota	Corre	Λ	, =	(eg) No							I, Unit 222	n office		Hobbs,
	\ 	4	Received by: (Signature)	utes a valid purch ssume any respo a charge of \$5 for	TCLP / SPLP 6010: 8RCRA						10:30	10:29	10:29	10:28	10:23	10:20	Time Sampled	Total Containers:	Correction Factor:	FOO-MIN	Thermometer ID	Wet Ice:	Due Date:	Rush: 24hr.	Routine	Turr	Email: tr	0	A	0	m	Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1295 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0800) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
			e)	ase order from c insibility for any l	P 6010: 8RC						0-4	0-4	0-4	0-4	0-4	0-4	Depth		0.2			Ves No	ate:	24hr.	Ф	Turn Around	Email: travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@w	City, State ZIP:	Address:	Company Name:	Bill to: (if different)	Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (805)/94-1286 75-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (8
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Revised Date 051418 Rev 2018 1

Eurofins Xenco, Carlsbad

Phone. 575-988-3199 Fax. 575-988-3199

Carlsbad NM 88220

1089 N Canal St.

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Chain of Custody Record

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Environment Testing

Project Name PLU 78 B SW15 (890-1526-5) SW10 (890-1526-1) State Zip: TX, 79701 SW16 (890-1526-6) SW14 (890-1526-4) SW13 (890-1526-3) SW12 (890-1526-2) Sample Identification - Client ID (Lab ID) tote 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 naintain accreditation in the State of Origin listed above for analysis/rests/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 laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions. 32-704-5440(Tel) 211 W Florida Ave, Shipping/Receiving ossible Hazard Identification mpty Kit Relinquished by eliverable Requested | II III IV Other (specify) elinquished by: elinquished by lient Information ent Contact ırofins Xenco Custody Seals Intact inquished by: Yes S B (Sub Contract Lab) Custody Seal ᇹ <u>ن</u> الا Phone **%**0# TAT Requested (days) Due Date Requested 11/5/2021 Primary Deliverable Rank 89000004 Date/Time Date/Time Sample Date roject #: 10/29/21 10/28/21 10/27/21 10/27/21 10/27/21 10/30/21 Mountain 10 23 Mountain 10 28 Mountain 10 29 Mountain 10 29 Mountair 10 20 (C=comp, G=grab) Sample Type Preservation Code: Company Company Matrix Solid Solid Solid Solid Solid Solid essica kramer@eurofinset com Kramer Ime Field Filtered Sample (Yes or No) Accreditations Required (See note):
NELAP - Louisiana NELAP - Texas Jessica Perform MS/MSD (Yes or No) Special Instructions/QC Requirements × × × × × 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Received by: × Cooler Temperature(s) °C and Other Remarks. Return To Client × × 8015MOD_Calc × × × × 300 ORGEM 28D/DI LEACH Chloride × × × × × × × × × × 8021B/5035FP_Calc (MOD) BTEX × × Analysis Requested Total_BTEX_GCV × × × × × × Disposal By Lab State of Origin
New Mexico Date/Time Date/Time Archive For 口ののこ **Total Number of containers** 4 eller COC No 890-495 1 ±0™m∪d œ > Preservation Codes 890-1526-1 Page 1 of 1 Ice DI Water EDTA EDA Nitric Acid NaHSO4 MeOH Amchlor NaOH Ascorbic Acid 던 Special Instructions/Note V € < ⊂ ⊣ 0 R 0 P zΞ o Na2O4S
Na2O4S
Na2SO3
Na2SO3
Na2SO3
Na2SO4
TSP Dodecahydrate
J Acetone
J MCAA Company Company Ver: 06/08/2021 other (specify) Months

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1526-1

SDG Number: 31403236.20.0129

List Source: Eurofins Xenco, Carlsbad

Login Number: 1526 List Number: 1 Creator: Clifton, Cloe

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 Number: 1526

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1526-1

SDG Number: 31403236.20.0129

List Source: Eurofins Xenco, Midland List Creation: 11/05/21 01:13 PM

List Number: 2
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	4.6/4.7
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: 890-1555-1

Laboratory Sample Delivery Group: 31403236.020.0129

Client Project/Site: PLU 78

For:

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

Attn: Kalei Jennings

MEAMER

Authorized for release by: 11/11/2021 7:17:34 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

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www.eurofinsus.com/Env

Released to Imaging: 12/16/2022 9:35:28 AM

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.
 Laboratory Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

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 Colony Forming Unit CFU **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 MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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

Toxicity Equivalent Factor (Dioxin) TFF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Job ID: 890-1555-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1555-1

Receipt

The samples were received on 11/10/2021 11:23 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 9.6°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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Eurofins Xenco, Carlsbad 11/11/2021

Lab Sample ID: 890-1555-1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS11

Date Collected: 11/10/21 09:02 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:45	
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:45	•
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:45	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/11/21 08:57	11/11/21 12:45	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:45	
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/11/21 08:57	11/11/21 12:45	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	125		70 - 130			11/11/21 08:57	11/11/21 12:45	
1,4-Difluorobenzene (Surr)	79		70 - 130			11/11/21 08:57	11/11/21 12:45	
- Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/21 14:02	
Analyte Total TPH		Qualifier	RL 50.0	Unit ma/Ka	D	Prepared	Analyzed	Dil Fa
Total TPH			50.0	mg/Kg		Tropurcu		
							11/11/21 15:00	•
							11/11/21 15:00	
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)					11/11/21 15:00	•
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	
Analyte Gasoline Range Organics	• • •	Qualifier	RL	Unit mg/Kg	<u>D</u>	Prepared 11/11/21 08:21		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U			<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0	Qualifier U	50.0	mg/Kg	<u>D</u>	11/11/21 08:21	Analyzed 11/11/21 11:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U U U	50.0	mg/Kg	<u>D</u>	11/11/21 08:21	Analyzed 11/11/21 11:51 11/11/21 11:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0 <50.0	Qualifier U U U	50.0 50.0 50.0	mg/Kg	<u>D</u>	11/11/21 08:21 11/11/21 08:21 11/11/21 08:21	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U U	50.0 50.0 50.0 Limits	mg/Kg	<u> </u>	11/11/21 08:21 11/11/21 08:21 11/11/21 08:21 Prepared	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51 Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	11/11/21 08:21 11/11/21 08:21 11/11/21 08:21 Prepared 11/11/21 08:21	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51 Analyzed 11/11/21 11:51	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	11/11/21 08:21 11/11/21 08:21 11/11/21 08:21 Prepared 11/11/21 08:21	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51 Analyzed 11/11/21 11:51	Dil Fac

Client Sample ID: FS12

Date Collected: 11/10/21 09:03 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/11/21 08:57	11/11/21 13:06	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/11/21 08:57	11/11/21 13:06	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/11/21 08:57	11/11/21 13:06	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/11/21 08:57	11/11/21 13:06	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/11/21 08:57	11/11/21 13:06	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/11/21 08:57	11/11/21 13:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130			11/11/21 08:57	11/11/21 13:06	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1555-2

Matrix: Solid

Lab Sample ID: 890-1555-2

11/11/21 17:04

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Client Sample ID: FS12

Date Collected: 11/10/21 09:03 Date Received: 11/10/21 11:23

Sample Depth: 4

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	79		70 - 130			11/11/21 08:57	11/11/21 13:06	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/11/21 14:02	-
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/11/21 15:00	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		11/11/21 08:21	11/11/21 12:55	
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		11/11/21 08:21	11/11/21 12:55	•
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/21 08:21	11/11/21 12:55	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	98		70 - 130			11/11/21 08:21	11/11/21 12:55	
			70 - 130			11/11/21 08:21	11/11/21 12:55	

253

mg/Kg

21300

Eurofins Xenco, Carlsbad

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1 U

12

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1555-1	FS11	125	79	
890-1555-1 MS	FS11	117	113	
890-1555-1 MSD	FS11	116	101	
890-1555-2	FS12	78	79	
LCS 880-11996/1-A	Lab Control Sample	109	102	
LCSD 880-11996/2-A	Lab Control Sample Dup	113	102	
MB 880-11996/5-A	Method Blank	128	102	
Surrogate Legend				
BFB = 4-Bromofluorobenz	zene (Surr)			

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

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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1555-1	FS11	109	121	
890-1555-1 MS	FS11	100	99	
890-1555-2	FS12	98	102	
LCS 880-11990/2-A	Lab Control Sample	84	93	
LCSD 880-11990/3-A	Lab Control Sample Dup	83	86	
MB 880-11990/1-A	Method Blank	106	127	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

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

Matrix: Solid Prep Type: Total/NA

=				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID			
890-1555-1 MSD	FS11			
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11996/5-A

Matrix: Solid

Analysis Batch: 11997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11996

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/11/21 08:57	11/11/21 12:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 08:57	11/11/21 12:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/11/21 08:57	11/11/21 12:17	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	11/11/21 08:57	11/11/21 12:17	1
1,4-Difluorobenzene (Surr)	102		70 - 130	11/11/21 08:57	11/11/21 12:17	1

Lab Sample ID: LCS 880-11996/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 11997

Prep Type: Total/NA Prep Batch: 11996

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08647 mg/Kg 86 70 - 130 Toluene 0.100 0.09691 mg/Kg 97 70 - 130 Ethylbenzene 0.100 0.09479 mg/Kg 95 70 - 130 0.200 0.1868 93 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 70 - 130 o-Xylene 0.09441 mg/Kg

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	109	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: LCSD 880-11996/2-A

Matrix: Solid

Analysis Batch: 11997

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11996

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09356		mg/Kg		94	70 - 130	8	35	
Toluene	0.100	0.09366		mg/Kg		94	70 - 130	3	35	
Ethylbenzene	0.100	0.09798		mg/Kg		98	70 - 130	3	35	
m-Xylene & p-Xylene	0.200	0.1966		mg/Kg		98	70 - 130	5	35	
o-Xylene	0.100	0.09688		mg/Kg		97	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-1555-1 MSD

Matrix: Solid

Analysis Batch: 11997

Client Sample ID: FS11 Prep Type: Total/NA Prep Batch: 11996

MSD MSD RPD Sample Sample Spike %Rec. Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit 0.0994 0.08915 mg/Kg

Analyte <0.00200 U Benzene Toluene <0.00200 U 0.0994 0.09820 mg/Kg

4-Bromofluorobenzene (Surr)

Analysis Batch: 11997

o-Terphenyl

Released to Imaging: 12/16/2022 9:35:28 AM

1,4-Difluorobenzene (Surr)

 Client: WSP USA Inc.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

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

116

101

Lab Sample ID: 890-1555-1 MSD

Matrix: Solid

Analysis Batch: 11997

Sample Sample Spike MSD MSD

Client Sample ID: FS11

Prep Type: Total/NA

Prep Batch: 11996

RRD

RRD

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ethylbenzene	<0.00200	U	0.0994	0.1013		mg/Kg					
m-Xylene & p-Xylene	<0.00399	U	0.199	0.2015		mg/Kg					
o-Xylene	<0.00200	U	0.0994	0.1024		mg/Kg					
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								

Lab Sample ID: 890-1555-1 MS

Client Sample ID: FS11

Matrix: Solid

Prep Type: Total/NA

70 - 130 70 - 130

 Surrogate
 %Recovery 4-Bromofluorobenzene (Surr)
 Qualifier 270 - 130
 Limits 70 - 130

 4-Bromofluorobenzene (Surr)
 117
 70 - 130

 1,4-Difluorobenzene (Surr)
 113
 70 - 130

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

Lab Sample ID: MB 880-11990/1-A

Matrix: Solid

Analysis Batch: 11992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11990

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/11/21 08:21	11/11/21 09:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/21 08:21	11/11/21 09:47	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/21 08:21	11/11/21 09:47	1

MB MB %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 70 - 130 1-Chlorooctane 11/11/21 08:21 11/11/21 09:47 106 o-Terphenyl 127 70 - 130 11/11/21 08:21 11/11/21 09:47

Lab Sample ID: LCS 880-11990/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 11992 Prep Batch: 11990

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D %I	Rec	Limits	
Gasoline Range Organics	1000	895.5		mg/Kg		90	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	900.5		mg/Kg		90	70 - 130	
0.40, 0.00)								

70 - 130

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Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-11990/3-A

Matrix: Solid Analysis Batch: 11992 Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 11990

Spike LCSD LCSD RPD RPD Limit Analyte Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 918.9 mg/Kg 92 70 - 130 3 20 (GRO)-C6-C10 1000 870.9 87 70 - 130 Diesel Range Organics (Over mg/Kg 3 20

C10-C28)

LCSD LCSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 83 o-Terphenyl 86 70 - 130

Lab Sample ID: 890-1555-1 MS Client Sample ID: FS11

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 11992** Prep Batch: 11990

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 108 Gasoline Range Organics <50.0 U 997 1100 mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 793.8 mg/Kg 77 70 - 130

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 100 70 - 130 o-Terphenyl 99 70 - 130

Lab Sample ID: 890-1555-1 MSD

Matrix: Solid

Analysis Batch: 11992 Sample Sample Spike MSD MSD

Prep Batch: 11990 %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <50.0 U 998 1148 Gasoline Range Organics mg/Kg (GRO)-C6-C10 <50.0 U 998 849.1 mg/Kg Diesel Range Organics (Over

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits

1-Chlorooctane

o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-12024/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analyte

Chloride

Analysis Batch: 12046

MB MB Result Qualifier RL Unit Analyzed Dil Fac D Prepared <5.00 U 5.00 11/11/21 15:36 mg/Kg

Client Sample ID: FS11

Prep Type: Total/NA

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-12024/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 12046

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-12024/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 12046

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Limit Analyte Unit D %Rec Limits RPD Chloride 250 257.6 mg/Kg 103 90 - 110 0

Lab Sample ID: 880-8189-A-1-E MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 12046

MS MS %Rec. Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 3170 1240 4348 90 - 110 mg/Kg

Lab Sample ID: 880-8189-A-1-F MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 12046

Sample Sample MSD MSD RPD Spike %Rec. Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result D Limits Chloride 3170 1240 4351 96 90 - 110 0 20 mg/Kg

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

GC VOA

Prep Batch: 11996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1 FS11		Total/NA	Solid	5035	
890-1555-2	FS12	Total/NA	Solid	5035	
MB 880-11996/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11996/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11996/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1555-1 MSD	FS11	Total/NA	Solid	5035	

Analysis Batch: 11997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Total/NA	Solid	8021B	11996
890-1555-2	FS12	Total/NA	Solid	8021B	11996
MB 880-11996/5-A	Method Blank	Total/NA	Solid	8021B	11996
LCS 880-11996/1-A	Lab Control Sample	Total/NA	Solid	8021B	11996
LCSD 880-11996/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11996
890-1555-1 MS	FS11	Total/NA	Solid	8021B	
890-1555-1 MSD	FS11	Total/NA	Solid	8021B	11996

Analysis Batch: 12040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Total/NA	Solid	Total BTEX	
890-1555-2	FS12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 11990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Total/NA	Solid	8015NM Prep	
890-1555-2	FS12	Total/NA	Solid	8015NM Prep	
MB 880-11990/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11990/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11990/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1555-1 MS	FS11	Total/NA	Solid	8015NM Prep	
890-1555-1 MSD	FS11	Total/NA	Solid	8015NM Prep	

Analysis Batch: 11992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Total/NA	Solid	8015B NM	11990
890-1555-2	FS12	Total/NA	Solid	8015B NM	11990
MB 880-11990/1-A	Method Blank	Total/NA	Solid	8015B NM	11990
LCS 880-11990/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11990
LCSD 880-11990/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11990
890-1555-1 MS	FS11	Total/NA	Solid	8015B NM	11990
890-1555-1 MSD	FS11	Total/NA	Solid	8015B NM	11990

Analysis Batch: 12045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Total/NA	Solid	8015 NM	
890-1555-2	FS12	Total/NA	Solid	8015 NM	

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

HPLC/IC

Leach Batch: 12024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Soluble	Solid	DI Leach	
890-1555-2	FS12	Soluble	Solid	DI Leach	
MB 880-12024/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-12024/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-12024/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-8189-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-8189-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 12046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1555-1	FS11	Soluble	Solid	300.0	12024
890-1555-2	FS12	Soluble	Solid	300.0	12024
MB 880-12024/1-A	Method Blank	Soluble	Solid	300.0	12024
LCS 880-12024/2-A	Lab Control Sample	Soluble	Solid	300.0	12024
LCSD 880-12024/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	12024
880-8189-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	12024
880-8189-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	12024

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Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1555-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS11

Lab Sample ID: 890-1555-1

Matrix: Solid

Date Collected: 11/10/21 09:02 Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11996	11/11/21 08:57	KL	XEN MID
Total/NA	Analysis	8021B		1	11997	11/11/21 12:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11990	11/11/21 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11992	11/11/21 11:51	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	СН	XEN MID
Soluble	Analysis	300.0		20	12046	11/11/21 16:42	SC	XEN MID

Client Sample ID: FS12 Lab Sample ID: 890-1555-2

Date Collected: 11/10/21 09:03 Matrix: Solid

Date Received: 11/10/21 11:23

Date Received.	. 11/10/21 11.2							
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11996	11/11/21 08:57	KL	XEN MID

Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11996	11/11/21 08:57	KL	XEN MID
Total/NA	Analysis	8021B		1	11997	11/11/21 13:06	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11990	11/11/21 08:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11992	11/11/21 12:55	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	СН	XEN MID
Soluble	Analysis	300.0		50	12046	11/11/21 17:04	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.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-21-22	06-30-22	
The following analytes	are included in this report, but	t the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for y	
the agency does not of	• •	it the laboratory is not certifi	ed by the governing admonty. This list his	ay include analytes for t	
,	• •	Matrix	Analyte	ay include analytes for t	
the agency does not of	fer certification.	•	, , ,	ay include analytes for v	

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Method Summary

 Client: WSP USA Inc.
 Job ID: 890-1555-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Method **Method Description** Protocol Laboratory 8021B Volatile Organic Compounds (GC) SW846 XEN MID **Total BTEX Calculation** TAL SOP Total BTEX 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 SW846 XEN MID Closed System Purge and Trap 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

Eurofins Xenco, Carlsbad

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Sample Summary

Client: WSP USA Inc. Project/Site: PLU 78

Job ID: 890-1555-1

SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Dept
890-1555-1	FS11	Solid	11/10/21 09:02	11/10/21 11:23	4
890-1555-2	FS12	Solid	11/10/21 09:03	11/10/21 11:23	4

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Relinquished by: (Signature) Received by: (Signature) Received by: (Signature) Received by: (Signature)	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 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 solice: Signature of this document and ralinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions a 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 contra		FS12	FS11	Sample Identification		Seals: Yes	(Yea)	3	SAMPLE RECEIPT Ter	Sampler's Name: Travis Casey	P.O. Number:	Project Number: 31403236.020.0129	Project Name: PLU 78	Phone: (432) 704-5178	e ZIP:			Project Manager: Tacoma Morrissey	LABCRATORIES
Received by: (Signature)	I 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Cle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn nature of this document and ralinguishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It 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		S 11/10/2021 0	S 11/10/2021 09	Matrix Date T	(N/A)	o (N/A) Correc	No		Temp Blank: (Yes) No			.0129		8	9705	3300 North A St. Bldg 1, Unit 222	WSP USA Inc., Permian office		
Signature)	BRCRA 13PPM Texas 11 Al TCLP / SPLP 6010: BRCRA shitutes a valid purchase order from client of assume any responsibility for any losses		0903 4	0902 4	Time Depth	Cto	2,0-			Wet ice: (No No	Due Date:	Rush: 24hr	Routine	Turn Around	Email: travis.casey@	City, State ZIP:	Address:	Company Name:	Bill to: (it different)	Houston,TX (281) 240-4200 Midland,TX (432-704-5440 575-392-7550) Phoenix,AZ
Date/Time	Al Sb A		×	1 ×	Number TPH (E		-	tain	ers						wsp.com,	Caris	L_		Adria) Dallas,TX)) EL Paso, (480-355-0
Date/Time	As Ba Be As Ba Be As Ba Be penses incurred		×	×	BTEX (kalei.jen	Carlsbad, NM	3104 E Greene St	XTO Energy	Adrian Baker	(214) 902-(TX (915)58 900) Atlant
Relinquished by: (Signature)	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Sb As Ba Be Cd Cr Co Cu Pb Mn Mo N Sb As Ba Be Cd Cr Co Cu Pb Mn Mo N Smpany to Xenco, its affiliates and subcontractors. It assigns or expenses incurred by the client if such losses are due to cir		×	×	Chlorid	890-1555 C	A 30	ov.0)						ANALYSIS REQUEST	Email: travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@w		St.			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)
Signature) Received by: (Signature)	Ag SiO2					hain of Custody								EST	Deliverables: EDD 🔲 ADaPT 🗆	Reporting:Level II	State of Project: NM	Program: UST/PST □PRP □\$rownfields	Work Order Comments	820-2000) <u>www.xenco.com</u>
re) Date/Time	Na Sr Tl Sn ∪ V Zn 1631 / 245.1 / 7470 / 7471 :		Composite	Composite	Sample Comments	lab, if received by 4:30pm	TAT starts the day recevied by the				API:30-015-27536	CC:1080781001	IN:NAPP2126639352	Work Order Notes	Other:	JST TRP TVel IV		ields ☐RC ☐uperfund	omments	Page of

Revised Date 051418 Rev 2018 1

Eurofins Xenco, Carlsbad

Chain of Custody Record

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eurofins :

Environment Testing America

Project Name: PLU 78 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/tests/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. FS11 (890-1555-1) TX 79701 Midland attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. ⁻S12 (890-1555-2) Sample Identification - Client ID (Lab ID) \$32-704-5440(Tel) Client Information (Sub Contract Lab) Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199 ossible Hazard Identification 1211 W Florida Ave elinquished by: elinquished by mpty Kit Relinquished by eliverable Requested I II III IV Other (specify) urofins Xenco hipping/Receiving Custody Seals Intact.

∆ Yes ∆ No B Custody Seal No 1.10.2 Project #: 89000004 Phone: Date/Time Primary Deliverable Rank 2 WO# TAT Requested (days Due Date Requested 11/11/2021 Sample Date 11/10/21 11/10/21 Date 09 02 Mountain 09 03 Mountain (C=comp, G=grab) Sample Type Preservation Code: Company Matrix Solid Solid Kramer Jessica jessica kramer@eurofinset.com Time Accreditations Required (See note)
NELAP - Louisiana NELAP - Texas Perform MS/MSD (Yes or No) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Special Instructions/QC Requirements Received by: 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks \times Return To Client 8015MOD_Calc × × 300_ORGFM_28D/DI_LEACH Chloride × × × 8021B/5035FP_Calc (MOD) BTEX Analysis Requested × Total_BTEX_GCV Disposal By Lab State of Origin
New Mexico Carrier Tracking No(s) Ú Archive For Total Number of containers E NaHSO4
F MeOH
G Amchlor
H Ascorbic Acid COC No 890-502 1 00 >Preservation Codes 890-1555-1 Page 1 of 1 ice
J DI Water
K EDTA
L EDA Zn Acetate Nitnc Acid NaHSO4 NaOH Special Instructions/Note 4 Moxane
V None
D AsNa02
VNB204S
VNB2503
R NB2503
R NB2504
S H2S04
S H2S04
C Xegone
U Acetone
U Acetone
U MCAA Ver: 06/08/2021 Company Months

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1555-1

SDG Number: 31403236.020.0129

Login Number: 1555 List Source: Eurofins Xenco, Carlsbad

List Number: 1 Creator: Clifton, Cloe

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	

Eurofins Xenco, Carlsbad

Page 20 of 21

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1555-1

SDG Number: 31403236.020.0129

List Source: Eurofins Xenco, Midland

List Creation: 11/11/21 11:49 AM

Login Number: 1555 List Number: 2 Creator: Kramer, Jessica

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

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1557-1

Laboratory Sample Delivery Group: 31403236.020.0129

Client Project/Site: PLU 78

For:

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

Attn: Tacoma Morrissey

RAMER

Authorized for release by: 11/15/2021 8:12:43 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

Review your project results through

Have a Question?



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www.eurofinsus.com/Env

Released to Imaging: 12/16/2022 9:35:28 AM

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.
 Laboratory Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Qualifiers

GC	VO	Α
Ous	lifia	

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

Ouglifier Description

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
F1	MS and/or MSD recovery

exceeds control limits. U Indicates the analyte was analyzed for but not detected.

Glossary

CFL

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

CFU Colony Forming Unit **CNF** Contains No Free Liquid DER

Contains Free Liquid

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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

Not Calculated NC

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

NEG Negative / Absent POS Positive / Present PQL Practical Quantitation Limit

Presumptive **PRES Quality Control** QC

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TFO

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Job ID: 890-1557-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1557-1

Receipt

The samples were received on 11/10/2021 11:23 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 9.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS04 (890-1557-4) and (MB 880-11984/5-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11991 and analytical batch 880-11994 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS01 (890-1557-1), FS02 (890-1557-2), FS03 (890-1557-3), FS05 (890-1557-5), FS06 (890-1557-6), FS09 (890-1557-9) and FS10 (890-1557-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-11991/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11932 and 880-11932 and analytical batch 880-12195 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.

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Lab Sample ID: 890-1557-1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS01

Date Collected: 11/10/21 08:51 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/11/21 07:52	11/11/21 13:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:33	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/11/21 07:52	11/11/21 13:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			11/11/21 07:52	11/11/21 13:33	1
1,4-Difluorobenzene (Surr)	102		70 - 130			11/11/21 07:52	11/11/21 13:33	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			11/11/21 14:14	1
Analyte	Result	Qualifier	RL	Unit	D			
- 3							Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg		Prepared	Analyzed 11/11/21 15:00	
- -								
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)	49.9	mg/Kg	=	<u> </u>	11/11/21 15:00	1
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	RO) (GC) Qualifier	49.9	mg/Kg	<u>D</u>	Prepared	11/11/21 15:00 Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	49.9	mg/Kg	=	<u> </u>	11/11/21 15:00	Dil Fac
Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D	RO) (GC) Qualifier U F1	49.9	mg/Kg Unit mg/Kg	=	Prepared	11/11/21 15:00 Analyzed	Dil Fac
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1	49.9 RL 49.9	mg/Kg	=	Prepared 11/11/21 08:22	11/11/21 15:00 Analyzed 11/11/21 11:51	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1	49.9 RL 49.9	mg/Kg Unit mg/Kg	=	Prepared 11/11/21 08:22	11/11/21 15:00 Analyzed 11/11/21 11:51	Dil Fac
Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/11/21 08:22 11/11/21 08:22	11/11/21 15:00 Analyzed 11/11/21 11:51 11/11/21 11:51	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/11/21 08:22 11/11/21 08:22 11/11/21 08:22	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 140	RO) (GC) Qualifier U F1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/11/21 08:22 11/11/21 08:22 11/11/21 08:22 Prepared	Analyzed 11/11/21 15:00 Analyzed 11/11/21 11:51 11/11/21 11:51 Analyzed	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 140 161	Qualifier U U Qualifier U C Qualifier S1+ S1+	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/11/21 08:22 11/11/21 08:22 11/11/21 08:22 Prepared 11/11/21 08:22	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51 Analyzed 11/11/21 11:51	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 140 161 **comatography -	Qualifier U U Qualifier U C Qualifier S1+ S1+	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/11/21 08:22 11/11/21 08:22 11/11/21 08:22 Prepared 11/11/21 08:22	Analyzed 11/11/21 11:51 11/11/21 11:51 11/11/21 11:51 Analyzed 11/11/21 11:51	Dil Fac

Client Sample ID: FS02

Date Collected: 11/10/21 08:52 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		11/11/21 07:52	11/11/21 14:01	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/11/21 07:52	11/11/21 14:01	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/11/21 07:52	11/11/21 14:01	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		11/11/21 07:52	11/11/21 14:01	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/11/21 07:52	11/11/21 14:01	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		11/11/21 07:52	11/11/21 14:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			11/11/21 07:52	11/11/21 14:01	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1557-2

Matrix: Solid

Job ID: 890-1557-1 SDG: 31403236.020.0129

Project/Site: PLU 78

Client Sample ID: ES02

Client Sample ID: FS02

Date Collected: 11/10/21 08:52

Date Received: 11/10/21 11:23

Lab Sample ID: 890-1557-2

Matrix: Solid

Sample Depth: 4

Client: WSP USA Inc.

Method: 8021B -	Volatile Ord	anic Com	nounds (C	GC) ((Continued)	
Method. 002 1D	Volatile Oit		poullus (C	3 0, ((Continueu)	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130	11/11/21 07:52	11/11/21 14:01	1

ı						
	Method:	Total	RTFY	- Total	RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			11/11/21 14:14	1

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	Discal Demas Ossessies (DDO) (CO)

moundar of the property of the								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<50.0 U	50.0	mg/Kg			11/11/21 15:00	1

		_			
Method: 8015B	NM - Diesel	Range Org	ranics ('DROL	GC
motriou. ou rob	THE DIGGOL	itunge or	garnoo (D. (O)	(–

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 12:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 12:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prep	ared Analyz	zed Dil Fac
1-Chlorooctane	122	70 - 130	11/11/2	1 08:22 11/11/21	12:55 1
o-Terphenyl	137 S1+	70 - 130	11/11/2	1 08:22 11/11/21	12:55 1

Method: 300.0 - Anions,	Ion Chromato	graphy	y - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	709		4.97	mg/Kg			11/11/21 18:33	1

Client Sample ID: FS03 Lab Sample ID: 890-1557-3

Date Collected: 11/10/21 08:53 Date Received: 11/10/21 11:23

Sample Depth: 4

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

mounda. our ib volutile orga	illo compoundo ((33)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 14:28	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 14:28	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 14:28	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		11/11/21 07:52	11/11/21 14:28	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 14:28	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		11/11/21 07:52	11/11/21 14:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			11/11/21 07:52	11/11/21 14:28	1
1,4-Difluorobenzene (Surr)	112		70 - 130			11/11/21 07:52	11/11/21 14:28	1

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00404	U	0.00404	ma/Ka			11/11/21 14:14	1

Analyte	•	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH		<49.9	U	49.9	mg/Kg			11/11/21 15:00	1

Eurofins Xenco, Carlsbad

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Matrix: Solid

Lab Sample ID: 890-1557-3

Lab Sample ID: 890-1557-4

Matrix: Solid

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS03

Date Collected: 11/10/21 08:53 Date Received: 11/10/21 11:23

Sample Depth: 4

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 13:16	
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 13:16	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	125		70 - 130			11/11/21 08:22	11/11/21 13:16	
o-Terphenyl	141	S1+	70 - 130			11/11/21 08:22	11/11/21 13:16	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14100		100	mg/Kg			11/11/21 18:40	20

Client Sample ID: FS04

Date Collected: 11/10/21 08:55

Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 14:56	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 14:56	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 14:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/11/21 07:52	11/11/21 14:56	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 14:56	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/11/21 07:52	11/11/21 14:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	70 - 130			11/11/21 07:52	11/11/21 14:56	1
1,4-Difluorobenzene (Surr)	79		70 - 130			11/11/21 07:52	11/11/21 14:56	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			11/11/21 14:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/11/21 15:00	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 13:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 13:38	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 13:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			11/11/21 08:22	11/11/21 13:38	1
o-Terphenyl	130		70 - 130			11/11/21 08:22	11/11/21 13:38	1

Job ID: 890-1557-1

Lab Sample ID: 890-1557-4

Client: WSP USA Inc. Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS04

Date Collected: 11/10/21 08:55 Date Received: 11/10/21 11:23

Sample Depth: 4

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9540		49.9	mg/Kg			11/11/21 18:48	10

Client Sample ID: FS05 Lab Sample ID: 890-1557-5 Matrix: Solid

Date Collected: 11/10/21 08:56 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/11/21 07:52	11/11/21 15:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/11/21 07:52	11/11/21 15:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			11/11/21 07:52	11/11/21 15:23	1
1,4-Difluorobenzene (Surr)	116		70 - 130			11/11/21 07:52	11/11/21 15:23	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			11/11/21 14:14	1
Analyte Total TPH	Result	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/11/21 15:00	Dil Fac
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 13:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 13:59	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 13:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			11/11/21 08:22	11/11/21 13:59	1
o-Terphenyl	140	S1+	70 - 130			11/11/21 08:22	11/11/21 13:59	1
Method: 300.0 - Anions, Ion Chr								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	740		4.95	mg/Kg			11/11/21 18:55	1

Lab Sample ID: 890-1557-6

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS06

Date Collected: 11/10/21 08:57 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/11/21 07:52	11/11/21 15:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 15:50	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/11/21 07:52	11/11/21 15:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			11/11/21 07:52	11/11/21 15:50	1
1,4-Difluorobenzene (Surr)	104		70 - 130			11/11/21 07:52	11/11/21 15:50	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/21 14:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg		<u> </u>	11/11/21 15:00	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 14:21	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 14:21	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 14:21	1
						Prepared	A l	
Surrogate	%Recovery	Qualifier	Limits			rrepared	Analyzed	Dil Fac
Surrogate 1-Chlorooctane		Qualifier S1+	70 ₋ 130			11/11/21 08:22	11/11/21 14:21	
	131							1
1-Chlorooctane o-Terphenyl	131 141	S1+ S1+	70 - 130			11/11/21 08:22	11/11/21 14:21	Dil Fac 1
1-Chlorooctane	131 141 omatography -	S1+ S1+	70 - 130	Unit	<u>D</u>	11/11/21 08:22	11/11/21 14:21	1

Client Sample ID: FS07

Date Collected: 11/10/21 08:58

Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 16:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 16:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 16:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/11/21 07:52	11/11/21 16:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 16:17	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/11/21 07:52	11/11/21 16:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			11/11/21 07:52	11/11/21 16:17	1

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Lab Sample ID: 890-1557-7

Matrix: Solid

Lab Sample ID: 890-1557-7

11/11/21 08:22 11/11/21 14:42 11/11/21 08:22 11/11/21 14:42

Lab Sample ID: 890-1557-8

Matrix: Solid

 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Client Sample ID: FS07

Date Collected: 11/10/21 08:58 Date Received: 11/10/21 11:23

Sample Depth: 4

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103	70 - 130	11/11/21 07:52	11/11/21 16:17	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			11/11/21 14:14	1

Method: 8015 NM -	Diesel Rand	ne Organics	(DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/11/21 15:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		11/11/21 08:22	11/11/21 14:42	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		11/11/21 08:22	11/11/21 14:42	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/11/21 08:22	11/11/21 14:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

1-Chlorooctane	111	70 - 130	
o-Terphenyl	125	70 - 130	

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble						
Analyte	Result	Qualifier	RL	 Unit	D	Prepared	Analyzed	Dil Fac

Chloride	888	4.97	mg/Kg	 11/11/21 19:10	1

Client Sample ID: FS08 Date Collected: 11/10/21 08:59

Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 16:56	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 16:56	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 16:56	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/11/21 07:52	11/11/21 16:56	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/11/21 07:52	11/11/21 16:56	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/11/21 07:52	11/11/21 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	186	S1+	70 - 130			11/11/21 07:52	11/11/21 16:56	1
1,4-Difluorobenzene (Surr)	113		70 - 130			11/11/21 07:52	11/11/21 16:56	1

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403	ma/Ka			11/11/21 14:14	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (DRO)	(GC
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Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/11/21 15:00	1

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Lab Sample ID: 890-1557-8

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS08

Date Collected: 11/10/21 08:59 Date Received: 11/10/21 11:23

Sample Depth: 4

Method: 8015B NM - Diesel Rang	, ,	Qualifier	DI	l lmi4	_	Duamanad	Amalumad	Dil Faa
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 15:04	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 15:04	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 15:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130			11/11/21 08:22	11/11/21 15:04	1
o-Terphenyl	126		70 - 130			11/11/21 08:22	11/11/21 15:04	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7570		50.0	mg/Kg			11/15/21 12:59	10

Lab Sample ID: 890-1557-9 **Client Sample ID: FS09** Date Collected: 11/10/21 09:00 Matrix: Solid

Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 17:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 17:21	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 17:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/11/21 07:52	11/11/21 17:21	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/11/21 07:52	11/11/21 17:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/11/21 07:52	11/11/21 17:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			11/11/21 07:52	11/11/21 17:21	1
1,4-Difluorobenzene (Surr)	119		70 - 130			11/11/21 07:52	11/11/21 17:21	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			11/11/21 14:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Pocult	O						
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/11/21 15:00	Dil Fac
Total TPH Method: 8015B NM - Diesel Rang	<49.9	U			<u>D</u>	Prepared		
Method: 8015B NM - Diesel Rang	<49.9	U			D 	Prepared Prepared		
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<49.9	RO) (GC) Qualifier	49.9	mg/Kg			11/11/21 15:00	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.9 ge Organics (D Result	CODE (GC) Qualifier U	49.9	mg/Kg		Prepared	11/11/21 15:00 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9 ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/11/21 08:22 11/11/21 08:22	11/11/21 15:00 Analyzed 11/11/21 15:25 11/11/21 15:25	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.9 ge Organics (D Result <49.9	RO) (GC) Qualifier U	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 11/11/21 08:22	11/11/21 15:00 Analyzed 11/11/21 15:25	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9 ge Organics (D Result <49.9 <49.9	U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/11/21 08:22 11/11/21 08:22	11/11/21 15:00 Analyzed 11/11/21 15:25 11/11/21 15:25	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 ge Organics (D) Result <49.9 <49.9 <49.9	U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/11/21 08:22 11/11/21 08:22 11/11/21 08:22	Analyzed 11/11/21 15:25 11/11/21 15:25 11/11/21 15:25	1 Dil Fac 1 1

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11/15/2021

Job ID: 890-1557-1 SDG: 31403236.020.0129

Client Sample ID: FS09

Client: WSP USA Inc.

Project/Site: PLU 78

Date Collected: 11/10/21 09:00 Date Received: 11/10/21 11:23

Sample Depth: 4

Lab Sample ID: 890-1557-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20400	99.8	mg/Kg			11/15/21 13:04	20

Client Sample ID: FS10

Date Collected: 11/10/21 09:01

Lab Sample ID: 890-1557-10

Matrix: Solid

Date Collected: 11/10/21 09:01 Date Received: 11/10/21 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 17:48	
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 17:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 17:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/11/21 07:52	11/11/21 17:48	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 17:48	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/11/21 07:52	11/11/21 17:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			11/11/21 07:52	11/11/21 17:48	1
1,4-Difluorobenzene (Surr)	113		70 - 130			11/11/21 07:52	11/11/21 17:48	1
Method: Total BTEX - Total BTE	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/11/21 14:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/11/21 15:00	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 15:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 15:46	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/21 08:22	11/11/21 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130			11/11/21 08:22	11/11/21 15:46	1
o-Terphenyl	143	S1+	70 - 130			11/11/21 08:22	11/11/21 15:46	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
, .,				•	_		,u. y = 0 u	

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

latrix: Solid Prep Type: Total/NA

		DED4	DED 74	Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1557-1	FS01	95	102	
890-1557-1 MS	FS01	86	119	
890-1557-1 MSD	FS01	85	116	
890-1557-2	FS02	89	112	
890-1557-3	FS03	90	112	
890-1557-4	FS04	183 S1+	79	
890-1557-5	FS05	97	116	
890-1557-6	FS06	99	104	
890-1557-7	FS07	95	103	
890-1557-8	FS08	186 S1+	113	
890-1557-9	FS09	113	119	
890-1557-10	FS10	104	113	
LCS 880-11984/1-A	Lab Control Sample	83	119	
LCSD 880-11984/2-A	Lab Control Sample Dup	89	118	
MB 880-11984/5-A	Method Blank	60 S1-	103	
Surrogate Legend				
BFB = 4-Bromofluorobe				

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1557-1	FS01	140 S1+	161 S1+	
890-1557-1 MS	FS01	117	118	
890-1557-1 MSD	FS01	118	119	
890-1557-2	FS02	122	137 S1+	
890-1557-3	FS03	125	141 S1+	
890-1557-4	FS04	122	130	
890-1557-5	FS05	127	140 S1+	
890-1557-6	FS06	131 S1+	141 S1+	
890-1557-7	FS07	111	125	
890-1557-8	FS08	111	126	
890-1557-9	FS09	127	135 S1+	
890-1557-10	FS10	131 S1+	143 S1+	
LCS 880-11991/2-A	Lab Control Sample	79	84	
LCSD 880-11991/3-A	Lab Control Sample Dup	89	96	
	Method Blank	121	143 S1+	

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OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-1557-1 SDG: 31403236.020.0129 Project/Site: PLU 78

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11984/5-A

Matrix: Solid Analysis Batch: 11985 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11984

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/11/21 07:52	11/11/21 13:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/11/21 07:52	11/11/21 13:05	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/11/21 07:52	11/11/21 13:05	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	d Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	60	S1-	70 - 130	11/11/21 0	7:52 11/11/21 13:0	5 1
1,4-Difluorobenzene (Surr)	103		70 - 130	11/11/21 0	7:52 11/11/21 13:0	5 1

Lab Sample ID: LCS 880-11984/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 11985

Prep Type: Total/NA Prep Batch: 11984

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09527	-	mg/Kg		95	70 - 130	
Toluene	0.100	0.07811		mg/Kg		78	70 - 130	
Ethylbenzene	0.100	0.08233		mg/Kg		82	70 - 130	
m-Xylene & p-Xylene	0.200	0.1779		mg/Kg		89	70 - 130	
o-Xylene	0.100	0.08999		mg/Kg		90	70 - 130	

LCS LCS

Surrogate	%Recovery Quali	fier Limits
4-Bromofluorobenzene (Surr)	83	70 - 130
1,4-Difluorobenzene (Surr)	119	70 - 130

Lab Sample ID: LCSD 880-11984/2-A

Matrix: Solid

Analysis Batch: 11985

Client Sample ID: Lab Control Sample Dup

%Rec

Prep Type: Total/NA

Prep Batch: 11984

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1004		mg/Kg		100	70 - 130	5	35	
Toluene	0.100	0.07784		mg/Kg		78	70 - 130	0	35	
Ethylbenzene	0.100	0.08568		mg/Kg		86	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.1845		mg/Kg		92	70 - 130	4	35	
o-Xylene	0.100	0.09405		mg/Kg		94	70 - 130	4	35	

LCSD LCSD

Sample Sample

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1.4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: 890-1557-1 MSD

Matrix: Solid

Analysis Batch: 11985

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 11984

RPD %Rec. Limit Limits **RPD**

Analyte Result Qualifier Added Result Qualifier Unit <0.00200 U 0.0994 Benzene 0.09769 mg/Kg Toluene <0.00200 U 0.0994 0.07506 mg/Kg

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Spike

MSD MSD

Job ID: 890-1557-1 Client: WSP USA Inc. SDG: 31403236.020.0129 Project/Site: PLU 78

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

Lab Sample ID: 890-1557-1 MSD Client Sample ID: FS01 **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11985** Prep Batch: 11984

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ethylbenzene	<0.00200	U	0.0994	0.07663		mg/Kg					
m-Xylene & p-Xylene	<0.00400	U	0.199	0.1771		mg/Kg					
o-Xylene	<0.00200	U	0.0994	0.01040		mg/Kg					
	MSD	MSD									
0	0/ 0	O	1 : :4								

Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 70 - 130 85 1,4-Difluorobenzene (Surr) 116 70 - 130

Lab Sample ID: 890-1557-1 MS

Matrix: Solid

o-Terphenyl

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Analysis Batch: 11985

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	119		70 - 130

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

Lab Sample ID: MB 880-11991/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 11994 Prep Batch: 11991

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 09:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 09:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/21 08:22	11/11/21 09:47	1
	MD	MD						

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	11/11/21 08:22	11/11/21 09:47	1
o-Terphenyl	143	S1+	70 - 130	11/11/21 08:22	11/11/21 09:47	1

Lab Sample ID: LCS 880-11991/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11994 Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1281 128 70 - 130 mg/Kg (GRO)-C6-C10 70 - 130

70 - 130

Diesel Range Organics (Over		1000	1011	mg/Kg	101
C10-C28)					
	LCS LCS				
Surrogate %Reco	very Qualifier	Limits			
1-Chlorooctane	79	70 - 130			

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Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 11991

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-11991/3-A

Matrix: Solid

Analysis Batch: 11994

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 11991

Client Sample ID: FS01

Prep Type: Total/NA

Spike LCSD LCSD RPD RPD Limit Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 1216 mg/Kg 122 70 - 130 5 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 943.3 94 70 - 130mg/Kg 7 20

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 890-1557-1 MS **Matrix: Solid**

Analysis Batch: 11994 Prep Batch: 11991 Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

<49.9 U F1 997 160 70 - 130 Gasoline Range Organics 1600 F1 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 997 1097 mg/Kg 106 70 - 130

C10-C28)

MS MS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	117	70 _ 130
o-Terphenyl	118	70 - 130

Lab Sample ID: 890-1557-1 MSD

Matrix: Solid

Analysis Batch: 11994

Client Sample ID: FS01 Prep Type: Total/NA Prep Batch: 11991

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <49.9 U F1 998 1611 F1 20 Gasoline Range Organics 161 70 - 130 mg/Kg (GRO)-C6-C10 <49.9 U 998 1109 107 20 Diesel Range Organics (Over mg/Kg 70 - 130

C10-C28)

MSD MSD Surrogate Qualifier Limits %Recovery 1-Chlorooctane 118 70 - 130

119 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-12024/1-A

Matrix: Solid

Analysis Batch: 12046

MB MB

Analyte Result Qualifier RL Unit Analyzed Dil Fac D Prepared Chloride <5.00 U 5.00 11/11/21 15:36 mg/Kg

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Client Sample ID: Method Blank

Prep Type: Soluble

Lab Sample ID: LCS 880-12024/2-A

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analysis Batch: 12046

Spike LCS LCS %Rec. Analyte Added Result Qualifier %Rec Limits Unit Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-12024/3-A **Matrix: Solid**

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

Matrix: Solid

Analysis Batch: 12046

Spike LCSD LCSD %Rec. RPD Added Limit Analyte Result Qualifier Unit D %Rec Limits RPD Chloride 250 257.6 mg/Kg 103 90 - 110 0

Lab Sample ID: 890-1556-A-6-G MS

Client Sample ID: Matrix Spike

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 12046

MS MS %Rec. Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 76.0 248 323.9 mg/Kg 100 90 - 110

> Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Lab Sample ID: 890-1556-A-6-H MSD

Lab Sample ID: MB 880-11932/1-A

Lab Sample ID: LCS 880-11932/2-A

Matrix: Solid

Analysis Batch: 12046

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	76.0		248	317.8		mg/Kg		98	90 - 110	2	20

Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 12195

MR MR

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/13/21 14:26

> Client Sample ID: Lab Control Sample **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 12195

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	248.3		mg/Kg		99	90 - 110	

Lab Sample ID: LCSD 880-11932/3-A

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

Matrix: Solid

Analysis Batch: 12195

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	249.8		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 880-8274-A-2-C MS

Client Sample ID: Matrix Spike

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 12195

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1680	F1	1240	2575	F1	mg/Kg		72	90 - 110	

Job ID: 890-1557-1 SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-8274-A-2-D MSD

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analysis Batch: 12195

Client: WSP USA Inc.

Project/Site: PLU 78

Matrix: Solid

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 1680 F1 1250 2902 mg/Kg 97 90 - 110 12 20

Lab Sample ID: MB 880-12295/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 12337

MB MB

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 11/15/21 14:19
 1

Lab Sample ID: LCS 880-12295/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Matrix. John

Analysis Batch: 12337

 Spike
 LCS
 LCS
 KRec.

 Analyte
 Added
 Result
 Qualifier
 Unit
 D
 KRec
 Limits

 Chloride
 250
 248.5
 mg/Kg
 99
 90 - 110

Lab Sample ID: LCSD 880-12295/3-A

Matrix: Solid

Analysis Batch: 12337

LCSD LCSD Spike RPD %Rec. Analyte Added Result Qualifier %Rec RPD Limit Unit Limits Chloride 250 247.2 90 - 110 20 mg/Kg

Lab Sample ID: 890-1571-A-5-H MS

Matrix: Solid

Analysis Batch: 12337

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 249 Chloride 83.5 354.4 mg/Kg 109 90 - 110

Lab Sample ID: 890-1571-A-5-I MSD

Matrix: Solid

Analysis Batch: 12337

Sample Sample Spike MSD MSD %Rec. **RPD** Added Result Qualifier RPD Limit Analyte Result Qualifier Unit D %Rec Limits 83.5 Chloride 249 339.9 mg/Kg 103 90 - 110 20

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Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

GC VOA

Prep Batch: 11984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Total/NA	Solid	5035	
890-1557-2	FS02	Total/NA	Solid	5035	
890-1557-3	FS03	Total/NA	Solid	5035	
890-1557-4	FS04	Total/NA	Solid	5035	
890-1557-5	FS05	Total/NA	Solid	5035	
890-1557-6	FS06	Total/NA	Solid	5035	
890-1557-7	FS07	Total/NA	Solid	5035	
890-1557-8	FS08	Total/NA	Solid	5035	
890-1557-9	FS09	Total/NA	Solid	5035	
890-1557-10	FS10	Total/NA	Solid	5035	
MB 880-11984/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11984/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11984/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1557-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 11985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Total/NA	Solid	8021B	11984
890-1557-2	FS02	Total/NA	Solid	8021B	11984
890-1557-3	FS03	Total/NA	Solid	8021B	11984
890-1557-4	FS04	Total/NA	Solid	8021B	11984
890-1557-5	FS05	Total/NA	Solid	8021B	11984
890-1557-6	FS06	Total/NA	Solid	8021B	11984
890-1557-7	FS07	Total/NA	Solid	8021B	11984
890-1557-8	FS08	Total/NA	Solid	8021B	11984
890-1557-9	FS09	Total/NA	Solid	8021B	11984
890-1557-10	FS10	Total/NA	Solid	8021B	11984
MB 880-11984/5-A	Method Blank	Total/NA	Solid	8021B	11984
LCS 880-11984/1-A	Lab Control Sample	Total/NA	Solid	8021B	11984
LCSD 880-11984/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11984
890-1557-1 MS	FS01	Total/NA	Solid	8021B	
890-1557-1 MSD	FS01	Total/NA	Solid	8021B	11984

Analysis Batch: 12040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Total/NA	Solid	Total BTEX	
890-1557-2	FS02	Total/NA	Solid	Total BTEX	
890-1557-3	FS03	Total/NA	Solid	Total BTEX	
890-1557-4	FS04	Total/NA	Solid	Total BTEX	
890-1557-5	FS05	Total/NA	Solid	Total BTEX	
890-1557-6	FS06	Total/NA	Solid	Total BTEX	
890-1557-7	FS07	Total/NA	Solid	Total BTEX	
890-1557-8	FS08	Total/NA	Solid	Total BTEX	
890-1557-9	FS09	Total/NA	Solid	Total BTEX	
890-1557-10	FS10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 11991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Total/NA	Solid	8015NM Prep	

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 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

GC Semi VOA (Continued)

Prep Batch: 11991 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-2	FS02	Total/NA	Solid	8015NM Prep	
890-1557-3	FS03	Total/NA	Solid	8015NM Prep	
890-1557-4	FS04	Total/NA	Solid	8015NM Prep	
890-1557-5	FS05	Total/NA	Solid	8015NM Prep	
890-1557-6	FS06	Total/NA	Solid	8015NM Prep	
890-1557-7	FS07	Total/NA	Solid	8015NM Prep	
890-1557-8	FS08	Total/NA	Solid	8015NM Prep	
890-1557-9	FS09	Total/NA	Solid	8015NM Prep	
890-1557-10	FS10	Total/NA	Solid	8015NM Prep	
MB 880-11991/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11991/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11991/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1557-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-1557-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 11994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Total/NA	Solid	8015B NM	11991
890-1557-2	FS02	Total/NA	Solid	8015B NM	11991
890-1557-3	FS03	Total/NA	Solid	8015B NM	11991
890-1557-4	FS04	Total/NA	Solid	8015B NM	11991
890-1557-5	FS05	Total/NA	Solid	8015B NM	11991
890-1557-6	FS06	Total/NA	Solid	8015B NM	11991
890-1557-7	FS07	Total/NA	Solid	8015B NM	11991
890-1557-8	FS08	Total/NA	Solid	8015B NM	11991
890-1557-9	FS09	Total/NA	Solid	8015B NM	11991
890-1557-10	FS10	Total/NA	Solid	8015B NM	11991
MB 880-11991/1-A	Method Blank	Total/NA	Solid	8015B NM	11991
LCS 880-11991/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11991
LCSD 880-11991/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11991
890-1557-1 MS	FS01	Total/NA	Solid	8015B NM	11991
890-1557-1 MSD	FS01	Total/NA	Solid	8015B NM	11991

Analysis Batch: 12045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1557-1	FS01	Total/NA	Solid	8015 NM	
890-1557-2	FS02	Total/NA	Solid	8015 NM	
890-1557-3	FS03	Total/NA	Solid	8015 NM	
890-1557-4	FS04	Total/NA	Solid	8015 NM	
890-1557-5	FS05	Total/NA	Solid	8015 NM	
890-1557-6	FS06	Total/NA	Solid	8015 NM	
890-1557-7	FS07	Total/NA	Solid	8015 NM	
890-1557-8	FS08	Total/NA	Solid	8015 NM	
890-1557-9	FS09	Total/NA	Solid	8015 NM	
890-1557-10	FS10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 11932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-8	FS08	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

11/15/2021

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 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

HPLC/IC (Continued)

Leach Batch: 11932 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-9	FS09	Soluble	Solid	DI Leach	
MB 880-11932/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11932/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11932/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-8274-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-8274-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 12024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Soluble	Solid	DI Leach	
890-1557-2	FS02	Soluble	Solid	DI Leach	
890-1557-3	FS03	Soluble	Solid	DI Leach	
890-1557-4	FS04	Soluble	Solid	DI Leach	
890-1557-5	FS05	Soluble	Solid	DI Leach	
890-1557-6	FS06	Soluble	Solid	DI Leach	
890-1557-7	FS07	Soluble	Solid	DI Leach	
MB 880-12024/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-12024/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-12024/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1556-A-6-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1556-A-6-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 12046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-1	FS01	Soluble	Solid	300.0	12024
890-1557-2	FS02	Soluble	Solid	300.0	12024
890-1557-3	FS03	Soluble	Solid	300.0	12024
890-1557-4	FS04	Soluble	Solid	300.0	12024
890-1557-5	FS05	Soluble	Solid	300.0	12024
890-1557-6	FS06	Soluble	Solid	300.0	12024
890-1557-7	FS07	Soluble	Solid	300.0	12024
MB 880-12024/1-A	Method Blank	Soluble	Solid	300.0	12024
LCS 880-12024/2-A	Lab Control Sample	Soluble	Solid	300.0	12024
LCSD 880-12024/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	12024
890-1556-A-6-G MS	Matrix Spike	Soluble	Solid	300.0	12024
890-1556-A-6-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	12024

Analysis Batch: 12195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-8	FS08	Soluble	Solid	300.0	11932
890-1557-9	FS09	Soluble	Solid	300.0	11932
MB 880-11932/1-A	Method Blank	Soluble	Solid	300.0	11932
LCS 880-11932/2-A	Lab Control Sample	Soluble	Solid	300.0	11932
LCSD 880-11932/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11932
880-8274-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	11932
880-8274-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	11932

Leach Batch: 12295

Released to Imaging: 12/16/2022 9:35:28 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-10	FS10	Soluble	Solid	DI Leach	
MB 880-12295/1-A	Method Blank	Soluble	Solid	DI Leach	

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 Client: WSP USA Inc.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

HPLC/IC (Continued)

Leach Batch: 12295 (Continued)

Lab Sample ID LCS 880-12295/2-A	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-12295/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1571-A-5-H MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1571-A-5-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 12337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1557-10	FS10	Soluble	Solid	300.0	12295
MB 880-12295/1-A	Method Blank	Soluble	Solid	300.0	12295
LCS 880-12295/2-A	Lab Control Sample	Soluble	Solid	300.0	12295
LCSD 880-12295/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	12295
890-1571-A-5-H MS	Matrix Spike	Soluble	Solid	300.0	12295
890-1571-A-5-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	12295

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Client: WSP USA Inc. Project/Site: PLU 78

Lab Sample ID: 890-1557-1

Matrix: Solid

Date Collected: 11/10/21 08:51 Date Received: 11/10/21 11:23

Client Sample ID: FS01

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 13:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 11:51	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	СН	XEN MID
Soluble	Analysis	300.0		1	12046	11/11/21 18:11	SC	XEN MID

Lab Sample ID: 890-1557-2 **Client Sample ID: FS02**

Date Collected: 11/10/21 08:52 **Matrix: Solid** Date Received: 11/10/21 11:23

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab 5035 XEN MID Total/NA Prep 11984 11/11/21 07:52 KL 8021B Total/NA 11/11/21 14:01 XEN MID Analysis 1 11985 MR Total/NA Total BTEX 12040 11/11/21 14:14 XEN MID Analysis 1 A.I XEN MID Total/NA Analysis 8015 NM 12045 11/11/21 15:00 Total/NA 11991 11/11/21 08:22 XEN MID Prep 8015NM Prep DM Total/NA Analysis 8015B NM 11994 11/11/21 12:55 AJ XEN MID XEN MID Soluble Leach DI Leach 12024 11/11/21 13:00 CH Soluble Analysis 300.0 1 12046 11/11/21 18:33 SC XEN MID

Lab Sample ID: 890-1557-3 **Client Sample ID: FS03 Matrix: Solid**

Date Collected: 11/10/21 08:53 Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 14:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 13:16	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	СН	XEN MID
Soluble	Analysis	300.0		20	12046	11/11/21 18:40	SC	XEN MID

Client Sample ID: FS04 Lab Sample ID: 890-1557-4

Date Collected: 11/10/21 08:55 Matrix: Solid Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 14:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS04

Date Received: 11/10/21 11:23

Lab Sample ID: 890-1557-4 Date Collected: 11/10/21 08:55

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 13:38	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	CH	XEN MID
Soluble	Analysis	300.0		10	12046	11/11/21 18:48	SC	XEN MID

Client Sample ID: FS05 Lab Sample ID: 890-1557-5

Date Collected: 11/10/21 08:56 **Matrix: Solid**

Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 15:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 13:59	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	CH	XEN MID
Soluble	Analysis	300.0		1	12046	11/11/21 18:55	SC	XEN MID

Client Sample ID: FS06 Lab Sample ID: 890-1557-6 Date Collected: 11/10/21 08:57 **Matrix: Solid**

Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 15:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 14:21	AJ	XEN MID
Soluble	Leach	DI Leach			12024	11/11/21 13:00	CH	XEN MID
Soluble	Analysis	300.0		1	12046	11/11/21 19:03	SC	XEN MID

Client Sample ID: FS07 Lab Sample ID: 890-1557-7

Date Collected: 11/10/21 08:58 Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 16:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 14:42	AJ	XEN MID

Eurofins Xenco, Carlsbad

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Matrix: Solid

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1557-1 Project/Site: PLU 78 SDG: 31403236.020.0129

Client Sample ID: FS07

Date Received: 11/10/21 11:23

Lab Sample ID: 890-1557-7 Date Collected: 11/10/21 08:58

Matrix: Solid

		Batch	Batch		Dilution	Batch	Prepared		
Prep 1	Гуре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Solubl	e	Leach	DI Leach			12024	11/11/21 13:00	СН	XEN MID
Solubl	е	Analysis	300.0		1	12046	11/11/21 19:10	SC	XEN MID

Client Sample ID: FS08 Lab Sample ID: 890-1557-8

Date Collected: 11/10/21 08:59 **Matrix: Solid** Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 16:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 15:04	AJ	XEN MID
Soluble	Leach	DI Leach			11932	11/12/21 10:53	SC	XEN MID
Soluble	Analysis	300.0		10	12195	11/15/21 12:59	CH	XEN MID

Client Sample ID: FS09 Lab Sample ID: 890-1557-9

Date Collected: 11/10/21 09:00 **Matrix: Solid**

Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 17:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 15:25	AJ	XEN MID
Soluble	Leach	DI Leach			11932	11/12/21 10:53	SC	XEN MID
Soluble	Analysis	300.0		20	12195	11/15/21 13:04	CH	XEN MID

Client Sample ID: FS10 Lab Sample ID: 890-1557-10

Date Collected: 11/10/21 09:01 **Matrix: Solid** Date Received: 11/10/21 11:23

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11984	11/11/21 07:52	KL	XEN MID
Total/NA	Analysis	8021B		1	11985	11/11/21 17:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	12040	11/11/21 14:14	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	12045	11/11/21 15:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			11991	11/11/21 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1	11994	11/11/21 15:46	AJ	XEN MID
Soluble	Leach	DI Leach			12295	11/15/21 11:50	СН	XEN MID
Soluble	Analysis	300.0		50	12337	11/15/21 20:22	SC	XEN MID

Lab Chronicle

Client: WSP USA Inc. Project/Site: PLU 78

Job ID: 890-1557-1 SDG: 31403236.020.0129

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.
 Job ID: 890-1557-1

 Project/Site: PLU 78
 SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, hu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for y
the agency does not of	• •	it the laboratory to not certifi	ed by the governing additionty. This list me	ay include analytes for t
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the agency does not of	fer certification.	•	, , ,	ay include analytes for v

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Method Summary

Job ID: 890-1557-1 Client: WSP USA Inc. Project/Site: PLU 78 SDG: 31403236.020.0129

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 78

Job ID: 890-1557-1

SDG: 31403236.020.0129

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1557-1	FS01	Solid	11/10/21 08:51	11/10/21 11:23	4
890-1557-2	FS02	Solid	11/10/21 08:52	11/10/21 11:23	4
890-1557-3	FS03	Solid	11/10/21 08:53	11/10/21 11:23	4
890-1557-4	FS04	Solid	11/10/21 08:55	11/10/21 11:23	4
890-1557-5	FS05	Solid	11/10/21 08:56	11/10/21 11:23	4
890-1557-6	FS06	Solid	11/10/21 08:57	11/10/21 11:23	4
890-1557-7	FS07	Solid	11/10/21 08:58	11/10/21 11:23	4
890-1557-8	FS08	Solid	11/10/21 08:59	11/10/21 11:23	4
890-1557-9	FS09	Solid	11/10/21 09:00	11/10/21 11:23	4
890-1557-10	FS10	Solid	11/10/21 09:01	11/10/21 11:23	4

Revised Date 051418 Rev 2018 1									
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Date/Time	e) Received by: (Signature)	Relinquished by: (Signature)	Time	Date/Time	re)	Received by: (Signature)) Rec	r: (Signature)	Relinquished by: (Signature)
	enforced unless previously negonated.		o, but not analy	itted to Xenc	or each sample subm	oject and a charge of \$5 f	applied to each pro	arge of \$75.00 will be a	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
	It essigns standard terms and conditions the due to circumstances beyond the control	23 S	o Xenco, its aff ses incurred by	nt company t ses or expen	hase order from clier onsibility for any los	s constitutes a valid pure shall not assume any resp	ishment of sample it of samples and s	document and relinqui	Notice: Signature of this of service. Xenco will be
1631 / 245.1 / /4/0 / /4/1 : Hg		Be Cd Cr Co Cu Pb Mn Mo Ni	As Ba Be C	ည	TCLP / SPLP 6010: 8RCRA		to be analyze	Circle Method(s) and Metal(s) to be analyzed	Circle Method
Sn U V Zn	i K Se Ag SiO2	()		Вb	M Texas 11	8RCRA 13PPM	020:	010 200.8 / 6020:	Total 200.7 / 6010
Composite			×	×	4	11/10/2021 0901	11/10	0	FS10
Composite			×	×	4	11/10/2021 0900	11/10	9	FS09
Composite			×	×	4	11/10/2021 9819	11/10	æ	FS08
Composite			×	×	4 1	11/10/2021 0858	11/10	7	FS07
Composite			×	×	4	11/10/2021 0857	11/10	6	FS06
Composite			×	×	4 1	11/10/2021 0816	11/10	5	FS05
Composite			×	×	4	11/10/2021 0855	11/10	4	FS04
Composite			×	×	4	11/10/2021 9853	11/10	۵	FS03
Composite			×	×	4 1	11/10/2021 085 2	S 11/10	2	FS02
Composite			×	×	4	11/10/2021 085 /	S 11/10		FS01
Sample Comments	Se		BTEX (TPH (E	Depth	Date Time Sampled Sampled	Matrix San	ntification	Sample Identification
lab, if received by 4:30pm	lab			_	10	Total Containers:		ils: Yes No	Sample Custody Seals:
TAT starts the day recevied by the		890-1557 Chain of Custody	-		1	Correction Factor:	(N/A)	s: Yes No	Cooler Custody Seals:
						-co-wat	8	(Yes)	Received Intact:
))			Thermometer ID	19.6	9.00	Temperature (°C):
				•	Yes No	No Wet Ice:	Temp Blank: (Yes		SAMPLE RECEIPT
API:30-015-27536	API:30-				Date:	Due Date:		Travis Casey	Sampler's Name:
CC:1080781001	CC:108				Rush: 24hr	Rush			P.O. Number:
IN:NAPP2126639352	IN:NAP				ne	Routine	0129	31403236.020.0129	Project Number:
Work Order Notes		ANALYSIS REQUEST	_		Turn Around	Tu		PLU 78	Project Name:
Other:	Deliverables: EDD ADaPT	Email: travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@w	kalei.jennin	/sp.com,	travis.casey@w	Email:		(432) 704-5178	Phone:
TRP Livel IV	Level III LST/UST	B	Carlsbad, NM	Carlsb	City, State ZIP:		705	Midland, TX 79705	City, State ZIP:
] # X		3104 E Greene St.	3104 E	Address:	222	t. Bldg 1, Unit	3300 North A St. Bldg 1, Unit 222	Address:
☐RC ☐uperfund ☐	Program: UST/PST ☐PRP ☐Brownfields [P	nergy	XTO Energy	Company Name:	ř	Permian offic	WSP USA Inc., Permian office	Company Name:
nts	Work Order Comments		Baker	Adrian Baker	Bill to: (if different)		sey	Tacoma Morrissey	Project Manager:
ge of	0-2000) www.xenco.com Page	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	00) Atlanta,G.	480-355-09	7550) Phoenix,AZ (Hobbs,NM (575-392-			
		Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio, IX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296	214) 902-0300 X (915)585-34	Dallas,TX (2 EL Paso,T.	TX (281) 240-4200 ,TX (432-704-5440)	Houston, Midland	Di L		LAB
	Work Order No:			المال				1	5

Phone 575-988-3199 Fax 575-988-3199

Carlsbad NM 88220

Eurofins Xenco, Carlsbad

Chain of Custody Record

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🐝 eurofins

Environment Testing America

Project Name PLU 78 FS06 (890-1557-6) Sample Identification - Client ID (Lab ID) Empty Kit Relinquished by FS08 (890-1557-8) FS07 (890-1557-7) FS05 (890-1557-5) FS01 (890-1557-1) 432-704-5440(Tel) TX 79701 Midland FS09 (890-1557-9) FS04 (890-1557-4) Shipping/Receiving Deliverable Requested | II III IV Other (specify) ⁻S03 (890-1557-3) ⁻⁻S02 (890-1557-2) Client Information ossible Hazard Identification 1211 W Florida Ave tention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. ote. 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 aintain accreditation in the State of Origin listed above for analysis/tests/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. linquished by linquished by urofins Xenco Custody Seals Intact.
∆ Yes ∆ No \mathcal{A} (Sub Contract Lab Custody Seal No A Project #. 89000004 Phone Date/Time Primary Deliverable Rank 2 ₩O# TAT Requested (days): Due Date Requested 11/11/2021 Sample Date 11/10/21 11/10/21 11/10/21 11/10/21 11/10/21 11/10/21 11/10/21 11/10/21 11/10/21 Mountain 08 59 Mountain 08 53 Date Mountain 09 00 Mountain 08 57 Mountain 08 56 Mountain 08 55 Mountain 08 52 Mountain 08 58 08 51 (C=comp, Sample Type Preservation Code: Company Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Lab PM Kramer Jessica essica kramer@eurofinset com Field Filtered Sample (Yes or No) Time Accreditations Required (See note)
NELAP - Louisrana NELAP - Texas Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks Received by \times × × × × × \times × otici Return To Client × × × × × × × 8015MOD_Calc × × × × × 300_ORGFM_28D/DI_LEACH Chloride × × × × × × × × × × × × × 8021B/5035FP_Calc (MOD) BTEX × Analysis Requested × × × × Total BTEX GCV Disposal By Lab State of Origin
New Mexico Carrier Tracking No(s) Method of Shipment $\mathcal{C}_{\mathcal{K}}$ Date/Time لار J DI Water K EDTA A. Total Number of containers 1948 . 4 dia D Nimc Acid
E NaHSO4
F MeOH
G Amchlor
H Ascorbic Acid Page: Page 1 of 2 COC No: 890-502 1 O B > 890-1557-1 Preservation Codes HCL NaOH Zn Acetate Special Instructions/Note: Q K O F D > ≥ N 0 Z Z Compan Ver: 06/08/2021 Company M Hexane
V None
V None
D AsNa02
- Na2C03
D Na2S03
R Na2S203
R Na2S203
R Na2S204
F 12SO4
F 17SP Dodecahydrate
J Acetone
J MCAA other (specify) Months

1089 N Canal St

Eurofins Xenco, Carlsbad

Chain of Custody Record

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Environment Testing

Project Name PLU 78 Deliverable Requested | II III IV Other (specify) 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/tests/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 and the samples accreditation in the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. Eurofins Xenco Sample Identification - Client ID (Lab ID) Empty Kit Relinquished by Possible Hazard Identification FS10 (890-1557-10) 432-704-5440(Tel) TX 79701 1211 W Florida Ave Shipping/Receiving Client Information (Sub Contract Lab) Carlsbad NM 88220 Phone 575-988-3199 Fax. 575-988-3199 elinquished by: elinquished by: Custody Seals Intact. Yes 8 6 Custody Seal No 110.21 Project #: 89000004 Sampler Date/Time Primary Deliverable Rank 2 Due Date Requested 11/11/2021)ate/Time 'AT Requested (days): SOW# 11/10/21 Date Mountain Sample 09 01 Time (C=comp, o=waste/oil, G=grab) BT=Tissue, A=Ah Sample Preservation Code: Type Company Company Company Matrix Solid jessica kramer@eurofinset com Kramer Jessica Time. Accreditations Required (See note):
NELAP - Louisiana NELAP - Texas Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Received by: 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Received by: × Cooler Temperature(s) °C and Other Remarks × 8015MOD_Caic 300_ORGFM_28D/DI_LEACH Chloride × 8021B/5035FP_Calc (MOD) BTEX Analysis Requested Total BTEX GCV × Carrier Tracking No(s) Date/Time ĊĊ Q Total Number of containers E NAHSOA

E NAHSOA

F MeOH

G Amchior

H Assorbic Acid

I Ice

J DI Water

K EDTA

L EDA Page Page 2 of 2 COC No 890-502 2 Preservation Codes 390-1557-1 NaOH Zn Acetate Special Instructions/Note Company Company None

AsNa02

Na204S

Na2503

Na2503

Na2503

Na2606

Na2606

Acetone

Acetone

MCAA

MPH4-5

Other (specify) Ver 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1557-1

SDG Number: 31403236.020.0129

Login Number: 1557 List Source: Eurofins Xenco, Carlsbad

List Number: 1 Creator: Clifton, Cloe

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	
s 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 <6 mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1557-1

SDG Number: 31403236.020.0129

List Source: Eurofins Xenco, Midland
List Creation: 11/11/21 11:49 AM

Creator: Kramer, Jessica

Login Number: 1557

List Number: 2

<6mm (1/4").

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	N/A	

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.....LINKS

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Have a Question?

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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: 890-3189-1

Laboratory Sample Delivery Group: 03E1558044

Client Project/Site: PLU 78B

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/17/2022 10:23:11 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: PLU 78B
Laboratory Job ID: 890-3189-1
SDG: 03E1558044

Table of Contents

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Definitions/Glossary

Job ID: 890-3189-1 Client: Ensolum Project/Site: PLU 78B SDG: 03E1558044

Qualifiers

HPLC/IC

Qualifier **Qualifier Description**

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

Percent Recovery %R CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

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)

Estimated Detection Limit (Dioxin) EDL LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

 Client: Ensolum
 Job ID: 890-3189-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Job ID: 890-3189-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3189-1

Receipt

The samples were received on 10/10/2022~2:48~PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was $4.4^{\circ}C$

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS09A (890-3189-1), FS10A (890-3189-2) and FS12A (890-3189-3).

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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Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-3189-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Client Sample ID: FS09A Lab Sample ID: 890-3189-1

Date Collected: 10/10/22 11:20 Matrix: Solid
Date Received: 10/10/22 14:48

Sample Depth: 4'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifie	er RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	1040	5.05	mg/Kg			10/14/22 14:51	1		

Client Sample ID: FS10A Lab Sample ID: 890-3189-2

Date Collected: 10/10/22 12:55 Date Received: 10/10/22 14:48

Sample Depth: 4.5'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6280		50.1	mg/Kg			10/14/22 14:55	10	

Client Sample ID: FS12A

Date Collected: 10/10/22 11:30

Matrix: Solid

Date Collected: 10/10/22 11:30 Date Received: 10/10/22 14:48

Sample Depth: 4'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	123		4.99	mg/Kg			10/13/22 19:39	1	

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Job ID: 890-3189-1

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client: Ensolum Project/Site: PLU 78B SDG: 03E1558044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36661/1-A

Matrix: Solid

Analysis Batch: 36885

MB MB

Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 10/13/22 15:47

Lab Sample ID: LCS 880-36661/2-A

Matrix: Solid

Analysis Batch: 36885

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 267.3 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-36661/3-A

Matrix: Solid

Analysis Batch: 36885

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 254.7 mg/Kg 102 90 - 110

Lab Sample ID: 880-20136-A-1-D MS

Matrix: Solid

Analysis Batch: 36885

MS MS Spike %Rec Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 19.4 248 269.1 101 90 - 110 mg/Kg

Lab Sample ID: 880-20136-A-1-E MSD

Matrix: Solid

Analysis Batch: 36885

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 19.4 248 267.2 mg/Kg 100 90 - 110

Lab Sample ID: MB 880-36771/1-A

Matrix: Solid

Analysis Batch: 36929

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Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 10/14/22 12:24

Lab Sample ID: LCS 880-36771/2-A

Matrix: Solid

Analysis Batch: 36929

LCS LCS %Rec Spike Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 268.5 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-36771/3-A

Matrix: Solid

Analysis Batch: 36929

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 268.7 mg/Kg 107 90 - 110 20

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

QC Sample Results

Client: Ensolum Job ID: 890-3189-1 SDG: 03E1558044 Project/Site: PLU 78B

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-3191-A-11-C MS

Matrix: Solid

Analysis Batch: 36929

Sample Sample Spike MS MS %Rec Added Result Qualifier Result Qualifier Analyte Unit %Rec Limits Chloride 76.4 250 341.4 mg/Kg 106 90 - 110

Lab Sample ID: 890-3191-A-11-D MSD

Matrix: Solid

Analysis Batch: 36929

•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	76.4		250	342.4		mg/Kg		106	90 - 110	0	20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3189-1

 Project/Site: PLU 78B
 SDG: 03E1558044

HPLC/IC

Leach Batch: 36661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3189-3	FS12A	Soluble	Solid	DI Leach	
MB 880-36661/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36661/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36661/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20136-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20136-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 36771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3189-1	FS09A	Soluble	Solid	DI Leach	
890-3189-2	FS10A	Soluble	Solid	DI Leach	
MB 880-36771/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36771/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36771/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3191-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3191-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 36885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3189-3	FS12A	Soluble	Solid	300.0	36661
MB 880-36661/1-A	Method Blank	Soluble	Solid	300.0	36661
LCS 880-36661/2-A	Lab Control Sample	Soluble	Solid	300.0	36661
LCSD 880-36661/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36661
880-20136-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	36661
880-20136-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	36661

Analysis Batch: 36929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3189-1	FS09A	Soluble	Solid	300.0	36771
890-3189-2	FS10A	Soluble	Solid	300.0	36771
MB 880-36771/1-A	Method Blank	Soluble	Solid	300.0	36771
LCS 880-36771/2-A	Lab Control Sample	Soluble	Solid	300.0	36771
LCSD 880-36771/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36771
890-3191-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	36771
890-3191-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	36771

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Client: Ensolum Job ID: 890-3189-1 Project/Site: PLU 78B SDG: 03E1558044

Client Sample ID: FS09A

Date Collected: 10/10/22 11:20 Date Received: 10/10/22 14:48 Lab Sample ID: 890-3189-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	36771	10/12/22 15:48	KS	EET MID
Soluble	Analysis	300.0		1			36929	10/14/22 14:51	CH	EET MID

Client Sample ID: FS10A Lab Sample ID: 890-3189-2

Date Collected: 10/10/22 12:55 Date Received: 10/10/22 14:48 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	36771	10/12/22 15:48	KS	EET MID
Soluble	Analysis	300.0		10			36929	10/14/22 14:55	CH	EET MID

Client Sample ID: FS12A Lab Sample ID: 890-3189-3

Date Collected: 10/10/22 11:30 **Matrix: Solid**

Date Received: 10/10/22 14:48

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	36661	10/11/22 10:10	KS	EET MID
Soluble	Analysis	300.0		1			36885	10/13/22 19:39	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3189-1 Project/Site: PLU 78B SDG: 03E1558044

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

	Authority	Program	Identification Number	Expiration Date
١	Texas	NELAP	T104704400-22-24	06-30-23

Method Summary

 Client: Ensolum
 Job ID: 890-3189-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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

Laboratory References:

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

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Sample Summary

 Client: Ensolum
 Job ID: 890-3189-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	De
890-3189-1	FS09A	Solid	10/10/22 11:20	10/10/22 14:48	4'
890-3189-2	FS10A	Solid	10/10/22 12:55	10/10/22 14:48	4.5'
890-3189-3	FS12A	Solid	10/10/22 11:30	10/10/22 14:48	4'

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inquished by:

Circle Method(s) a

Total 200.7 / 601

Environment Testing

Chain of Custody

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

		www.xenco.com	om Page	0	
		Work Orde	Work Order Comments		
	Program:	Program: UST/PST PRP Brownfields RRC Superfund	Brownfields [RRC 🗌	Superfund [
+	State of Project:	ect:			
220	Reporting:	Reporting: Level III ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	PST/UST	TRRP	Level IV
	Deliverable	Deliverables: EDD	ADaPT 🔲	Other:	

2. Amorpha State	(Signature) Received by: (Signature)	ment and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions 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 activities of \$55.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated) 200.8 / 6020: 8RCRA 13PPM Texa nd Metal(s) to be analyzed TCLP / SPLP 6010				A S + 1130 4	A S (1255 4.5	A S 10/10/22 1120 4	ication Matrix Sampled Sampled Depth	Corrected Temperature: 4.	Yes No N/A Temperature Reading:	Yes No NTA Correction Factor:	t: Wes No Thermometer ID: TOM-DC	Temp Blank: Res No Wet Ice: Yes		March Physics TAT starts the day received by
h1 cc/01/01	Date/Time	t company to Eurofins Xenco, Its affiliates a ny losses or expenses incurred by the clien ple submitted to Eurofins Xenco, but not a	s 11 Al Sb As Ba Be B C : 8RCRA Sb As Ba Be Cd			7	() - X	X	С - X	Grab/ # of C	4	6		aran	o neter		ed by
400	Relinquished by: (Signature)	nd subcontractors. It assigns standard terms and cond it if such losses are due to circumstances beyond the co nalyzed. These terms will be enforced unless previously	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni TCLP/SPLP6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U								890-3189 Chain of Custody						
	Received by: (Signature)	litions ntrol regotiated.	lo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn 1 U Hg: 1631 / 245.1 / 7470 / 7471					Z	lina		NaOH	Zn Ac	Na ₂ S	NaHS	H ₃ PO ₄ :HP	H ₂ SO ₄ : H ₂	HCL: HC
	Date/Time		1 U V Zn 3 / 7471			1080781001		NAPP2126639352	ncident #:	Sample Comments	NaOH+Ascorbic Acid: SAPC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ : NaSO ₃	NaHSO 4: NABIS	4: HP	4: H ₂ NaOH: Na	HC HNO 3: HN
									200	ıo 12	of :	15					

SAMPLE RECEIPT

ampler's Name:

roject Location: roject Number:

ject Name:

PLU

788

03E15580H

Routine

Rush

Code

Turn Around

City, State ZIP:

Larisbad

1.8307 23

Email:

tmorrissey wensolum. am

ANALYSIS REQUEST

None: NO

DI Water: H₂O

Preservative Codes

Deliverables:

Carlibad, NM

3104 E

Greene Energy (Jirey

City, State ZIP:

Project Manager:

ompany Name:

3122 Nat'l Parks

Enschum

acoma Monassey

Bill to: (if different) Company Name:

Jamett

Samples Received Inta

Cooler Custody Seals:

ample Custody Seals

otal Containers:

Sample Identii

FS 10

Work Order No:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3189-1 SDG Number: 03E1558044

Login Number: 3189 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3189-1 SDG Number: 03E1558044

Login Number: 3189 **List Source: Eurofins Midland** List Number: 2

List Creation: 10/12/22 11:01 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").





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ANALYTICAL REPORT

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

Laboratory Job ID: 890-3190-1

Laboratory Sample Delivery Group: 03E1558044

Client Project/Site: PLU 78B

For:

eurofins 🔆

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Tacoma Morrissey

JURAMER

Authorized for release by: 10/17/2022 11:37:48 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

results through
EO L.

Have a Question?

.....LINKS

Review your project

Ask—

Received by OCD: 11/18/2022 1:44:33 PM

_ _____

www.eurofinsus.com/Env
Released to Imaging: 12/16/2022 9:35:28 AM

Visit us at:

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

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

Client: Ensolum
Project/Site: PLU 78B
Laboratory Job ID: 890-3190-1
SDG: 03E1558044

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Definitions/Glossary

Client: Ensolum Job ID: 890-3190-1 Project/Site: PLU 78B SDG: 03E1558044

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
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

PRES

QC

RER

RPD

TEF

TEQ

TNTC

RL

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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

Eurofins Carlsbad

Presumptive

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

Case Narrative

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Job ID: 890-3190-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3190-1

Receipt

The samples were received on 10/10/2022~2:48~PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was $4.4^{\circ}C$

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3190-1), PH01A (890-3190-2) and PH01B (890-3190-3).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-36976 and analytical batch 880-37017 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-20395-A-1-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH01 (890-3190-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH01B (890-3190-3). 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 and precision for preparation batch 880-36976 and analytical batch 880-37017 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-20138-A-4-E MS) and (880-20138-A-4-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

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

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Eurofins Carlsbad 10/17/2022 Client: Ensolum Job ID: 890-3190-1 Project/Site: PLU 78B SDG: 03E1558044

Client Sample ID: PH01 Lab Sample ID: 890-3190-1

Date Collected: 10/10/22 12:10 Matrix: Solid Date Received: 10/10/22 14:48

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:34	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:34	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/14/22 14:04	10/16/22 01:34	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:34	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/14/22 14:04	10/16/22 01:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	44	S1-	70 - 130			10/14/22 14:04	10/16/22 01:34	1
1,4-Difluorobenzene (Surr)	70		70 - 130			10/14/22 14:04	10/16/22 01:34	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/17/22 12:04	1
Mothod: SW946 9045 NM Diggs	l Banga Organ	ico (DBO) (CC)					
Method: SW846 8015 NM - Diese Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			IN.L					
	<10 Q	11	10.0	ma/Ka				
	<49.9	U	49.9	mg/Kg			10/13/22 09:37	
Method: SW846 8015B NM - Dies				mg/Kg				
: Method: SW846 8015B NM - Dies	sel Range Orga			mg/Kg	D	Prepared		1
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	sel Range Orga	nics (DRO) Qualifier	(GC)		<u>D</u>		10/13/22 09:37	1 Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	sel Range Orga Result	nics (DRO) Qualifier	(GC)	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	10/13/22 09:37 Analyzed	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	sel Range Orga Result <49.9	nics (DRO) Qualifier	(GC) RL 49.9	Unit	<u>D</u>	Prepared 10/12/22 08:44	10/13/22 09:37 Analyzed 10/12/22 19:32	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga Result <49.9	nics (DRO) Qualifier U	(GC) RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared 10/12/22 08:44	10/13/22 09:37 Analyzed 10/12/22 19:32	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Orga Result <49.9	nics (DRO) Qualifier U	(GC) RL 49.9	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 10/12/22 08:44 10/12/22 08:44	10/13/22 09:37 Analyzed 10/12/22 19:32 10/12/22 19:32	1 Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	sel Range Orga Result <49.9 <49.9	nics (DRO) Qualifier U	(GC) RL 49.9 49.9 49.9	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 10/12/22 08:44 10/12/22 08:44 10/12/22 08:44	Analyzed 10/12/22 19:32 10/12/22 19:32 10/12/22 19:32	Dil Face 1 1 1 Dil Face
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	sel Range Orga Result <49.9 <49.9 <49.9 %Recovery	nics (DRO) Qualifier U	(GC) RL 49.9 49.9 49.9 Limits	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 10/12/22 08:44 10/12/22 08:44 10/12/22 08:44 Prepared	Analyzed 10/12/22 19:32 10/12/22 19:32 10/12/22 19:32 Analyzed	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	sel Range Orga Result <49.9	U Qualifier U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 10/12/22 08:44 10/12/22 08:44 10/12/22 08:44 Prepared 10/12/22 08:44	10/13/22 09:37 Analyzed 10/12/22 19:32 10/12/22 19:32 Analyzed 10/12/22 19:32	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	U Qualifier U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 10/12/22 08:44 10/12/22 08:44 10/12/22 08:44 Prepared 10/12/22 08:44	10/13/22 09:37 Analyzed 10/12/22 19:32 10/12/22 19:32 Analyzed 10/12/22 19:32	1 Dil Fac

Client Sample ID: PH01A Lab Sample ID: 890-3190-2 Date Collected: 10/10/22 12:15 Matrix: Solid

Date Received: 10/10/22 14:48

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:54	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:54	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/14/22 14:04	10/16/22 01:54	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/14/22 14:04	10/16/22 01:54	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/14/22 14:04	10/16/22 01:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130			10/14/22 14:04	10/16/22 01:54	1

Client: Ensolum Job ID: 890-3190-1 Project/Site: PLU 78B SDG: 03E1558044

Client Sample ID: PH01A Lab Sample ID: 890-3190-2

Date Collected: 10/10/22 12:15 Matrix: Solid Date Received: 10/10/22 14:48

Sample Depth: 2'

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	9.3	70 - 130	10/14/22 14:04	10/16/22 01:54	1

Method: TAI	SOP Total BTFX -	- Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/17/22 12:04	1

Mathada OMO40 0045 NM Disasi Damas Omenica (DDO) (OO	Α.
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC	. 1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	ma/Ka			10/13/22 09:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 19:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 19:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 19:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94	70 - 130	10/12/22 08:44	10/12/22 19:53	1
o-Terphenyl	95	70 - 130	10/12/22 08:44	10/12/22 19:53	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifie		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.6	5.02	mg/Kg			10/14/22 08:28	1

Client Sample ID: PH01B Lab Sample ID: 890-3190-3

Date Collected: 10/10/22 12:20 Date Received: 10/10/22 14:48

Sample Depth: 4'

Mothodi	CIMOAC GOOAD	Valatile Or	ganic Compour	de (CC)
i wethod:	5W846 8U21B	- volatile Ur	danic Compour	ias (GC)

Metriod. 544646 6021B - Volatile Organic Compounds (CC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/14/22 14:04	10/16/22 02:15	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/14/22 14:04	10/16/22 02:15	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/14/22 14:04	10/16/22 02:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/14/22 14:04	10/16/22 02:15	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/14/22 14:04	10/16/22 02:15	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/14/22 14:04	10/16/22 02:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130			10/14/22 14:04	10/16/22 02:15	1

ı	4-Diomondocizene (Sun)	131 31+	70 - 130	10/14/22 14.04	10/10/22 02.13	,
	1,4-Difluorobenzene (Surr)	104	70 - 130	10/14/22 14:04	10/16/22 02:15	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/17/22 12:04	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/13/22 09:37	1

Eurofins Carlsbad

Matrix: Solid

Matrix: Solid

Lab Sample ID: 890-3190-3

Client Sample Results

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Client Sample ID: PH01B

Date Collected: 10/10/22 12:20 Date Received: 10/10/22 14:48

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 20:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 20:13	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 20:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/12/22 08:44	10/12/22 20:13	1
o-Terphenyl	101		70 - 130			10/12/22 08:44	10/12/22 20:13	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	30.1		4.95	mg/Kg			10/14/22 08:36	1

Eurofins Carlsbad

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Surrogate Summary

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-20395-A-1-B MS	Matrix Spike	93	97	
880-20395-A-1-C MSD	Matrix Spike Duplicate	114	88	
890-3190-1	PH01	44 S1-	70	
890-3190-2	PH01A	127	93	
890-3190-3	PH01B	131 S1+	104	
LCS 880-36976/1-A	Lab Control Sample	86	93	
LCSD 880-36976/2-A	Lab Control Sample Dup	84	94	
MB 880-36976/5-A	Method Blank	96	88	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-20138-A-4-E MS	Matrix Spike	74	67 S1-
880-20138-A-4-F MSD	Matrix Spike Duplicate	75	66 S1-
890-3190-1	PH01	93	90
890-3190-2	PH01A	94	95
890-3190-3	PH01B	98	101
LCS 880-36718/2-A	Lab Control Sample	99	107
LCSD 880-36718/3-A	Lab Control Sample Dup	88	94
MB 880-36718/1-A	Method Blank	83	92

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum Job ID: 890-3190-1 SDG: 03E1558044 Project/Site: PLU 78B

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36976/5-A

Lab Sample ID: LCS 880-36976/1-A

Matrix: Solid Analysis Batch: 37017 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36976

ı		MB	MB					
	Analyte	Result	Qualifier	RL	Unit D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200	mg/Kg	10/14/22 14:04	10/15/22 19:40	1
	Toluene	<0.00200	U	0.00200	mg/Kg	10/14/22 14:04	10/15/22 19:40	1
	Ethylbenzene	<0.00200	U	0.00200	mg/Kg	10/14/22 14:04	10/15/22 19:40	1
	m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	10/14/22 14:04	10/15/22 19:40	1
	o-Xylene	<0.00200	U	0.00200	mg/Kg	10/14/22 14:04	10/15/22 19:40	1
	Xylenes, Total	<0.00400	U	0.00400	mg/Kg	10/14/22 14:04	10/15/22 19:40	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	 10/14/22 14:04	10/15/22 19:40	1
1,4-Difluorobenzene (Surr)	88		70 - 130	10/14/22 14:04	10/15/22 19:40	1

Client Sample ID: Lab Control Sample

Prep Batch: 36976

Matrix: Solid Prep Type: Total/NA Analysis Batch: 37017

	Spike	LUS	LUS				/ortec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1035		mg/Kg		103	70 - 130	
Toluene	0.100	0.09984		mg/Kg		100	70 - 130	
Ethylbenzene	0.100	0.08928		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1795		mg/Kg		90	70 - 130	
o-Xylene	0.100	0.09130		mg/Kg		91	70 - 130	

LCS LCS

Surrogate	%Recovery Quali	fier Limits
4-Bromofluorobenzene (Surr)	86	70 - 130
1,4-Difluorobenzene (Surr)	93	70 - 130

Lab Sample ID: LCSD 880-36976/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 37017

Prep Type: Total/NA Prep Batch: 36976

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1082		mg/Kg		108	70 - 130	4	35	
Toluene	0.100	0.1038		mg/Kg		104	70 - 130	4	35	
Ethylbenzene	0.100	0.09363		mg/Kg		94	70 - 130	5	35	
m-Xylene & p-Xylene	0.200	0.1920		mg/Kg		96	70 - 130	7	35	
o-Xylene	0.100	0.09683		mg/Kg		97	70 - 130	6	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	84		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-20395-A-1-B MS

Matrix: Solid

Analysis Batch: 37017

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

Prep Batch: 36976

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F2 F1	0.100	0.08441		mg/Kg		84	70 - 130	
Toluene	<0.00202	U F2 F1	0.100	0.07227		mg/Kg		72	70 - 130	

QC Sample Results

Client: Ensolum Job ID: 890-3190-1 SDG: 03E1558044 Project/Site: PLU 78B

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

Lab Sample ID: 880-20395-A-1-B MS

Lab Sample ID: 880-20395-A-1-C MSD

Matrix: Solid

Analysis Batch: 37017

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36976

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U F1	0.100	0.05766	F1	mg/Kg		57	70 - 130	
m-Xylene & p-Xylene	<0.00403	U F1	0.201	0.1558		mg/Kg		78	70 - 130	
o-Xylene	<0.00202	U F1	0.100	0.07839		mg/Kg		78	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	93	70 - 130
1,4-Difluorobenzene (Surr)	97	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36976

Matrix: Solid Analysis Batch: 37017

_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F2 F1	0.0990	0.03276	F2 F1	mg/Kg		33	70 - 130	88	35
Toluene	<0.00202	U F2 F1	0.0990	0.03934	F2 F1	mg/Kg		40	70 - 130	59	35
Ethylbenzene	<0.00202	U F1	0.0990	0.04508	F1	mg/Kg		46	70 - 130	24	35
m-Xylene & p-Xylene	<0.00403	U F1	0.198	0.1249	F1	mg/Kg		63	70 - 130	22	35
o-Xylene	<0.00202	U F1	0.0990	0.06460	F1	mg/Kg		65	70 - 130	19	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

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

Lab Sample ID: MB 880-36718/1-A

Matrix: Solid

Analysis Batch: 36713

Client Sample ID: Method Blank
Prep Type: Total/NA
Duan Databa 20740

Prep Batch: 36718

ı		IND	MID						
l	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 11:04	1
	Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 11:04	1
	Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/22 08:44	10/12/22 11:04	1
ı									

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	10/12/22 08:44	10/12/22 11:04	1
o-Terphenyl	92		70 - 130	10/12/22 08:44	10/12/22 11:04	1

Lab Sample ID: LCS 880-36718/2-A

Matrix: Solid

Analysis Batch: 36713

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

Prep Batch: 36718

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	1007		mg/Kg		101	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	903.1		mg/Kg		90	70 - 130
C10-C28)							

Client: Ensolum Job ID: 890-3190-1 Project/Site: PLU 78B SDG: 03E1558044

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

LCS LCS

%Recovery Qualifier

Lab Sample ID: LCS 880-36718/2-A

Limits

Matrix: Solid

Analysis Batch: 36713

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36718

1-Chlorooctane 99 70 - 130 o-Terphenyl 107 70 - 130

Lab Sample ID: LCSD 880-36718/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Surrogate

Analysis Batch: 36713

Prep Type: Total/NA

Prep Batch: 36718 %Rec RPD

Spike LCSD LCSD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 70 - 130 1000 824.6 82 20 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 942.9 mg/Kg 94 70 - 13020 C10-C28)

LCSD LCSD

Surrogate	%Recovery			
1-Chlorooctane	88		70 - 130	
o-Terphenyl	94		70 - 130	

Lab Sample ID: 880-20138-A-4-E MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 36713

Prep Type: Total/NA

Prep Batch: 36718

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.8	U	998	1005		mg/Kg		99	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.8	U	998	700.9		mg/Kg		70	70 - 130	
C10 C28)										

C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	67	S1-	70 - 130

Lab Sample ID: 880-20138-A-4-F MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid**

Analysis Batch: 36713

Prep Type: Total/NA Prep Batch: 36718

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<49.8	U	998	1021		mg/Kg		101	70 - 130	2	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.8	U	998	713.6		mg/Kg		72	70 - 130	2	20	
C10 C20)												

C10-C28)

Surrogate 1-Chlorooctane o-Terphenyl

MSD	MISD	
%Recovery	Qualifier	Limits
75		70 - 130
66	S1-	70 - 130

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Job ID: 890-3190-1 Client: Ensolum Project/Site: PLU 78B SDG: 03E1558044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36661/1-A

Matrix: Solid

Analysis Batch: 36885

MB MB

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 10/13/22 15:47

Lab Sample ID: LCS 880-36661/2-A

Matrix: Solid

Analysis Batch: 36885

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 267.3 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-36661/3-A

Matrix: Solid

Analysis Batch: 36885

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 254.7 mg/Kg 102 90 - 110

Lab Sample ID: 880-20136-A-1-D MS

Matrix: Solid

Analysis Batch: 36885

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 19.4 248 269.1 101 90 - 110 mg/Kg

Lab Sample ID: 880-20136-A-1-E MSD

Matrix: Solid

Analysis Batch: 36885

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 248 Chloride 19.4 267.2 mg/Kg 100 90 - 110 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

GC VOA

Prep Batch: 36976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Total/NA	Solid	5035	
890-3190-2	PH01A	Total/NA	Solid	5035	
890-3190-3	PH01B	Total/NA	Solid	5035	
MB 880-36976/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36976/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36976/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20395-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-20395-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 37017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Total/NA	Solid	8021B	36976
890-3190-2	PH01A	Total/NA	Solid	8021B	36976
890-3190-3	PH01B	Total/NA	Solid	8021B	36976
MB 880-36976/5-A	Method Blank	Total/NA	Solid	8021B	36976
LCS 880-36976/1-A	Lab Control Sample	Total/NA	Solid	8021B	36976
LCSD 880-36976/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36976
880-20395-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	36976
880-20395-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36976

Analysis Batch: 37149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Total/NA	Solid	Total BTEX	
890-3190-2	PH01A	Total/NA	Solid	Total BTEX	
890-3190-3	PH01B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 36713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Total/NA	Solid	8015B NM	36718
890-3190-2	PH01A	Total/NA	Solid	8015B NM	36718
890-3190-3	PH01B	Total/NA	Solid	8015B NM	36718
MB 880-36718/1-A	Method Blank	Total/NA	Solid	8015B NM	36718
LCS 880-36718/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36718
LCSD 880-36718/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36718
880-20138-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	36718
880-20138-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36718

Prep Batch: 36718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Total/NA	Solid	8015NM Prep	
890-3190-2	PH01A	Total/NA	Solid	8015NM Prep	
890-3190-3	PH01B	Total/NA	Solid	8015NM Prep	
MB 880-36718/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36718/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36718/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20138-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-20138-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

GC Semi VOA

Analysis Batch: 36829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Total/NA	Solid	8015 NM	
890-3190-2	PH01A	Total/NA	Solid	8015 NM	
890-3190-3	PH01B	Total/NA	Solid	8015 NM	
_					

HPLC/IC

Leach Batch: 36661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Soluble	Solid	DI Leach	
890-3190-2	PH01A	Soluble	Solid	DI Leach	
890-3190-3	PH01B	Soluble	Solid	DI Leach	
MB 880-36661/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36661/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36661/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20136-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20136-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 36885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3190-1	PH01	Soluble	Solid	300.0	36661
890-3190-2	PH01A	Soluble	Solid	300.0	36661
890-3190-3	PH01B	Soluble	Solid	300.0	36661
MB 880-36661/1-A	Method Blank	Soluble	Solid	300.0	36661
LCS 880-36661/2-A	Lab Control Sample	Soluble	Solid	300.0	36661
LCSD 880-36661/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36661
880-20136-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	36661
880-20136-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	36661

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Client Sample ID: PH01

Client: Ensolum

Soluble

Project/Site: PLU 78B

Lab Sample ID: 890-3190-1

Matrix: Solid

Date Collected: 10/10/22 12:10 Date Received: 10/10/22 14:48

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	36976	10/14/22 14:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37017	10/16/22 01:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37149	10/17/22 12:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			36829	10/13/22 09:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	36718	10/12/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36713	10/12/22 19:32	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	36661	10/11/22 10:10	KS	EET MID

Lab Sample ID: 890-3190-2

Lab Sample ID: 890-3190-3

CH

10/13/22 19:46

36885

Matrix: Solid

Matrix: Solid

EET MID

Date Collected: 10/10/22 12:15

Analysis

300.0

Date Received: 10/10/22 14:48

Client Sample ID: PH01A

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	36976	10/14/22 14:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37017	10/16/22 01:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37149	10/17/22 12:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			36829	10/13/22 09:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	36718	10/12/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36713	10/12/22 19:53	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	36661	10/11/22 10:10	KS	EET MID
Soluble	Analysis	300.0		1			36885	10/14/22 08:28	CH	EET MID

Client Sample ID: PH01B

Date Collected: 10/10/22 12:20

Date Received: 10/10/22 14:48

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	36976	10/14/22 14:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37017	10/16/22 02:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37149	10/17/22 12:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			36829	10/13/22 09:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	36718	10/12/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36713	10/12/22 20:13	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	36661	10/11/22 10:10	KS	EET MIC
Soluble	Analysis	300.0		1			36885	10/14/22 08:36	CH	EET MIC

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date
		ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for
the agency does not of	fer certification.	•	, , ,	·, ·····
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	,
0 ,		Matrix Solid	, , ,	

Method Summary

Job ID: 890-3190-1 Client: Ensolum Project/Site: PLU 78B SDG: 03E1558044

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

 Client: Ensolum
 Job ID: 890-3190-1

 Project/Site: PLU 78B
 SDG: 03E1558044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	D
890-3190-1	PH01	Solid	10/10/22 12:10	10/10/22 14:48	0.
890-3190-2	PH01A	Solid	10/10/22 12:15	10/10/22 14:48	2'
890-3190-3	PH01B	Solid	10/10/22 12:20	10/10/22 14:48	4'

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Relinquished by: (Signature)

Received by: (Signature)

8841 CCPOILD

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020.2

eurofins **Environment Testing** Xenco

City, State ZIP:

Project Manager:

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334

	Xenco	Xenco Environment lesting	Midland, TX EL Paso, T)	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	Work Order No:
			Hobbs, NA	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	www.xenco.com Page of of
roject Manager:	Tacoma Mu	Marisson	Bill to: (if different)	Grannett Green	Work Order Comments
ompany Name:	- 1	-70	Company Name:	n	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
ddress:	3122 Nat'1	Parks Hwy		3104 E Greene St	State of Project:
ity, State ZIP:	and.	02288 WN	City, State ZIP:	Carisback, NM 88220	Reporting: Level II Level III PST/UST TRRP Level IV
hone:	1	. 6307 Email:		tmornsscy@ensolum.com	Deliverables: EDD ADaPT Other:
roject Name:	PLU 788	Tun	Turn Around	ANALYSIS REQUEST	Preservative Codes
er:	03E1558044	4 Noutine	Rush Code	G	None: NO DI Water: H ₂ O
roject Location:	32.19442,7	703. 828 HJ Date:			Coal: Coal MeOH: Me
	Meredith R	Paper 13 TAT starts th	TAT starts the day received by		
*:		the lab, if re	the lab, if received by 4:30pm		H ₂ SO ₄ :H ₂ NaOH:Na
SAMPLE RECEIPT	Temp Blank:	Res No Wet Ice:	res No		H₃PO₄; HP
amples Received Intact:		nometer l	70	_S	NaHSO 4: NABIS
Cooler Custody Seals:	Yes No MA	Correction Factor:	V		Na ₂ S ₂ O ₃ : NaSO ₃
sample Custody Seals:	Yes No N/A	Temperature Reading:	4.16	X	
Sample Identification	fication Matrix	Date Time Sampled Sampled	Depth Grab/ # of Cont	Chie BTE TPI	Sample Comments
PHOI	S	0161 22/01/01	0.5, 6	XXX	Incident #:
PHOIA	S	Siei		XXX	NAPP2 26637552
PHOIL	58	4 1320	4.	XXXXX	7
			\		(2018/080)
Total 200.7 / 6010 ircle Method(s) ar	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	8RCR	PM Texas 11 Al SPLP 6010 : 8RCRA	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg NTCLP/SPLP 6010 : BRCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471
otice: Signature of this docur	ment and relinquishment of samples to the cost of samples to the cos	les constitutes a valid purchase o vies and shall not assume any resp	rder from client company to E xonsibility for any losses or ex	oblice. Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions is service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control	and conditions nd the control
Eurofins Xenco. A minimum	n charge of \$85.00 will be applied to	to each project and a charge or a	o for each sample submittee	of Eurofins Xenco. A minimum charge of \$85,00 will be applied to each project and a charge of \$5 for each sample submitted to curonic setting, but not attain your necessary in Symmoson.	To From the Southern

10/17/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3190-1 SDG Number: 03E1558044

Login Number: 3190 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3190-1 SDG Number: 03E1558044

Login Number: 3190
List Source: Eurofins Midland
List Number: 2
List Creation: 10/12/22 11:01 AM

Creator: Rodriguez, Leticia

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

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APPENDIX D

NMOCD Notifications

From: Hamlet, Robert, EMNRD

To: melanie.collins@exxonmobil.com

Cc: Enviro, OCD, EMNRD; DelawareSpills@exxonmobil.com; Cole, Aimee; Ager, Ashley; Morrissey, Tacoma; Bratcher,

Mike, EMNRD; Hensley, Chad, EMNRD; Velez, Nelson, EMNRD

Subject: (Extension Approval) XTO - PLU 78 B Salt Water Disposal / NAPP2126639352

Date: Friday, December 3, 2021 2:31:00 PM

Attachments: <u>image003.png</u>

RE: Incident #NAPP2126639352

Melanie,

Your request for an extension to **March 8th, 2022** is approved.

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: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

Sent: Friday, December 3, 2021 1:36 PM

To: Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>

Subject: FW: [EXTERNAL] XTO Extension Request - PLU 78 B Salt Water Disposal / NAPP2126639352

From: Collins, Melanie < melanie.collins@exxonmobil.com >

Sent: Friday, December 3, 2021 8:41 AM

To: Enviro, OCD, EMNRD < OCD. Enviro@state.nm.us >; Bratcher, Mike, EMNRD

<mike.bratcher@state.nm.us>

Cc: DelawareSpills /SM <<u>DelawareSpills@exxonmobil.com</u>>; Cole, Aimee <<u>Aimee.Cole@wsp.com</u>>;

Ager, Ashley Ashley Ashle

Subject: [EXTERNAL] XTO Extension Request - PLU 78 B Salt Water Disposal / NAPP2126639352

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

All,

XTO is requesting an extension for the current 90-day deadline for submitting a remediation work

plan or closure report required in 19.15.29.12.B.(1) NMAC at the PLU 78 B Salt Water Disposal (Incident Number NAPP2126639352). The release was discovered on September 9, 2021 and initial site assessment was conducted. Remediation activities have been ongoing since October 19, 2021 and to date an estimated 540 cubic yards of impacted soil have been removed. 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 complete the remediation work, and submit a remediation work plan or closure report XTO requests a 90-day extension of this deadline until March 8, 2022.

Thank you,

Melaníe Collins

SSHE Technician

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

Cc: DelawareSpills /SM; WSP-XTO-Project-Team
Subject: XTO Site Activities for the Week of Nov 29
Date: Wednesday, November 24, 2021 3:32:27 PM

Attachments: <u>image001.png</u>

All.

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

Tuesday:

PLU 78 B / NAPP2126639352

Wednesday:

• *PLU 30 107H / nAPP2126639352

Thursday:

Ross Ranch 6 (nAPP2034638293)

Friday:

• Ross Ranch 6 (nAPP2034638293)

Thank you and have a Happy Thanksgiving,

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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 Cc:
 DelawareSpills /SM; WSP-XTO-Project-Team

 Subject:
 XTO Site Activities for the Week of October 11

Date: Friday, October 8, 2021 4:34:18 PM

Attachments: <u>image001.png</u>

All,

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

Thursday:

- PLU 28 BS 901H / nAPP2116739947
- PLU 78 B / NAPP2126639352

Friday:

- PLU 28 BS 901H / nAPP2116739947
- PLU 78 B / NAPP2126639352

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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 Cc:
 DelawareSpills /SM; WSP-XTO-Project-Team

 Subject:
 XTO Site Activities for the Week of October 18

 Date:
 Friday, October 15, 2021 4:43:41 PM

Attachments: image001.pnq

All.

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

Monday:

PLU 78 B / NAPP2126639352

Tuesday:

Ross Ranch 6 (nAPP2034638293)

Wednesday:

- Ross Ranch 6 (nAPP2034638293)
- PLU 78 B / NAPP2126639352

Thursday:

Ross Ranch 6 (nAPP2034638293)

Friday:

• Ross Ranch 6 (nAPP2034638293)

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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Cc:DelawareSpills /SM; WSP-XTO-Project-TeamSubject:XTO Site Activities for the Week of October 25Date:Friday, October 22, 2021 3:38:50 PM

Attachments: <u>image001.png</u>

All,

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

Monday:

- Ross Ranch 6 / NAPP2034638293
- PLU 78 B / NAPP2126639352

Tuesday:

- Ross Ranch 6 / NAPP2034638293
- PLU 78 B / NAPP2126639352

Wednesday:

- Ross Ranch 6 / NAPP2034638293
- PLU 78 B / NAPP2126639352

Thursday:

• Ross Ranch 6 / NAPP2034638293

Friday:

• Ross Ranch 6 / NAPP2034638293

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

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS

Action 160109

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	160109
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Deferral Request Approved. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. The OCD will not close a release, where contaminants are left in place, due to close proximity to equipment. The incident will only be closed after all contaminated soil has been remediated to meet OCD Spill Rule Standards.	12/16/2022