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Incident ID	NAPP2108540573
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the for	llowing items must be included in the closure report.
A scaled site and sampling diagram as described in 19	9.15.29.11 NMAC
Photographs of the remediated site prior to backfill omust be notified 2 days prior to liner inspection)	or photos of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropr	riate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or f may endanger public health or the environment. The accep should their operations have failed to adequately investigat human health or the environment. In addition, OCD accep compliance with any other federal, state, or local laws and/ restore, reclaim, and re-vegetate the impacted surface area accordance with 19.15.29.13 NMAC including notification	d complete to the best of my knowledge and understand that pursuant to OCD rules file certain release notifications and perform corrective actions for releases which otance of a C-141 report by the OCD does not relieve the operator of liability are and remediate contamination that pose a threat to groundwater, surface water, tance of a C-141 report does not relieve the operator of responsibility for for regulations. The responsible party acknowledges they must substantially to the conditions that existed prior to the release or their final land use in a to the OCD when reclamation and re-vegetation are complete. Title:Environmental Coordinator Date:02/28/2022 Telephone:432-236-3808
OCD Only	
Received by: Robert Hamlet	Date:10/27/2022
	ble party of liability should their operations have failed to adequately investigate and surface water, human health, or the environment nor does not relieve the responsible aws and/or regulations.
Closure Approved by: Robert Hamlet	Date: 10/27/2022
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

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	NAPP2108540573
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party OGRID		OGRID				
Contact Nam	Contact Name Contact T		elephone			
Contact emai	Contact email Incident		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)
Crude Oil		Volume Release		carculations of specific	Volume Reco	
Produced	Water	Volume Release	ed (bbls)		Volume Reco	overed (bbls)
		Is the concentrat	tion of total dissolv	ved solids (TDS)	Yes N	No
□ C - 1	4.		$\frac{\text{water} > 10,000 \text{ mg}}{1.0111}$:/1?	V. I D.	1/11)
Condensa		Volume Release			Volume Recovered (bbls)	
	Natural Gas Volume Released (Mcf)			Volume Recovered (Mcf)		
Other (describe) Volume/Weight Released (provide units)		e units)	Volume/Wei	ght Recovered (provide units)		
G 07.1						
Cause of Rele	ease					

Received by OCD: 6/20/2022 1:49:24 PM State of New Mexico
Page 2 Oil Conservation Division

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Incident ID	NAPP2108540573
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Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respo	nsible party consider this a major release?
Yes No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	nom? When and by what means (phone, email, etc)?
	Initial R	esponse
The responsible p	party must undertake the following actions immediate	ly unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
☐ The impacted area ha	as been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or	dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed an	d managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain	why:
		emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred
		blease attach all information needed for closure evaluation.
		best of my knowledge and understand that pursuant to OCD rules and
		fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have
failed to adequately investig	ate and remediate contamination that pose a three	eat to groundwater, surface water, human health or the environment. In
and/or regulations.	if a C-141 report does not refleve the operator of	responsibility for compliance with any other federal, state, or local laws
Printed Name:	\mathcal{N}	Title:
Signature	ion Bakis	Date
Signature.	·	Date.
email:		Telephone:
OCD Only		
Received by: Ramona	a Marcus	Date: <u>5/4/2021</u>

NAPP2108540573

Location:	PLU 13 DTD 903H				
Spill Date:	3/13/2021				
-	Area 1		•		
Approximate A	rea =	56.15	cu.ft.		
	VOLUME OF LEAK				
Total Frac fluid		10.00	bbls		
	Area 2				
Approximate A	rea =	3851.00	sq. ft.		
Average Satura	tion (or depth) of spill =	1.75	inches		
Average Porosi	ty Factor =	0.03			
	VOLUME OF LEAK				
Total Frac fluid	=	25.00	bbls		
	TOTAL VOLUME OF LEAK				
Total Frac fluid	=	35.00	bbls		
	TOTAL VOLUME RECOVERED				
Total Frac fluid	=	32.00	bbls		

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

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 23756

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
XTO ENERGY, INC 6401 Holiday Hill Road	5380	23756	C-141
Building #5 Midland, TX79707			

OCD Reviewer	Condition
rmarcus	None

Incident ID	NAPP2108540573
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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?	>100 (ft bgs)			
Did this release impact groundwater or surface water?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No			
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
 ∑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. ∑ Field data ∑ Data table of soil contaminant concentration data 				
 ✓ Depth to water determination ✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release 				

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.

Photographs including date and GIS information

☐ Laboratory data including chain of custody

Boring or excavation logs

Topographic/Aerial maps

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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: Environemtnal Coordinator			
Signature: Advisor Baks	Date:02/28/2022			
email: adrian.baker@exxonmobil.com	Telephone: 432-236-3808			
OCD Only				
Received by:	Date:			

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Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the fo	llowing items must be included in the closure report.
A scaled site and sampling diagram as described in 1	9.15.29.11 NMAC
Photographs of the remediated site prior to backfill omust be notified 2 days prior to liner inspection)	or photos of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate to the control of the	riate ODC District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or f may endanger public health or the environment. The acces should their operations have failed to adequately investigal human health or the environment. In addition, OCD accept compliance with any other federal, state, or local laws and restore, reclaim, and re-vegetate the impacted surface area	
OCD Only	
Received by:	Date:
	ible party of liability should their operations have failed to adequately investigate and s, surface water, human health, or the environment nor does not relieve the responsible laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:



WSP USA

3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

March 1, 2022

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

RE: Closure Request Addendum
PLU 13 DTD 903H
Incident Number NAPP2108540573
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following addendum to a Closure Request submitted on September 9, 2021. This Addendum provides an update to the delineation activities completed at the PLU 13 DTD 903H (Site), located in Unit C, Section 24, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1), in response to the denial of the Closure Request by the New Mexico Oil Conservation Division (NMOCD). In the denial, NMOCD expressed concern that the lateral delineation may not be sufficient. Based on the delineation activities described below, XTO is requesting no further action (NFA) for Incident Number NAPP2108540573.

BACKGROUND

On March 13, 2021, a blender booster malfunctioned during frac operations, resulting in the release of approximately 35 barrels (bbls) of frac fluid into the impermeable containment and onto the surface of the well pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 32 bbls of frac fluid were recovered. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on March 13, 2021. A Release Notification and Corrective Action Form C-141 (Form C-141) was submitted on March 26, 2021. The release was assigned Incident Number NAPP2108540573.

The Closure Request detailed site characterization according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Based on the site characterization, the following Closure Criteria were applied:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg



District II Page 2

 Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg

• TPH: 2,500 mg/kg

Chloride: 20,000 mg/kg

Site assessment and excavation activities were conducted at the Site to address the frac fluid release. Based on laboratory analytical results for the preliminary assessment soil samples (Figure 2), approximately 48 cubic yards of impacted soil were excavated and transported offsite for disposal. Closure was requested based on laboratory analytical results for the final excavation soil samples indicating benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria (Figure 3).

On January 27, 2022, NMOCD denied the Closure Request for Incident Number NAPP2108540573 for the following reasons:

• The closure report is denied. Delineation of edges/sidewalls of a release requires clean samples equal to or less than 600 mg/kg for chlorides and 100 mg/kg for TPH. If the edge of the spill has been visually identified, a sample will need to be pulled from the clean side to prove extent. Once that is accomplished, you can excavate to the table 1 criteria on the pad. This will define the edge of the release and ensure the release did not leave the pad. While vertical definition of contamination that may be acceptable is almost exclusively driven by depth to water, as determined, and as driven by Table I in rule, horizontal definition is different. The edges (horizontal definition) of a liquid release must be determined as well. The only value for determination of horizontal impact are derived by either "background" value as determined appropriate to Rule 29, or, for chloride, 600 mg/Kg in soils. This 600 mg/Kg value is discussed in detail in 19.15.29.13 D. (1)

ADDITIONAL DELINEATION ACTIVITIES

On January 31, 2022, WSP personnel returned to the Site to collect additional lateral delineation soil samples. Four soil samples (SS06 through SS09) were collected from a depth of 0.5 feet bgs around the release extent to confirm the lateral extent of the release. The delineation soil sample locations and the release extent are depicted on the attached Figure 3. Laboratory analytical results for soil samples SS06 through SS09 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with Closure Criteria and provided lateral delineation to below the most stringent Table 1 Closure Criteria. The soil sample analytical results are summarized on Table 1 and the complete laboratory analytical reports are included in Attachment 1.



District II Page 3

CLOSURE REQUEST

Site assessment and excavation activities were completed at the Site to address the impacted soil resulting from the March 13, 2021 release of frac fluid at the Site. Based on the laboratory analytical results below the Closure Criteria in the delineation and excavation soil samples, and lateral delineation to below the most stringent Table 1 Closure Criteria, XTO respectfully requests no further action for Incident Number NAPP2108540573.

If you have any questions or comments, please do not hesitate to contact Ms. Aimee Cole at (720) 384-7365.

Sincerely,

WSP USA Inc.

Hadlie Green

Hadie Freen

Assistant Consultant, Geologist

Aimee Cole

Lineé Cale

Sr. Consultant, Environmental Scientist

cc: Adrian Baker, XTO

Bureau of Land Management

Attachments:

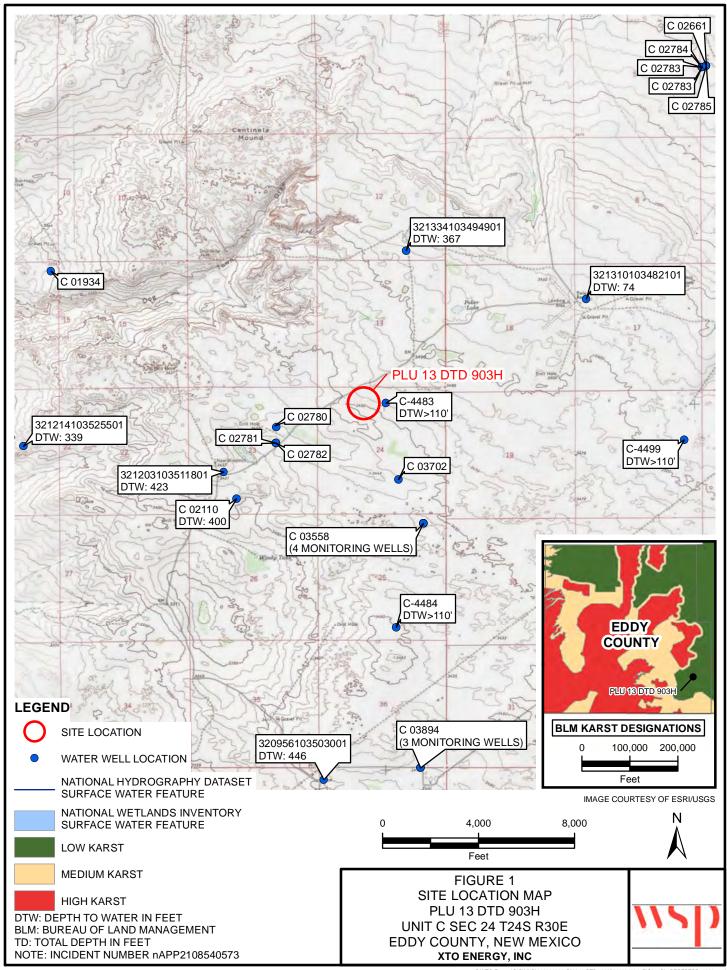
Figure 1 Site Location Map

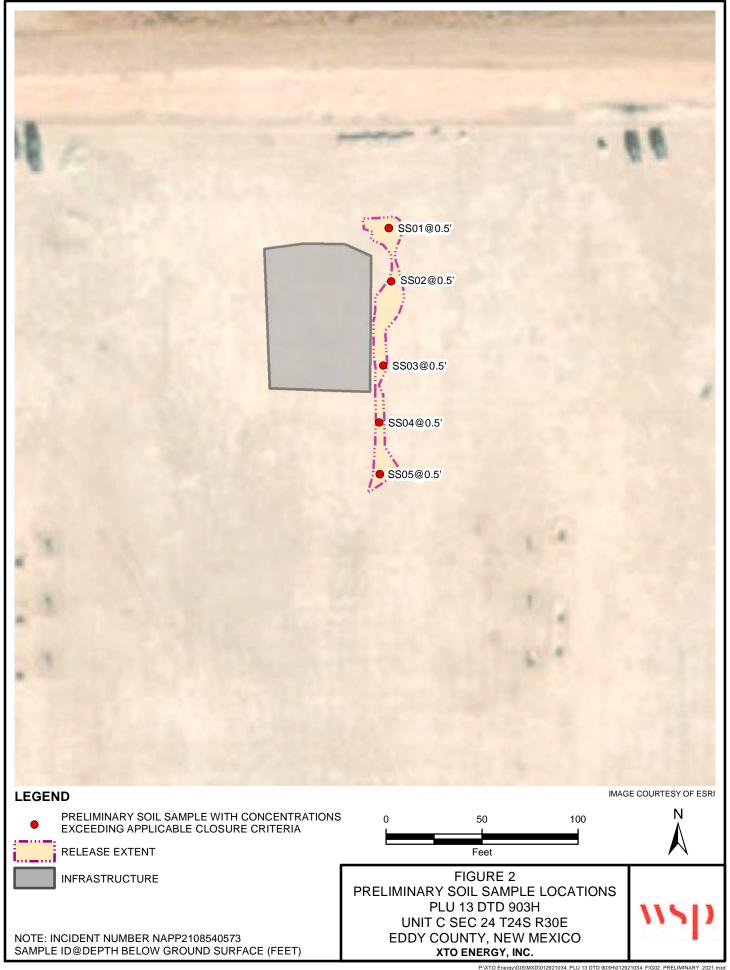
Figure 2 Preliminary Soil Sample Locations

Figure 3 Excavation and Delineation Soil Sample Locations

Table 1 Soil Analytical Results

Attachment 1 Laboratory Analytical Reports





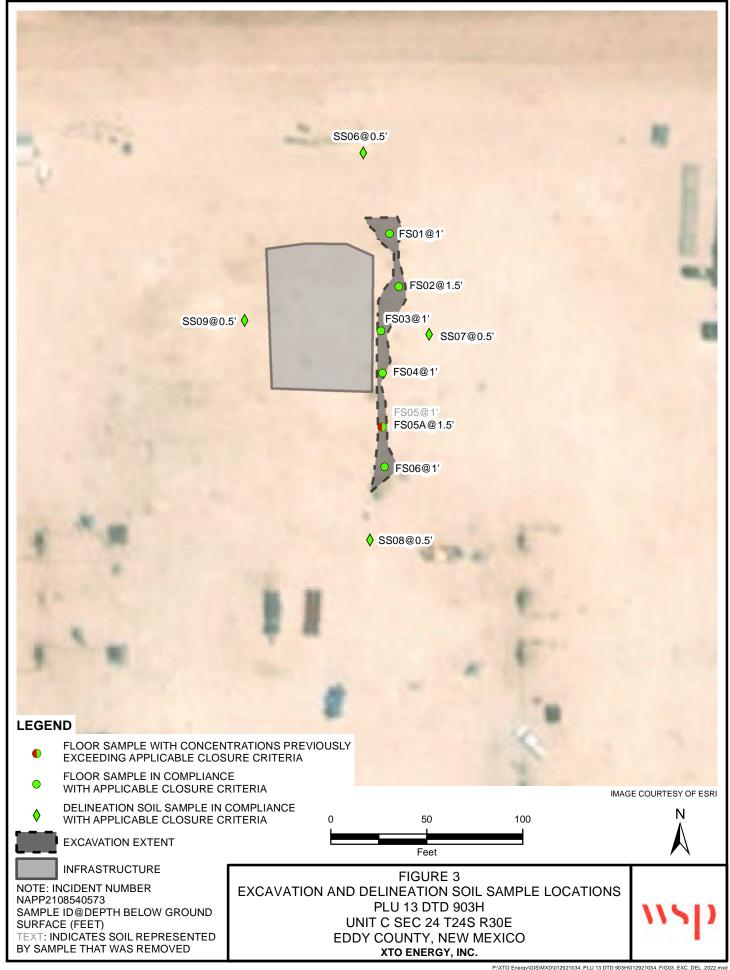


Table 1

Soil Analytical Results PLU 13 DTD 903H Incident Number NAPP2108540573 XTO Energy, Inc. Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 C	losure Criteria (l	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
Surface Samples										
SS01	04/06/2021	0.5	< 0.00249	< 0.00249	3,600	<49.9	<49.9	3,600	3,600	7,540
SS02	04/06/2021	0.5	< 0.00202	< 0.00202	1,110	<49.9	<49.9	1,110	1,110	6,870
SS03	04/06/2021	0.5	< 0.00202	< 0.00202	1,110	<49.8	<49.8	1,110	1,110	734
SS04	04/06/2021	0.5	< 0.00199	< 0.00199	1,040	<49.9	<49.9	1,040	1,040	3,400
SS05	04/06/2021	0.5	< 0.00200	< 0.00200	1,140	<49.9	<49.9	1,140	1,140	2,270
Delineation Soil Sa	mples									
SS06	01/31/2022	0.5	< 0.00200	< 0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	262
SS07	01/31/2022	0.5	< 0.00202	< 0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	300
SS08	01/31/2022	0.5	< 0.00200	< 0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	114
SS09	01/31/2022	0.5	< 0.00200	< 0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	47.7
Excavation Floor S	amples									
FS01	06/15/2021	1	< 0.00201	< 0.00402	67.7	<49.9	<49.9	67.7	67.7	5,070
FS02	06/15/2021	1.5	< 0.00201	< 0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,070
FS03	06/15/2021	1	< 0.00199	< 0.00398	91.6	<50.0	<50.0	91.6	91.6	1,330
FS04	06/15/2021	1	< 0.00200	< 0.00399	252	<50.0	105	252	357	1,060
FS05	06/15/2021	1	< 0.00200	< 0.00399	1,870	<49.9	1,120	1,870	2,990	899
FS05A	07/06/2021	1.5	< 0.00200	< 0.00399	66.9	<49.9	<49.9	66.9	66.9	108
FS06	06/15/2021	1	< 0.00198	< 0.00396	644	<50.0	344	644	988	724

Notes

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

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

NE - Not Established

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

Text impacted soil was excavated



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1894-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

Revision: 1

For:

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

Attn: Kalei Jennings

KRAMER

Authorized for release by: 2/25/2022 12:15:41 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 10/27/2022 9:25:01 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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14

Client: WSP USA Inc.

Laboratory Job ID: 890-1894-1

Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

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QC Sample Results	7
QC Association Summary	11
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Certification Summary	14
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Sample Summary	16
Chain of Custody	17
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13	

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1894-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier Description	
-----------------------	--

LCS and/or LCSD is outside acceptance limits, high biased.

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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

Glossary

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

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

%R Percent Recovery Contains Free Liquid **CFL** 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) Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Job ID: 890-1894-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Job ID: 890-1894-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1894-1

REVISION

The report being provided is a revision of the original report sent on 2/7/2022. The report (revision 1) is being revised due to Per client email, correcting sample depths from 0.6' to 0.5'.

Report revision history

Receipt

The sample was received on 1/31/2022 4:53 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SS06 (890-1894-1). The container labels list <SAMPLE ID>, while the COC lists <SAMPLEID>. The client was contacted, and the lab was instructed to <EXPLANATION_REQUIRED>.

Login- 890-1894 Times are different

Jar- 9:40 COC- 15:00

Given the sample name, date, depth are the same its safe to say these are the same samples.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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 880-18363 and analytical batch 880-18607 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.

Matrix: Solid

Lab Sample ID: 890-1894-1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1894-1

Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Client Sample ID: SS06 Date Collected: 01/31/22 15:00 Date Received: 01/31/22 16:53

Sample Depth: 0.5

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 00:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 00:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 00:58	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/03/22 09:00	02/04/22 00:58	1
o-Xylene	< 0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 00:58	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/03/22 09:00	02/04/22 00:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130			02/03/22 09:00	02/04/22 00:58	1
1,4-Difluorobenzene (Surr)	100		70 - 130			02/03/22 09:00	02/04/22 00:58	1
Method: Total BTEX - Total B	TEX Calcula	tion						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			02/04/22 14:29	1
Method: 8015 NM - Diesel Ra	nge Organic	s (DRO) (0	C)					
Method: 8015 NM - Diesel Ra Analyte	_	s (DRO) (O Qualifier	SC) RL	Unit	D	Prepared	Analyzed	Dil Fac
	_	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 02/03/22 11:27	Dil Fac
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: 8015B NM - Diesel R	Result <49.9	Qualifier U ics (DRO) Qualifier	RL 49.9 (GC)	mg/Kg		· ·	02/03/22 11:27	1
Analyte Total TPH Method: 8015B NM - Diesel R Analyte	Result <49.9 Range Organ Result	Qualifier U ics (DRO) Qualifier	RL 49.9 (GC)	mg/Kg		Prepared	02/03/22 11:27 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 Range Organ Result	Qualifier U ics (DRO) Qualifier U	RL 49.9 (GC)	mg/Kg		Prepared 02/02/22 14:28	02/03/22 11:27 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 Range Organ Result <49.9	Qualifier U ics (DRO) Qualifier U U *+	(GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:05	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:05 02/05/22 15:05	1 Dil Fac 1 1
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:05 02/05/22 15:05	1 Dil Fac 1 1
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 49.9 (GC) RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:05 02/05/22 15:05 02/05/22 15:05 Analyzed	Dil Fac 1 1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9 Result <49.9 <49.9 <49.9 <49.9 <49.9	Qualifier U ics (DRO) Qualifier U U *+ U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	Analyzed 02/05/22 15:05 02/05/22 15:05 02/05/22 15:05 Analyzed 02/05/22 15:05	1 Dil Fac 1 Dil Fac 1

4.95

mg/Kg

02/05/22 01:21

262

OTPH = o-Terphenyl

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1894-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Per	ent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-10875-A-48-D MS	Matrix Spike	118	99	
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96	
890-1894-1	SS06	121	100	
LCS 880-18361/1-A	Lab Control Sample	115	104	
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102	
MB 880-18361/5-A	Method Blank	109	105	
Surrogate Legend				
BFB = 4-Bromofluorobe	enzene (Surr)			
DFBZ = 1,4-Difluorober	nzene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

			Per	cent Surrogate	e Recovery
		1001	OTPH1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-10891-A-21-D MS	Matrix Spike	72	75		
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86		
890-1894-1	SS06	98	103		
Surrogate Legend					
1CO = 1-Chlorooctane					

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

Matrix: Solid Prep Type: Total/NA

			Percen	t Surrogate Recovery (Acceptance Limits)
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-18405/2-A	Lab Control Sample	104	109	
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103	
MB 880-18405/1-A	Method Blank	96	97	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Page 6 of 19

Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H

Job ID: 890-1894-1

SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18361

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109	70 - 130	02/03/22 09:00	02/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105	70 - 130	02/03/22 09:00	02/03/22 22:14	1

Lab Sample ID: LCS 880-18361/1-A

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.08168 mg/Kg 82 Toluene 0.100 0.08307 mg/Kg 70 - 130 83 Ethylbenzene 0.100 0.08488 mg/Kg 85 70 - 130 0.200 87 m-Xylene & p-Xylene 0.1732 mg/Kg 70 - 130 o-Xylene 0.100 0.08940 mg/Kg 70 - 130

LCS LCS

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

Lab Sample ID: LCSD 880-18361/2-A

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07641		mg/Kg		76	70 - 130	7	35
Toluene	0.100	0.08096		mg/Kg		81	70 - 130	3	35
Ethylbenzene	0.100	0.08209		mg/Kg		82	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1694		mg/Kg		85	70 - 130	2	35
o-Xylene	0.100	0.08747		mg/Kg		87	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1.4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Ratch: 19462

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

Pron Ratch: 18361

Analysis batch: 10402									Prep i	วิสเติก: 103เ
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
Toluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H

Job ID: 890-1894-1

SDG: TE012921034 TASK 02

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

Lab Sample ID: 880-10875-A-48-D MS

Lab Sample ID: 880-10875-A-48-E MSD

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18361

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U F1	0.100	0.04603	F1	mg/Kg		46	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.09724	F1	mg/Kg		49	70 - 130	
o-Xylene	<0.00200	U F1	0.100	0.05004	F1	mg/Kg		50	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 18462

Prep Type: Total/NA

Prep Batch: 18361

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit 0.100 Benzene <0.00200 U F1 0.03234 F1 mg/Kg 32 70 - 130 35 27 Toluene <0.00200 UF1 0.100 0.03586 F1 36 70 - 130 20 35 mg/Kg Ethylbenzene <0.00200 UF1 0.100 0.03495 F1 mg/Kg 35 70 - 130 27 35 m-Xylene & p-Xylene <0.00401 UF1 0.201 0.07455 F1 mg/Kg 37 70 - 130 26 35 <0.00200 UF1 0.100 0.04331 F1 43 o-Xylene mg/Kg 70 - 130 14

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

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

Prep Batch: 18405

	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		02/02/22 14:28	02/05/22 11:54	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1	

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	96	·	70 - 130	02/02/22 14:28	02/05/22 11:54	1
l	o-Terphenyl	97		70 - 130	02/02/22 14:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 18405

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1218		mg/Kg		122	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1331	*+	mg/Kg		133	70 - 130	
C10-C28)								

Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H

Job ID: 890-1894-1 SDG: TE012921034 TASK 02

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

Lab Sample ID: LCS 880-18405/2-A

Lab Sample ID: LCSD 880-18405/3-A

Lab Sample ID: 880-10891-A-21-D MS

Matrix: Solid

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

LCS LCS

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 18620

Prep Batch: 18405 LCSD LCSD RPD %Rec. RPD Limit

Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1098 mg/Kg 110 70 - 130 10 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1165 mg/Kg 117 70 - 130 13 20

Spike

C10-C28)

Matrix: Solid

C10-C28)

Analysis Batch: 18620

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18405

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec Gasoline Range Organics <50.0 U 1000 996.6 mg/Kg 97 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 <50.0 U*+ F1 1008 mg/Kg 101 70 - 130

MS MS

F2

Surrogate Qualifier Limits %Recovery 1-Chlorooctane 70 - 130 72 o-Terphenyl 75 70 - 130

Lab Sample ID: 880-10891-A-21-E MSD

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Matrix: Solid Prep Type: Total/NA **Analysis Batch: 18620** Prep Batch: 18405 Sample Sample Spike MSD MSD %Rec. RPD

		- up.	- p						,		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	998	1148		mg/Kg		112	70 - 130	14	20
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U *+ F1	998	1328	F1 F2	mg/Kg		133	70 - 130	27	20
C10-C28)		F2									

MSD MSD

Surrogate	%Recovery Qualific	er Limits
1-Chlorooctane	96	70 - 130
o-Terphenyl	86	70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1894-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A Client Sample ID: Method Blank **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 18607

Analyte

Chloride

MB MB Result Qualifier RL Unit Analyzed Dil Fac D Prepared 5.00 02/04/22 22:17 <5.00 U mg/Kg

Lab Sample ID: LCS 880-18363/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 18607 Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 246.6 90 - 110 mg/Kg 99

Lab Sample ID: LCSD 880-18363/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Soluble

Analysis Batch: 18607 Spike LCSD LCSD %Rec. RPD

Analyte Added Result Qualifier Limits **RPD** Limit Unit %Rec Chloride 250 269.2 108 90 - 110 20 mg/Kg

Lab Sample ID: 890-1896-A-1-B MS **Client Sample ID: Matrix Spike Prep Type: Soluble**

Matrix: Solid Analysis Batch: 18607

Spike MS MS %Rec. Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits

Chloride 114 F1 248 399.7 F1 90 - 110 mg/Kg 116

Lab Sample ID: 890-1896-A-1-B MSD **Client Sample ID: Matrix Spike Duplicate Matrix: Solid Prep Type: Soluble**

Analysis Batch: 18607

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Unit Limits RPD Limit Result Qualifier %Rec Chloride 114 F1 248 343.9 93 20 mg/Kg 90 - 110 15

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1894-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID 890-1894-1	Client Sample ID SS06	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Total/NA	Solid	8015 NM	

Analysis Batch: 18620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Total/NA	Solid	8015B NM	18405
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

Released to Imaging: 10/27/2022 9:25:01 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Soluble	Solid	DI Leach	
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1894-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1896-A-1-B MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1894-1	SS06	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
890-1896-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	18363
890-1896-A-1-B MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18363

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1894-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Client Sample ID: SS06 Lab Sample ID: 890-1894-1 Date Collected: 01/31/22 15:00

Matrix: Solid

Date Received: 01/31/22 16:53

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 00:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 15:05	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	CH	XEN MID
Soluble	Analysis	300.0		1	18607	02/05/22 01:21	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1894-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Laboratory: Eurofins 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 analyte	are included in this rene	ort but the laboratory is r	and contified by the devention outbority	This list may include analytes for u
the agency does not	offer certification.	•	not certified by the governing authority.	This list may include analytes for w
	•	Matrix	Analyte	This list may include analytes for w
the agency does not	offer certification.	•		This list may include analytes for w

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Method Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1894-1

SDG: TE012921034 TASK 02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
3015B 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
015NM Prep	Microextraction	SW846	XEN MID
Ol Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1894-1

SDG: TE012921034 TASK 02

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Depth

 890-1894-1
 SS06
 Solid
 01/31/22 15:00
 01/31/22 16:53
 0.5

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Chain of Custo

onio TY (210) 509-3334	Work Order	
	rder No	

		Date/Time		SiO2 Na Sr Ti Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg					Discrete	Sample Comments	lab, if received by 4:30pm	TAT starts the day recevied by the				API:30-015-45845	CC: 1665081001		Work Order Notes	Other:	The Ive) ;	s ☐RC ☐perfund ☐	nents
		Received by: (Signature)	l assigns standard terms and conditions due to circumstances beyond the control orced unless previously negotiated.	Ag SiO2								TA	- - -	of Custody				_	-	Deliverables: EDD ADaPT	evel) ¥	Program: UST/PST ☐RP ☐rownfields	Work Order Comments
		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 controp 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.	B Cd Ca Cr Co Cu Fe Pb Mg Mn Cd Cr Co Cu Pb Mn Mo Ni Se Ag									890-100	1804 Chain of Custody					ANALYSIS REQUEST				Pro	
6 4	31.22 16532	Date/Time	nt company to Xenco, its affil ses or expenses incurred by itted to Xenco, but not analyz	Al Sb As Ba Be B RA Sb As Ba Be Co				× ×	< TI	PH (EF	PA 8	015) 0=80	021)							Email: amy.ruth@exxonmobil.com,aimee.cole@wsp.com	Carlsbad, NM 88220	3104 E Green Street	XTO Energy	Amy Ruth
		re)	chase order from clier consibility for any loss or each sample submi	ICRA 13PPM Texas 11 A TCLP / SPLP 6010: 8RCRA				C.o		Depth		0.2			<u>N</u>	Date:		ine 🗹	Turn Around	amy.ruth@exxo	City, State ZIP:	Address:	Company Name:	Bill to: (if different)
/	or carlo	Received by: (Signature)	mples constitutes a valid pur and shall not assume any resi h project and a charge of \$5 f	8RCRA 13PPM yzed TCLP/SPLP 6				01/31/22 15:00	u		Total Containers:	Correction Factor:	RM-00-1	Therr	(Yes) No Wet Ice: (Yes	Due Date:	Rush:	ask 02 Routine	Tu	Email:				
	C	(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 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 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 ent	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed				v	D I	Matrix	Yes No	Yes No (N/A)	Kes No	2.4/2.2	Temp Blank:	Mercy Rotich.		TE012921034 Task 02	PLU 13 DTD 903H	720-384-7365	Midland, Texas 79705	3300 North A Street	WSP USA	Kalei Jennings
	Way.	Relinquished by: (Signature)	otice: Signature of this do f service. Xenco will be lit f Xenco. A minimum char	Total 200.7 / 6010 Circle Method(s)				SSU6		Sample Identification	Sample Custody Seals:	Cooler Custody Seals:	Received Intact:	Temperature (°C):	SAMPLE RECEIPT	Sampler's Name: N	P.O. Number:	Project Number:	Project Name:	Phone: 7	City, State ZIP: N	Address: 3		Project Manager: K

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1894-1

SDG Number: TE012921034 TASK 02

Login Number: 1894 **List Source: Eurofins 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 Carlsbad

Released to Imaging: 10/27/2022 9:25:01 AM

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1894-1 SDG Number: TE012921034 TASK 02

Login Number: 1894 **List Source: Eurofins Midland** List Creation: 02/02/22 01:36 PM List Number: 2

Creator: Kramer, Jessica

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1895-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

For:

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

Attn: Kalei Jennings

SKRAMER

Authorized for release by: 2/7/2022 3:42:48 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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

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

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Client: WSP USA Inc.

Laboratory Job ID: 890-1895-1

Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

Table of Contents

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Qualifiers

\sim	_		_	•
G	U	V	U	А

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.

Qualifier Description

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.
HPLC/IC	

Qualifier

U

RER

RPD

TEF

TEQ

TNTC

RL

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

Eurofins Carlsbad

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: WSP USA Inc.

Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Job ID: 890-1895-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1895-1

Receipt

The sample was received on 1/31/2022 4:53 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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.

Matrix: Solid

Lab Sample ID: 890-1895-1

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Client Sample ID: SS09

Date Collected: 01/31/22 15:00 Date Received: 01/31/22 16:53

Sample Depth: 0.6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130			02/03/22 09:00	02/04/22 01:19	1
1,4-Difluorobenzene (Surr)	90		70 - 130			02/03/22 09:00	02/04/22 01:19	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			02/04/22 14:29	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			40.0	m a /l/a			00/02/22 11:27	
Total TPH	<49.9	U	49.9	mg/Kg			02/03/22 11:27	1
• ***			49.9	mg/Kg			02/03/22 11:27	1
- -	ge Organics (D		49.9 RL	mg/Kg Unit		Prepared	02/03/22 11:27 Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier			<u>D</u>	Prepared 02/02/22 14:28		·
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	RL	Unit	<u>D</u>	<u>·</u>	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	<u>D</u>	02/02/22 14:28	Analyzed 02/05/22 15:26	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)	ge Organics (DI Result <49.9	RO) (GC) Qualifier U *+	RL 49.9	unit mg/Kg mg/Kg	<u>D</u>	02/02/22 14:28	Analyzed 02/05/22 15:26 02/05/22 15:26	Dil Fac 1 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)	ge Organics (D) Result <49.9 <49.9	RO) (GC) Qualifier U *+	RL 49.9 49.9 49.9	unit mg/Kg mg/Kg	<u>D</u>	02/02/22 14:28 02/02/22 14:28 02/02/22 14:28	Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26	Dil Fac 1 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) 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	<u>D</u>	02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared	Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26 Analyzed	Dil Fac 1 1 1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D) Result <49.9 <49.9 <49.9 **Recovery** 94 96	Qualifier U *+ U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	unit mg/Kg mg/Kg	<u>D</u>	02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26 Analyzed 02/05/22 15:26	Dil Fac 1
Method: 8015B NM - Diesel Rang 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 94 96 omatography -	Qualifier U *+ U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	unit mg/Kg mg/Kg	<u>D</u>	02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26 Analyzed 02/05/22 15:26	Dil Fac 1 1 1 Dil Fac 1

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-10875-A-48-D MS	Matrix Spike	118	99	
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96	
890-1895-1	SS09	134 S1+	90	
LCS 880-18361/1-A	Lab Control Sample	115	104	
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102	
MB 880-18361/5-A	Method Blank	109	105	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			
DFBZ = 1,4-Difluorobenz	ene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Recovery (Acceptance Limi
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-10891-A-21-D MS	Matrix Spike	72	75	
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86	
890-1895-1	SS09	94	96	
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 Lin				
		1CO2	OTPH2				
ab Sample ID	Client Sample ID	(70-130)	(70-130)				
_CS 880-18405/2-A	Lab Control Sample	104	109				
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103				
MB 880-18405/1-A	Method Blank	96	97				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1895-1 SDG: TE012921034 TASK 02 Project/Site: PLU 13 DTD 903H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18361

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prej	pared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	02/03/2	22 09:00	02/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105		70 - 130	02/03/2	22 09:00	02/03/22 22:14	1

Lab Sample ID: LCS 880-18361/1-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18361

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08168		mg/Kg		82	70 - 130	
Toluene	0.100	0.08307		mg/Kg		83	70 - 130	
Ethylbenzene	0.100	0.08488		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	0.200	0.1732		mg/Kg		87	70 - 130	
o-Xylene	0.100	0.08940		mg/Kg		89	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-18361/2-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 18361

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.07641 mg/Kg 76 70 - 130 35 Toluene 0.100 0.08096 mg/Kg 81 70 - 130 3 35 Ethylbenzene 0.100 0.08209 mg/Kg 82 70 - 130 3 35 0.200 0.1694 m-Xylene & p-Xylene mg/Kg 85 70 - 130 35 0.100 0.08747 70 - 130 o-Xylene mg/Kg 35

LCSD LCSD

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

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
Toluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

Prep Batch: 18361

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1895-1 SDG: TE012921034 TASK 02 Project/Site: PLU 13 DTD 903H

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

Lab Sample ID: 880-10875-A-48-D MS Client Sample ID: Matrix Spike **Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 18462

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U F1	0.100	0.04603	F1	mg/Kg		46	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.09724	F1	mg/Kg		49	70 - 130	
o-Xylene	<0.00200	U F1	0.100	0.05004	F1	mg/Kg		50	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	118	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 880-10875-A-48-E MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

								Prep	Batch:	18361
Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00200	U F1	0.100	0.03234	F1	mg/Kg		32	70 - 130	27	35
<0.00200	U F1	0.100	0.03586	F1	mg/Kg		36	70 - 130	20	35
<0.00200	U F1	0.100	0.03495	F1	mg/Kg		35	70 - 130	27	35
<0.00401	U F1	0.201	0.07455	F1	mg/Kg		37	70 - 130	26	35
<0.00200	U F1	0.100	0.04331	F1	mg/Kg		43	70 - 130	14	35
	Result <0.00200 <0.00200 <0.00200 <0.00200	Sample Sample Result Qualifier <0.00200 U F1 <0.00200 U F1 <0.00200 U F1 <0.00401 U F1 <0.00200 U F1	Result Qualifier Added <0.00200	Result Qualifier Added Result <0.00200	Result Qualifier Added Result Qualifier <0.00200	Result Qualifier Added Result Qualifier Unit <0.00200	Result Qualifier Added Result Qualifier Unit D <0.00200	Result Qualifier Added Result Qualifier Unit D %Rec <0.00200	Sample Result Sample Qualifier Spike Added Result MSD Qualifier Unit Unit Unit Unit Unit Unit Unit Unit	Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD <0.00200

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

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	IND	MID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	02/02/22 14:28	02/05/22 11:54	1
o-Terphenyl	97		70 - 130	02/02/22 14:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

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

Prep Batch: 18405

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1218		mg/Kg		122	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1331	*+	mg/Kg		133	70 - 130	
C10-C28)								

Job ID: 890-1895-1

SDG: TE012921034 TASK 02

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

LCS LCS

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

%Recovery Qualifier Surrogate

Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18405

Lab Sample ID: LCSD 880-18405/3-A **Matrix: Solid**

Lab Sample ID: 880-10891-A-21-D MS

Analysis Batch: 18620

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1098		mg/Kg		110	70 - 130	10	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1165		mg/Kg		117	70 - 130	13	20	
C10-C28)										

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	97	70 - 130
o-Terphenyl	103	70 - 130

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 18405

Matrix: Solid

Analysis Batch: 18620

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	996.6		mg/Kg		97	70 - 130	
Diesel Range Organics (Over	<50.0	U *+ F1	1000	1008		mg/Kg		101	70 - 130	
C10-C28)		F2								

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	72		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: 880-10891-A-21-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 18620

Prep Type: Total/NA

Prep Batch: 18405

	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	<50.0	U	998	1148		mg/Kg		112	70 - 130	14	20	
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1 F2	998	1328	F1 F2	mg/Kg		133	70 - 130	27	20	

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	96	70 - 130
o-Terphenyl	86	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

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A

Matrix: Solid

Analysis Batch: 18607

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

Lab Sample ID: LCS 880-18363/2-A

Matrix: Solid

Analysis Batch: 18607

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 246.6 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-18363/3-A

Matrix: Solid

Analysis Batch: 18607

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 269.2 108 mg/Kg 90 - 110

Lab Sample ID: 880-10869-A-5-B MS

Matrix: Solid

Analysis Batch: 18607

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 9.87 249 276.0 107 90 - 110 mg/Kg

Lab Sample ID: 880-10869-A-5-C MSD

Matrix: Solid

Analysis Batch: 18607

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 249 9.87 244.3 mg/Kg 94 90 - 110 12 20

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	5035	
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep	Batch
890-1895-1	SS09	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	8015 NM	

Analysis Batch: 18620

Lab Sample ID 890-1895-1	Client Sample ID SS09	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Soluble	Solid	DI Leach	-
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Released to Imaging: 10/27/2022 9:25:01 AM

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QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10869-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10869-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
880-10869-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	18363
880-10869-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18363

Eurofins Carlsbad

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Date Received: 01/31/22 16:53

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Client Sample ID: SS09 Lab Sample ID: 890-1895-1 Date Collected: 01/31/22 15:00

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 01:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 15:26	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	CH	XEN MID
Soluble	Analysis	300.0		1	18607	02/04/22 23:55	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Laboratory: Eurofins 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 certifi	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.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1895-1

SDG: TE012921034 TASK 02

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1895-1

SDG: TE012921034 TASK 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1895-1	SS09	Solid	01/31/22 15:00	01/31/22 16:53	0.6

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Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 S	C
allas,TX (214) 902-0300	hain of Custoc
San Antonio,TX (210) 509-3334	Istody

5	d	1 Notage	Relinquished by: (Signature)	of service. Xenco will be liable only of Xenco. A minimum charge of \$7	Circle Method(s) and					9809	Sample Identification	Sample Custody Seals:	Seals:	Received Intact:	Temperature (°C):	SAMPLE RECEIPT	Sampler's Name: Mercy	P.O. Number:	Project Number:	Project Name: PLU 13	Phone: 720-38	City, State ZIP: Midlan	Address: 3300 N	Company Name: WSP USA	Project Manager: Kalei J
) jeve	ature) Receiv	5.00 will be applied to each project	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed					S 01/31/22	on Matrix Date Sampled	No RUE	6 N	Yes No	2.4/2.2	Temp Blank: (Yes) N	Mercy Rotich.		TE012921034 Task 02	PLU 13 DTD 903H	720-384-7365	Midland, Texas 79705	3300 North A Street	JSA	Kalei Jennings
	-	S	Received by: (Signature)	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 of the client of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses of the client	TCLP / SPLP 6010: 8RCRA	0.0				/22 15:00 0.6'	Time Depth	Total Containers:	Correction Factor: - 2 · 2	HOW WAT	Thermometer ID	No Wet Ice: Yes No	Due Date:	Rush:	Routine	Turn Around	Email: amy.ruth@	City, State ZIP:	Address:	Company Name:	Bill to: (if different)
		1.31.22 1453	Date/Time	ny losses or expenses incurred by submitted to Xenco, but not analy	TO AS BA BE BACKET TO AS BACKET BE A SECULATED AS BACKET BE A SECULATED AS BACKET BE A SECULATED AS A SECURATED AS A SECULATED					-1 × ×	Number TPH (E	PA 8	015) 0=80	021)							Email: amy.ruth@exxonmobil.com,aimee.cole@wsp.com	IP: Carlsbad, NM 88220	3104 E Green Street	ame: XTO Energy	ent) Amy Ruth
6	4	2	Relinquished by: (Signature)	y the client if such losses are due to yzed. These terms will be enforced u										890-1895						ANALYSIS REQUEST	ole@wsp.com	0	et		
				are due to circumstances beyond the control enforced unless previously negotiated.	TI U	2							_	890-1895 Chain of Custody						JEST	Deliverables: EDD	Reporting:Level II evel III	State of Project:		NA NA
			Received by: (Signature)		1631 / 245.1						San	lab, i	TAT start	I			API:3	cc: 1		Wo	ADaPT []	Trust 1		□RP □rownfields □RC	Work Order Comments
Revised Date 051418 Rev. 2018 1			Date/Time		1631 / 245.1 / 7470 / 7471 : Hg	: 				Discrete	Sample Comments	lab, if received by 4:30pm	TAT starts the day recevied by the				API:30-015-45845	CC: 1665081001		Work Order Notes	Other:	LRP L[vel IV		3C {□perfund □	S

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1895-1

SDG Number: TE012921034 TASK 02

Login Number: 1895 List Source: Eurofins 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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1895-1

SDG Number: TE012921034 TASK 02

List Source: Eurofins Midland

List Creation: 02/02/22 01:36 PM

Creator: Kramer, Jessica

Login Number: 1895

List Number: 2

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

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<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1896-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

For:

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

Attn: Kalei Jennings

JURAMER

Authorized for release by: 2/7/2022 3:43:06 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

Review your project results through

TOTAL TOO

Have a Question?



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Released to Imaging: 10/27/2022 9:25:01 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 13 DTD 903H

Laboratory
SDG: TE0

Laboratory Job ID: 890-1896-1 SDG: TE012921034 TASK 02

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Qualifiers

GC VOA

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description** *+ LCS and/or LCSD is outside acceptance limits, high biased. F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits

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

DLC

EDL

LOD

LOQ

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

MCL EPA recommended "Maximum Contaminant Level" MDA MDC

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

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

Decision Level 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**

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: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Job ID: 890-1896-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1896-1

Receipt

The sample was received on 1/31/2022 4:53 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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 880-18363 and analytical batch 880-18607 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Client Sample ID: SS08 Lab Sample ID: 890-1896-1

Date Collected: 01/31/22 10:36

Date Received: 01/31/22 16:53

Matrix: Solid

Sample Depth: 0.6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/04/22 01:39	
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/04/22 01:39	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	105		70 - 130			02/03/22 09:00	02/04/22 01:39	
1,4-Difluorobenzene (Surr)	93		70 - 130			02/03/22 09:00	02/04/22 01:39	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00400	U	0.00400	mg/Kg			02/04/22 14:29	
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0	mg/Kg			02/03/22 11:27	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	
Gasoline Range Organics								Dil Fa
5 5	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 15:47	Dil Fa
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0 <50.0		50.0 50.0	mg/Kg mg/Kg		02/02/22 14:28	02/05/22 15:47 02/05/22 15:47	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)		U *+						,
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	<50.0	U *+	50.0	mg/Kg		02/02/22 14:28	02/05/22 15:47	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 <50.0	U*+	50.0 50.0	mg/Kg		02/02/22 14:28	02/05/22 15:47 02/05/22 15:47	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 <50.0 %Recovery	U*+	50.0 50.0 <i>Limits</i>	mg/Kg		02/02/22 14:28 02/02/22 14:28 Prepared	02/05/22 15:47 02/05/22 15:47 Analyzed	Dil Fa
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 <50.0 	U *+ U Qualifier	50.0 50.0 <u>Limits</u> 70 - 130	mg/Kg		02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	02/05/22 15:47 02/05/22 15:47 Analyzed 02/05/22 15:47	Dil Fa
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.0 <50.0 **Recovery 94 97 omatography -	U *+ U Qualifier	50.0 50.0 <u>Limits</u> 70 - 130	mg/Kg	D	02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	02/05/22 15:47 02/05/22 15:47 Analyzed 02/05/22 15:47	Dil Fa

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-10875-A-48-D MS	Matrix Spike	118	99	
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96	
890-1896-1	SS08	105	93	
LCS 880-18361/1-A	Lab Control Sample	115	104	
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102	
MB 880-18361/5-A	Method Blank	109	105	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			
DFBZ = 1,4-Difluorobenz	ene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Accep	tance Lim
		1001	OTPH1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-10891-A-21-D MS	Matrix Spike	72	75		
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86		
890-1896-1	SS08	94	97		
Surrogate Legend					
1CO = 1-Chlorooctane					

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

OTPH = o-Terphenyl

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-18405/2-A	Lab Control Sample	104	109	
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103	
MB 880-18405/1-A	Method Blank	96	97	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1896-1 SDG: TE012921034 TASK 02 Project/Site: PLU 13 DTD 903H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18361

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	d Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	02/03/22 0	9:00 02/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105		70 - 130	02/03/22 09	9:00 02/03/22 22:14	1

Lab Sample ID: LCS 880-18361/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 18462

Prep Type: Total/NA Prep Batch: 18361

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08168 mg/Kg 82 70 - 130 Toluene 0.100 0.08307 mg/Kg 83 70 - 130 0.100 85 Ethylbenzene 0.08488 mg/Kg 70 - 130 0.200 0.1732 87 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.08940 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-18361/2-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 18361

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Limit 76 Benzene 0.100 0.07641 mg/Kg 70 - 130 35 Toluene 0.100 0.08096 mg/Kg 81 70 - 130 3 35 Ethylbenzene 0.100 0.08209 mg/Kg 82 70 - 130 35 3 0.200 0.1694 m-Xylene & p-Xylene mg/Kg 85 70 - 130 2 35 0.100 0.08747 o-Xylene mg/Kg 70 - 130 35

LCSD LCSD

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

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
Toluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

Prep Batch: 18361

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

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

Lab Sample ID: 880-10875-A-48-D MS Client Sample ID: Matrix Spike **Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 18462

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U F1	0.100	0.04603	F1	mg/Kg		46	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.09724	F1	mg/Kg		49	70 - 130	
o-Xylene	<0.00200	U F1	0.100	0.05004	F1	mg/Kg		50	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-10875-A-48-E MSD **Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 18462	nalysis Batch: 18462								Prep	Batch:	18361
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.100	0.03234	F1	mg/Kg		32	70 - 130	27	35
Toluene	<0.00200	U F1	0.100	0.03586	F1	mg/Kg		36	70 - 130	20	35
Ethylbenzene	<0.00200	U F1	0.100	0.03495	F1	mg/Kg		35	70 - 130	27	35
m-Xylene & p-Xylene	<0.00401	U F1	0.201	0.07455	F1	mg/Kg		37	70 - 130	26	35
o-Xylene	<0.00200	U F1	0.100	0.04331	F1	mg/Kg		43	70 - 130	14	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18405/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 18620

	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		02/02/22 14:28	02/05/22 11:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	02/02/22 1	4:28	02/05/22 11:54	1
o-Terphenyl	97		70 - 130	02/02/22 1	4:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid							Prep Ty	ype: Total/NA
Analysis Batch: 18620							Prep	Batch: 18405
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1218		mg/Kg		122	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1331	*+	mg/Kg		133	70 - 130	
C10-C28)								

Eurofins Carlsbad

Client Sample ID: Lab Control Sample

Prep Batch: 18405

C10-C28)

Job ID: 890-1896-1

Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

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

Lab Sample ID: LCS 880-18405/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 18620 Prep Batch: 18405

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Lab Sample ID: LCSD 880-18405/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 18620 Prep Batch: 18405

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1098 110 70 - 13010 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1165 mg/Kg 117 70 - 13013 20

LCSD LCSD Surrogate %Recovery Qualifier Limits

97 70 - 130 1-Chlorooctane 103 70 - 130 o-Terphenyl

Lab Sample ID: 880-10891-A-21-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 18620 Prep Batch: 18405 Sample Sample Spike MS MS

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 1000 996.6 mg/Kg 97 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*+F1 1000 1008 mg/Kg 101 70 - 130 C10-C28) F2

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 72

70 - 130 o-Terphenyl 75 Lab Sample ID: 880-10891-A-21-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA Analysis Batch: 18620 Prep Batch: 18405

Sample Sample MSD MSD RPD Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <50.0 U 998 Gasoline Range Organics 1148 mg/Kg 112 70 - 130 14 20

(GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*+ F1 998 1328 F1 F2 mg/Kg 133 70 - 130 27 20 C10-C28) F2

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 96 70 - 130 86 70 - 130 o-Terphenyl

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: SS08

Client Sample ID: SS08

Prep Type: Soluble

Prep Type: Soluble

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A

Matrix: Solid

Analysis Batch: 18607

MB MB

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

Lab Sample ID: LCS 880-18363/2-A

Matrix: Solid

Analysis Batch: 18607

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 246.6 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-18363/3-A

Matrix: Solid

Analysis Batch: 18607

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 269.2 mg/Kg 108 90 - 110

Lab Sample ID: 890-1896-1 MS

Matrix: Solid

Analysis Batch: 18607

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 399.7 F1 Chloride 114 F1 248 116 90 - 110 mg/Kg

Lab Sample ID: 890-1896-1 MSD

Matrix: Solid

Analysis Batch: 18607

Sample Sample Spike MSD MSD %Rec. RPD Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits RPD Limit Chloride 114 F1 248 343.9 mg/Kg 93 90 - 110 15 20

QC Association Summary

Job ID: 890-1896-1 Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	5035	
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	8015 NM	<u> </u>

Analysis Batch: 18620

Lab Sample ID 890-1896-1	Client Sample ID SS08	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Soluble	Solid	DI Leach	
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Page 11 of 19

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1 MS	SS08	Soluble	Solid	DI Leach	
890-1896-1 MSD	SS08	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
890-1896-1 MS	SS08	Soluble	Solid	300.0	18363
890-1896-1 MSD	SS08	Soluble	Solid	300.0	18363

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Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Client Sample ID: SS08 Lab Sample ID: 890-1896-1 Date Collected: 01/31/22 10:36

Matrix: Solid

Date Received: 01/31/22 16:53

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 01:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 15:47	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	CH	XEN MID
Soluble	Analysis	300.0		1	18607	02/05/22 00:01	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

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 06-30-22	
		ELAP	T104704400-21-22		
The following analytes	are included in this report, but	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w	
the agency does not of	fer certification.	,	, g,	ly molade analytes for the	
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	y moduce analytee for the	
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Method Description

Total BTEX Calculation

Microextraction

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

Method Summary

Client: WSP USA Inc.

Method

8021B

Total BTEX 8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Project/Site: PLU 13 DTD 903H

Job ID: 890-1896-1

SDG: TE012921034 TASK 02

Protocol	Laboratory
SW846	XEN MID
TAL SOP	XEN MID
SW846	XEN MID
SW846	XEN MID
MCAWW	XEN MID
SW846	XEN MID

XEN MID

XEN MID

SW846

ASTM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1896-1

SDG: TE012921034 TASK 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Danish
Lab Sample ID	Chefit Gample ID	Watin	Collected	Neceiveu	Depth
890-1896-1	SS08	Solid	01/31/22 10:36	01/31/22 16:53	0.6

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Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al

dS. Зb

As Ва

Ве

 ϖ Cd Ca

As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

Cr Co Cu Fe Pb Mg Mn Mo

Z

ス Se Αg

SiO2 Na Sr Tl Sn U V Zn

1631 / 245.1 / 7470 / 7471 : Hg

TCLP / SPLP 6010: 8RCRA

Circle Method(s) and Metal(s) to be analyzed

Project Manager:

Phone:

City, State ZIP: Address: Company Name:

Project Name:

PLU 13 DTD 903H

TE012921034 Task 02

Rush: 5 2475

Routine

Turn Around

Due Date:

ANALYSIS REQUEST

Work Order Notes

P.O. Number:

Project Number:

Sampler's Name:

Mercy Rotich

emperature (°C):

1

Temp Blank:

(Yes)

8

Wet Ice:

Yes

SAMPLE RECEIPT

Sample Custody Seals:

Yes Yes

8 g

Correction Factor: Total Containers

á

Number of Containers

TPH (EPA 8015)

BTEX (EPA 0=8021)

Chloride (EPA 300.0)

890-1896 Chain of Custody

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

API:30-015-45845 CC: 1665081001

るかんじ Thermometer ID

N_o 1

Sample Identification

Matrix

Date Sampled

Time Sampled 10:36

Depth

SS08

S

01/31/22

0.6

ooler Custody Seals:

	C	Chain of Custody	Work Order No:
	Houston,TX (281) 240-4200 Da	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334	
	Midland,TX (432-704-5440) E	Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296	
	Hobbs,NM (575-392-7550) Phoenix,AZ (48	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	-620-2000) www.xenco.com -age1of
Kalei Jennings	Bill to: (if different) Amy Ruth	Amy Ruth	Work Order Comments
WSP USA	Company Name: XTO Energy	XTO Energy	Program: UST/PST BP Brownfields RC Sperfun
3300 North A Street	Address:	3104 E Green Street	State of Project:
Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220	Reporting:Level II
720-384-7365	Email: amy.ruth@exxon	Email: amy.ruth@exxonmobil.com,aimee.cole@wsp.com	Deliverables: EDD ADaPT Other:

Sample Comments

Discrete

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1896-1 SDG Number: TE012921034 TASK 02

Login Number List Number: 1 Creator: Clifton, Cloe

er: 1896	List Source: Eurofins Carlsbad	

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1896-1

SDG Number: TE012921034 TASK 02

List Source: Eurofins Midland

Login Number: 1896 List Number: 2 List Creation: 02/02/22 01:36 PM

Creator: Kramer, Jessica

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1897-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

For:

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

Attn: Kalei Jennings

SCRAMER

Authorized for release by: 2/7/2022 3:43:24 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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www.eurofinsus.com/Env

Released to Imaging: 10/27/2022 9:25:01 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: 890-1897-1 Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1897-1 SDG: TE012921034 TASK 02 Project/Site: PLU 13 DTD 903H

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Indicates the analyte was analyzed for but not detected.
HPLC/IC	

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

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

MDA 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 Practical Quantitation Limit **PQL**

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RLReporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Job ID: 890-1897-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1897-1

Receipt

The sample was received on 1/31/2022 4:52 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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 880-18363 and analytical batch 880-18607 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Client Sample ID: SS07 Lab Sample ID: 890-1897-1

Date Collected: 01/31/22 10:20 Matrix: Solid
Date Received: 01/31/22 16:52

Sample Depth: 0.6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/03/22 09:00	02/04/22 03:01	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/03/22 09:00	02/04/22 03:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			02/03/22 09:00	02/04/22 03:01	1
1,4-Difluorobenzene (Surr)	102		70 - 130			02/03/22 09:00	02/04/22 03:01	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			02/04/22 14:29	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			50.0	mg/Kg	— D	Prepared	02/03/22 11:27	DII Fac
-				5 5				
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		02/02/22 14:28	02/05/22 16:09	1
Diesel Range Organics (Over	<50.0	U *+	50.0	mg/Kg		02/02/22 14:28	02/05/22 16:09	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			02/02/22 14:28	02/05/22 16:09	1
o-Terphenyl	110		70 - 130			02/02/22 14:28	02/05/22 16:09	1
* · · · · · · · · · · · · · · · · · · ·								
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble						
Method: 300.0 - Anions, Ion Chro		Soluble Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

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)	
880-10875-A-48-D MS	Matrix Spike	118	99	
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96	
890-1897-1	SS07	111	102	
LCS 880-18361/1-A	Lab Control Sample	115	104	
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102	
MB 880-18361/5-A	Method Blank	109	105	
Surrogate Legend				
BFB = 4-Bromofluorobenz	ene (Surr)			
DFBZ = 1,4-Difluorobenze	ne (Surr)			

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

Matrix: Solid Prep Type: Total/NA

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-18405/2-A	Lab Control Sample	104	109	
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103	
MB 880-18405/1-A	Method Blank	96	97	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1897-1 SDG: TE012921034 TASK 02 Project/Site: PLU 13 DTD 903H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid Analysis Batch: 18462 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18361

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	:d	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	02/03/22 0	9:00 02	2/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105		70 - 130	02/03/22 0	9:00 02	2/03/22 22:14	1

Lab Sample ID: LCS 880-18361/1-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18361

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08168		mg/Kg		82	70 - 130	
Toluene	0.100	0.08307		mg/Kg		83	70 - 130	
Ethylbenzene	0.100	0.08488		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	0.200	0.1732		mg/Kg		87	70 - 130	
o-Xylene	0.100	0.08940		mg/Kg		89	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-18361/2-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18361

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07641		mg/Kg		76	70 - 130	7	35
Toluene	0.100	0.08096		mg/Kg		81	70 - 130	3	35
Ethylbenzene	0.100	0.08209		mg/Kg		82	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1694		mg/Kg		85	70 - 130	2	35
o-Xylene	0.100	0.08747		mg/Kg		87	70 - 130	2	35

LCSD LCSD

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

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
Toluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

Eurofins Carlsbad

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Prep Batch: 18361

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

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

Lab Sample ID: 880-10875-A-48-D MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 18462

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U F1	0.100	0.04603	F1	mg/Kg		46	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.09724	F1	mg/Kg		49	70 - 130	
o-Xylene	<0.00200	U F1	0.100	0.05004	F1	mg/Kg		50	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	118	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 880-10875-A-48-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 18462

						Prep Ty	pe: Tota	al/NA	
						Prep B	atch: 1	8361	
Samp	le Sample	Spike	MSD	MSD		%Rec.		RPD	
					 _	 			

Analyte Result Qualifier Added Result Qualifier Limits RPD Limit Unit %Rec 0.100 Benzene <0.00200 UF1 0.03234 F1 mg/Kg 32 70 - 130 27 35 Toluene 0.100 <0.00200 UF1 0.03586 F1 mg/Kg 36 70 - 130 20 35 Ethylbenzene <0.00200 UF1 0.100 0.03495 F1 35 70 - 130 27 35 mg/Kg 0.201 0.07455 F1 37 70 - 130 35 m-Xylene & p-Xylene <0.00401 UF1 mg/Kg 26 0.100 <0.00200 UF1 0.04331 F1 43 70 - 130 o-Xylene mg/Kg 14

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab

Ma

An

ab Sample ID: MB 880-18405/1-A	Client Sample ID: Method Blank
atrix: Solid	Prep Type: Total/NA
nalysis Batch: 18620	Prep Batch: 18405
MB MB	

Analyte Res	ult Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	0.0 U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
(GRO)-C6-C10							
Diesel Range Organics (Over <50	.0 U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
C10-C28)							
OII Range Organics (Over C28-C36) <50	.0 U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96	70 - 130	02/02/22 14:28	02/05/22 11:54	1
o-Terphenyl	97	70 - 130	02/02/22 14:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A **Client Sample ID: Lab Control Sample**

Analysis Batch: 18620

Matrix: Solid

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	1218		mg/Kg		122	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	1331	*+	mg/Kg		133	70 - 130

C10-C28)

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 18405

Job ID: 890-1897-1

Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

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

Lab Sample ID: LCS 880-18405/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 18620

Prep Type: Total/NA Prep Batch: 18405

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Lab Sample ID: LCSD 880-18405/3-A Client Sample ID: Lab Control Sample Dup

Analysis Batch: 18620

Matrix: Solid Prep Type: Total/NA Prep Batch: 18405

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1098 110 70 - 13010 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1165 mg/Kg 117 70 - 13013 20 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 97 70 - 130 1-Chlorooctane 103 70 - 130 o-Terphenyl

Lab Sample ID: 880-10891-A-21-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 18620

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 1000 996.6 mg/Kg 97 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*+F1 1000 1008 mg/Kg 101 70 - 130

C10-C28) F2 MS MS Surrogate %Recovery Qualifier

Limits 70 - 130 1-Chlorooctane 72 70 - 130 o-Terphenyl 75

Lab Sample ID: 880-10891-A-21-E MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 18620

C10-C28)

Sample Sample MSD MSD RPD Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <50.0 U 998 Gasoline Range Organics 1148 mg/Kg 112 70 - 130 14 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*+ F1 998 1328 F1 F2 mg/Kg 133 70 - 130 27 20

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 96 70 - 130 86 70 - 130 o-Terphenyl

F2

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 18405

Prep Batch: 18405

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A

Matrix: Solid

Analysis Batch: 18607

Client Sample ID: Method Blank **Prep Type: Soluble**

MB MB Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 02/04/22 22:17

Lab Sample ID: LCS 880-18363/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 18607

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 246.6 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-18363/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 18607

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 269.2 108 mg/Kg 90 - 110

Lab Sample ID: 890-1896-A-1-B MS

Matrix: Solid

Analysis Batch: 18607

%Rec. Spike MS MS Sample Sample Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits 399.7 F1 Chloride 114 F1 248 116 90 - 110 mg/Kg

Lab Sample ID: 890-1896-A-1-B MSD

Matrix: Solid

Analysis Batch: 18607

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 114 F1 248 343.9 mg/Kg 93 90 - 110 15 20

Eurofins Carlsbad

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	5035	
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method P	rep Batch
890-1897-1	SS07	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8015 NM	

Analysis Batch: 18620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8015B NM	18405
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Soluble	Solid	DI Leach	
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Page 11 of 19

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1896-A-1-B MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
890-1896-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	18363
890-1896-A-1-B MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18363

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Client Sample ID: SS07 Lab Sample ID: 890-1897-1 Date Collected: 01/31/22 10:20

Matrix: Solid

Date Received: 01/31/22 16:52

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 03:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 16:09	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	СН	XEN MID
Soluble	Analysis	300.0		1	18607	02/05/22 00:20	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Laboratory: Eurofins 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	it the laboratory is not certifi	ed by the governing authority. This list ma	y include analytes for w
the agency does not of	fer certification.	,	, g,	ly molade analytes for th
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	y moduce analytee for the
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Method Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1897-1

SDG: TE012921034 TASK 02

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1897-1

SDG: TE012921034 TASK 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1897-1	SS07	Solid	01/31/22 10:20	01/31/22 16:52	0.6

				<u>ე</u>	nain of (Chain of Custody	Work Order No:	No:
XEZ			Houston,TX (281)	240-4200 Dalla	35,TX (214) 902-0	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334		
70000	2 7 7 7	Hobbs,N	M (575-392-7550) Ph	noenix,AZ (480-	355-0900) Atlanti	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	-620-2000) www.xenco.com	m ² age 1 of 1
Project Manager: Kalei J	Kalei Jennings		Bill to: (i	Bill to: (if different)	Amy Ruth			Work Order Comments
	JSA		Compa		XTO Energy			☐rownfields ☐RC ☐perfund ☐
	3300 North A Street		Address:		3104 E Green Street	street	State of Project:	
e ZIP:	Midland, Texas 79705		City, State ZIP:		Carlsbad, NM 88220	8220	Reporting:Level II	T/UST TORP LIVELIN []
	4-7365		Email: amy.ru	ıth@exxonm	obil.com,aime	Email: amy ruth@exxonmobil.com,aimee.cole@wsp.com	Deliverables: EDD ADaPT	PT Other:
Name:	PLU 13 DTD 903H		Turn Around	nd.		ANALYSIS REQUEST	IEST	Work Order Notes
Project Number:	TE012921034 Task 02	ſask 02	Routine 4					
P.O. Number:			Rush: 5 days	5				CC: 1665081001
Sampler's Name: Mercy Rotich.	Rotich.		Due Date:					API:30-015-45845
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice: (Yes	No				
Temperature (°C):	2.4/2.2	The	Thermometer ID	ners				
Received Intact:	(Yes) No	7	100-MA		021)	900 1897	Chain of Custody	
L	S	Correct	Correction Factor: -O	f Co	0=8			TAT starts the day recevied by the
Sample Custody Seals:	Yes No N/A	l otal (l otal Containers:	er c	EPA			ומט, וו ופטפועפט טיץ דיטטטייי
Sample Identification	n Matrix	Date Sampled	Time Depth	Numbe	TPH (E BTEX (Chlorid		Sample Comments
SS07	S	01/31/22	10:20 0.6'	1	×	×		Discrete
			9.0					
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020: Metal(s) to be ana	8F	13PPM	_	Sb As Ba Be Sb As Ba Be	B Cd Ca Cr Co Cu F Cd Cr Co Cu Pb Mn	Fe Pb Mg Mn Mo Ni K Se Ag SiO2 1 Mo Ni Se Ag Ti U	Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg
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Relinquished by: (Signature)	iture)	Received by: (Signature)	: (Signature)		Date/Time	Relinquished by: (Signature)	ture) Received by: (Signature)	ture) Date/Time
MEN	7	los (i)	0	7	1.31.22 1652	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		
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2/7/2022

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1897-1

SDG Number: TE012921034 TASK 02

List Source: Eurofins Carlsbad

Login Number: 1897 List Number: 1 Creator: Clifton, Cloe

Eurofins Carlsbad

Released to Imaging: 10/27/2022 9:25:01 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1897-1

SDG Number: TE012921034 TASK 02

List Source: Eurofins Midland

List Creation: 02/02/22 01:36 PM

Creator: Kramer, Jessica

Login Number: 1897

List Number: 2

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

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<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1895-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

Revision: 1

For:

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

Attn: Kalei Jennings

KRAMER

Authorized for release by: 2/25/2022 12:18:14 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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Released to Imaging: 10/27/2022 9:25:01 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 13 DTD 903H

Laboratory
SDG: TEC

Laboratory Job ID: 890-1895-1 SDG: TE012921034 TASK 02

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier **Qualifier Description** *+ LCS and/or LCSD is outside acceptance limits, high biased. F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

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 Contains Free Liquid **CFL** 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) Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Job ID: 890-1895-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1895-1

REVISION

The report being provided is a revision of the original report sent on 2/7/2022. The report (revision 1) is being revised due to Per client email, correcting sample depths from 0.6' to 0.5'.

Report revision history

Receipt

The sample was received on 1/31/2022 4:53 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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

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

Matrix: Solid

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1895-1

Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Client Sample ID: SS09 Lab Sample ID: 890-1895-1 Date Collected: 01/31/22 15:00 Date Received: 01/31/22 16:53

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Toluene	< 0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
m-Xylene & p-Xylene	< 0.00399	U	0.00399	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
o-Xylene	< 0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/03/22 09:00	02/04/22 01:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130			02/03/22 09:00	02/04/22 01:19	1
1,4-Difluorobenzene (Surr)	90		70 - 130			02/03/22 09:00	02/04/22 01:19	1
Method: Total BTEX - Total B1	TEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			02/04/22 14:29	1
Method: 8015 NM - Diesel Rar	ngo Organic	s (DRO) (G	2C)					
Mictilioa. Oo 10 Mill - Diesei Mai								
	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	•	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 02/03/22 11:27	Dil Fac
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Ra Analyte Gasoline Range Organics	Result <49.9	Qualifier U ics (DRO) Qualifier	RL 49.9	mg/Kg			02/03/22 11:27	1
Analyte Total TPH Method: 8015B NM - Diesel Ra Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ange Organ Result	Qualifier U ics (DRO) Qualifier U	RL 49.9 (GC)	mg/Kg		Prepared 02/02/22 14:28	02/03/22 11:27 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Ranalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 ange Organ Result <49.9	Qualifier U ics (DRO) Qualifier U U *+	(GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:26	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Ranalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:26 02/05/22 15:26	1 Dil Fac 1 1
Analyte Total TPH Method: 8015B NM - Diesel Ranalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26	1 Dil Fac 1
Analyte Total TPH Method: 8015B NM - Diesel Ra	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 49.9 (GC) RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Ranalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U CS (DRO) Qualifier U U *+ U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70-130 70-130	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26 Analyzed 02/05/22 15:26	Dil Fac 1 1 1 1 Dil Fac 1
Analyte Total TPH Method: 8015B NM - Diesel Ranalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U CS (DRO) Qualifier U U *+ U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70-130 70-130	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	02/03/22 11:27 Analyzed 02/05/22 15:26 02/05/22 15:26 02/05/22 15:26 Analyzed 02/05/22 15:26	Dil Fac 1 1 1 1 Dil Fac 1

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Percer	nt Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-10875-A-48-D MS	Matrix Spike	118	99	
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96	
890-1895-1	SS09	134 S1+	90	
LCS 880-18361/1-A	Lab Control Sample	115	104	
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102	
MB 880-18361/5-A	Method Blank	109	105	
Surrogate Legend				
BFB = 4-Bromofluorobe	enzene (Surr)			
DFB7 = 1 4-Difluorober	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

			Pe	rcent Surro	ogate l	Recov	ery (Ac	ceptan	ce Limits	s)
		1CO1	OTPH1							
Lab Sample ID	Client Sample ID	(70-130)	(70-130)							
880-10891-A-21-D MS	Matrix Spike	72	75							
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86							
890-1895-1	SS09	94	96							

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

Matrix: Solid Prep Type: Total/NA

			Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-18405/2-A	Lab Control Sample	104	109	
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103	
MB 880-18405/1-A	Method Blank	96	97	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18361

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109	70 - 130	02/03/22 09:00	02/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105	70 - 130	02/03/22 09:00	02/03/22 22:14	1

Lab Sample ID: LCS 880-18361/1-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 18361

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.08168 mg/Kg 82 Toluene 0.100 0.08307 mg/Kg 70 - 130 83 Ethylbenzene 0.100 0.08488 mg/Kg 85 70 - 130 m-Xylene & p-Xylene 0.200 87 0.1732 mg/Kg 70 - 130 o-Xylene 0.100 0.08940 mg/Kg 70 - 130

LCS LCS

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

Lab Sample ID: LCSD 880-18361/2-A

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07641		mg/Kg		76	70 - 130	7	35
Toluene	0.100	0.08096		mg/Kg		81	70 - 130	3	35
Ethylbenzene	0.100	0.08209		mg/Kg		82	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1694		mg/Kg		85	70 - 130	2	35
o-Xylene	0.100	0.08747		mg/Kg		87	70 - 130	2	35

LCSD LCSD

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

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

	-	Sample	Sample	Spike	MS	MS				%Rec.	
A	nalyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Be	enzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
To	oluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

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QC Sample Results

Client: WSP USA Inc. Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

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

Lab Sample ID: 880-10875-A-48-D MS **Matrix: Solid**

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

Prep Batch: 18361

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U F1	0.100	0.04603	F1	mg/Kg		46	70 - 130	
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.09724	F1	mg/Kg		49	70 - 130	
o-Xylene	<0.00200	U F1	0.100	0.05004	F1	mg/Kg		50	70 - 130	
	Ethylbenzene m-Xylene & p-Xylene	Analyte Result Ethylbenzene <0.00200	Ethylbenzene <0.00200 U F1 m-Xylene & p-Xylene <0.00401	Analyte Result Qualifier Added Ethylbenzene <0.00200	Analyte Result Ethylbenzene Qualifier Added Ad	Analyte Result Qualifier Added Result Qualifier Ethylbenzene <0.00200	Analyte Result Qualifier Added Result Qualifier Unit Ethylbenzene <0.00200	Analyte Result ethylbenzene Qualifier occupation Added occupation Result ethylbenzene Qualifier occupation Added occupation Result occupation Qualifier occupation Unit occupation D m-Xylene & p-Xylene <0.00401	Analyte Result of the properties of the prop	Analyte Result of the properties of the prop

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 118 1,4-Difluorobenzene (Surr) 70 - 130 99

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 18361

Matrix: Solid Analysis Batch: 18462

Lab Sample ID: 880-10875-A-48-E MSD

Analysis Batch: 18462

%Rec. **RPD** Limits RPD Limit 70 - 130 35 32 27 35

Sample Sample Spike MSD MSD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Benzene <0.00200 U F1 0.100 0.03234 F1 mg/Kg Toluene <0.00200 UF1 0.100 0.03586 F1 36 70 - 130 20 mg/Kg Ethylbenzene <0.00200 UF1 0.100 0.03495 F1 mg/Kg 35 70 - 130 27 35 m-Xylene & p-Xylene <0.00401 UF1 0.201 0.07455 F1 mg/Kg 37 70 - 130 26 35 <0.00200 UF1 0.100 0.04331 F1 43 o-Xylene mg/Kg 70 - 13014

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 18405

MB MB Analyte Result Qualifier RL Unit **Prepared** Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 02/02/22 14:28 02/05/22 11:54 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 02/02/22 14:28 02/05/22 11:54

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	96		70 - 130	02/02/22 14:28	02/05/22 11:54	1
l	o-Terphenyl	97		70 - 130	02/02/22 14:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

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

Prep Batch: 18405

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1218		mg/Kg		122	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1331	*+	mg/Kg		133	70 - 130	
C10-C28)								

Client: WSP USA Inc.

Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

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

Lab Sample ID: LCS 880-18405/2-A

Lab Sample ID: LCSD 880-18405/3-A

Lab Sample ID: 880-10891-A-21-D MS

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

LCS LCS

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 18620 Prep Batch: 18405

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 1098 mg/Kg 110 70 - 130 10 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1165 mg/Kg 117 70 - 130 13 20

C10-C28)

Matrix: Solid

Analysis Batch: 18620

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	97	70 - 130
o-Terphenyl	103	70 - 130

Client Sample ID: Matrix Spike

%Rec.

Prep Type: Total/NA

Prep Batch: 18405

Spike Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec <50.0 U 1000

Gasoline Range Organics 996.6 mg/Kg 97 70 - 130 (GRO)-C6-C10 <50.0 U *+ F1 Diesel Range Organics (Over 1000 1008 mg/Kg 101 70 - 130 C10-C28) F2

MS MS

MS MS

Sample Sample

Surrogate	%Recovery Qu	ıalifier	Limits
1-Chlorooctane	72		70 - 130
o-Terphenvl	75		70 - 130

Lab Sample ID: 880-10891-A-21-E MSD

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

Analysis Batch: 18620 Prep Batch: 18405 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Limits **RPD** Analyte Unit %Rec <50.0 U 998 1148 112 70 - 130 Gasoline Range Organics mg/Kg

(GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*+ F1 998 1328 F1 F2 mg/Kg 133 70 - 130 27 20 C10-C28) F2

MSD MSD

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Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	96	70 - 130
o-Terphenyl	86	70 - 130

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Limit 20

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A

Matrix: Solid

Analysis Batch: 18607

MB MB

Analyte Result Qualifier RL Unit Analyzed Dil Fac D Prepared 5.00 02/04/22 22:17 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-18363/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Analysis Batch: 18607

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits

Chloride 250 90 - 110 246.6 mg/Kg 99

Lab Sample ID: LCSD 880-18363/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 18607

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Limits **RPD** Limit **Analyte** Unit %Rec Chloride 250 269.2 108 90 - 110 20 mg/Kg

Lab Sample ID: 880-10869-A-5-B MS

Matrix: Solid

Analysis Batch: 18607

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 249 276.0 90 - 110 9.87 mg/Kg 107

Lab Sample ID: 880-10869-A-5-C MSD

Matrix: Solid

Analysis Batch: 18607

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Unit Limits RPD Limit Result Qualifier %Rec Chloride 9.87 249 244.3 94 20 mg/Kg 90 - 110 12

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	5035	
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Total/NA	Solid	8015 NM	

Analysis Batch: 18620

Lab Sample ID 890-1895-1	Client Sample ID	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 18405
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Soluble	Solid	DI Leach	-
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10869-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10869-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1895-1	SS09	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
880-10869-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	18363
880-10869-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18363

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Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 890-1895-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Client Sample ID: 890-1895-1

Date Collected: 01/31/22 15:00 Matrix: Solid
Date Received: 01/31/22 16:53

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 01:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 15:26	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	СН	XEN MID
Soluble	Analysis	300.0		1	18607	02/04/22 23:55	CH	XEN MID

Laboratory References:

XEN MID = Eurofins 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: 890-1895-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Laboratory: Eurofins 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 analyte	e are included in this ren	art but the laboratory is r	not certified by the governing authority.	This list may include analytes for
,		ort, but the laboratory is i	iot certified by the governing authority.	This list may include analytes for
the agency does not		ort, but the laboratory is i	lot certilled by the governing authority.	This list may include analytes for
		Matrix	Analyte	This list may include analytes for
the agency does not o	offer certification.	•	, , ,	This list may include analytes for

Method Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1895-1

SDG: TE012921034 TASK 02

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

Protocol References:

ASTM = ASTM International

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1895-1

SDG: TE012921034 TASK 02

Lab Sample ID Client Sample ID Collected Matrix Received Depth 890-1895-1 SS09 Solid 01/31/22 15:00 01/31/22 16:53 0.5

				Chair	Chain of Custody	Istody	Work C	Work Order No:	
ſ Ņ X	XMZCO ABORATORIES	_ I	ouston,TX (281) 240-42 Midland,TX (432-704-54	00 Dallas,TX (40) EL Paso,T	214) 902-0300 X (915)585-34	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		300	
Project Manager:	Kalei Jennings	1	Bill to: (if different)	nt) Amy Ruth	Ruth	Bill to: (if different) Amy Ruth		Work Order Comments	ents
	WSP USA		Company Name:	ne: XTO Energy	nergy		Program: UST/PSTRP	□rownfields	□RC 1 perfund
	3300 North A Street		Address:	3104 E	3104 E Green Street	#	State of Project:		
e ZIP:	Midland, Texas 79705		City, State ZIP:		Carlsbad, NM 88220		Reporting:Level II	IIT/UST	TRP (WellV
	720-384-7365		Email: amy.ruth@exxonmobil.com,aimee.cole@wsp.com	xxonmobil.co	om,aimee.cc	ble@wsp.com	Deliverables: EDD	ADaPT []	Other:
Project Name:	PLU 13 DTD 903H		Turn Around			ANALYSIS REQUEST	ST		Work Order Notes
ř	TE012921034 Task 02	4 Task 02	Routine						
P.O. Number:			Rush:					0	CC: 1665081001
Sampler's Name:	Mercy Rotich.		Due Date:					>	API:30-015-45845
SAMPLE RECEIPT	PT Temp Blank:	(Ye) No	Wet Ice: Yes No						
Temperature (°C):	2.4/2.2	Thermo	Thermometer ID	iners					
Received Intact:	No No	-May	100			990-188	890-1895 Chain of Custody		
Cooler Custody Seals:	Yes No (NX	Correction Factor:	actor:		_			TAT	TAT starts the day recevied by the lab, if received by 4:30pm
Samuel Hamilionian		Date	Time Don't	m ber	EX (EI			T	Sample Comments
		Sampled Sampled	+	+	+			-	
SS09	- O	01/31/22 15	15:00	×	×				Discrete
			11 1						11 1
Total 200.7 / 6010 Circle Method(s) :	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	l %	CRA 13PPM Texas 11 A	န္	Ba Be Ba Be	B Cd Ca Cr Co Cu Fe Pb Mg T Cd Cr Co Cu Pb Mn Mo Ni Se	Mg Mn Mo Ni K Se Ag li Se Ag Ti U	SIO	Na Sr II Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg
Notice: Signature of this do of service. Xenco will be lis of Xenco. A minimum char.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. 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 at 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 et	f samples constitutes a vies and shall not assume each project and a charg	alid purchase order from any responsibility for any e of \$5 for each sample s	client company t losses or expen ubmitted to Xeno	to Xenco, its affil ises incurred by co, but not analy:		It assigns standard terms and conditions edue to circumstances beyond the control afforced unless previously negotiated.		
Relinquished by: (Signature)	(Signature)	Received by: (Si	(Signature)	Date/Time	Time	Relinquished by: (Signature)	re) Received by: (Signature)	(Signature)	Date/Time
magn !		Jose City	0	1-31-22	1453	4 0			
5						50			Revised Date 051418 Rev. 2018 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1895-1

SDG Number: TE012921034 TASK 02

List Source: Eurofins Carlsbad

Login Number: 1895 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 Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1895-1 SDG Number: TE012921034 TASK 02

List Source: Eurofins Midland

Login Number: 1895 List Creation: 02/02/22 01:36 PM List Number: 2

Creator: Kramer, Jessica

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

Eurofins Carlsbad Page 19 of 19 2/25/2022 (Rev. 1)

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1896-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

Revision: 1

For:

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

Attn: Kalei Jennings

MEAMER

Authorized for release by: 2/25/2022 12:17:23 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

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Visit us at:

Released to Imaging: 10/27/2022 9:25:01 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: 890-1896-1

Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

Table of Contents

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

Qualifiers

GC VOA

Qualifier **Qualifier Description**

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

GC Semi VOA

Qualifier **Qualifier Description** *+ LCS and/or LCSD is outside acceptance limits, high biased.

F1

MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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

Glossary

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

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

%R Percent Recovery Contains Free Liquid **CFL** 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) Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Job ID: 890-1896-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1896-1

REVISION

The report being provided is a revision of the original report sent on 2/7/2022. The report (revision 1) is being revised due to Per client email, correcting sample depths from 0.6' to 0.5'.

Report revision history

Receipt

The sample was received on 1/31/2022 4:53 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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 880-18363 and analytical batch 880-18607 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client: WSP USA Inc.

Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Lab Sample ID: 890-1896-1 **Client Sample ID: SS08** Matrix: Solid

Date Collected: 01/31/22 10:36 Date Received: 01/31/22 16:53

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	•
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/04/22 01:39	
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/04/22 01:39	•
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/04/22 01:39	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	105		70 - 130			02/03/22 09:00	02/04/22 01:39	-
1,4-Difluorobenzene (Surr)	93		70 - 130			02/03/22 09:00	02/04/22 01:39	•
Method: Total BTEX - Total B	TEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			02/04/22 14:29	•
Method: 8015 NM - Diesel Rai	nge Organic	s (DRO) (0	SC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/03/22 11:27	•
Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 15:47	
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0	mg/Kg		02/02/22 14:28	02/05/22 15:47	,
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 15:47	,
Surra mata	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate			70 100			02/02/22 14:28	02/05/22 15:47	
	94		70 - 130			02/02/22 11:20	02/03/22 13.41	
1-Chlorooctane	94		70 - 130 70 - 130				02/05/22 15:47	•
1-Chlorooctane o-Terphenyl	97	iphy - Solu	70 - 130					-
Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion C Analyte	97 Chromatogra	i <mark>phy - Sol</mark> u Qualifier	70 - 130	Unit	D			Dil Fac

OTPH = o-Terphenyl

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Perce	nt Surrogate Recovery (Accep	tance Limits)
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-10875-A-48-D MS	Matrix Spike	118	99		
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96		
890-1896-1	SS08	105	93		
LCS 880-18361/1-A	Lab Control Sample	115	104		
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102		
MB 880-18361/5-A	Method Blank	109	105		
Surrogate Legend					
BFB = 4-Bromofluorobe	enzene (Surr)				
DFBZ = 1.4-Difluorober	nzene (Surr)				

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits					
		1001	OTPH1				
Lab Sample ID	Client Sample ID	(70-130)	(70-130)				
880-10891-A-21-D MS	Matrix Spike	72	75				
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86				
890-1896-1	SS08	94	97				
Surrogate Legend							
1CO = 1-Chlorooctane							

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)				
		1CO2	OTPH2				
Lab Sample ID	Client Sample ID	(70-130)	(70-130)				
LCS 880-18405/2-A	Lab Control Sample	104	109				
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103				
MB 880-18405/1-A	Method Blank	96	97				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

Client: WSP USA Inc.

Job ID: 890-1896-1

Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid

Analysis Batch: 18462

Client	Sample	ID:	Method	В	anl	K

Prep Type: Total/NA

Prep Batch: 18361

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	< 0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	< 0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	< 0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109	70 - 130	02/03/22 09:00	02/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105	70 - 130	02/03/22 09:00	02/03/22 22:14	1

Client Sample ID: Lab Control Sample

70 - 130

70 - 130

87

82

85

87

Prep Type: Total/NA

Prep Batch: 18361

Prep Type: Total/NA

3

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35

35

Matrix: Solid Analysis Batch: 18462 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.08168 mg/Kg 82 Toluene 0.100 0.08307 mg/Kg 70 - 130 83 Ethylbenzene 0.100 0.08488 mg/Kg 85 70 - 130

0.1732

0.08940

0.08209

0.1694

0.08747

0.200

0.100

0.100

0.200

0.100

70 - 130

o-Xylene 100 100

Lab Sample ID: LCSD 880-18361/2-A

Lab Sample ID: LCS 880-18361/1-A

	_00 _00	
Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	115	70 - 130
1 4-Difluorobenzene (Surr)	104	70 - 130

Client Sample ID: Lab Control Sample Dup

mg/Kg

mg/Kg

Matrix: Solid

m-Xylene & p-Xylene

Analyte Benzene Toluene Ethylbenzene

o-Xylene

m-Xylene & p-Xylene

Analysis Batch: 18462

						Prep E	Batch: 1	18361	
Spike	LCSD	LCSD				%Rec.		RPD	
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
0.100	0.07641		mg/Kg		76	70 - 130	7	35	
0.100	0.08096		mg/Kg		81	70 - 130	3	35	

mg/Kg

mg/Kg

mg/Kg

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 119

102

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

1,4-Difluorobenzene (Surr)

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

70 - 130

70 - 130

70 - 130

Prep Batch: 18361

•	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
Toluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

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Page 7 of 19 Released to Imaging: 10/27/2022 9:25:01 AM

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1896-1 SDG: TE012921034 TASK 02 Project/Site: PLU 13 DTD 903H

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

Lab Sample ID: 880-10875-A-48-D MS

Lab Sample ID: 880-10875-A-48-E MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 18462

Analysis Batch: 18462

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 18361

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U F1 0 100 0.04603 F1 mg/Kg 46 70 - 130 m-Xylene & p-Xylene <0.00401 U F1 0.200 0.09724 F1 mg/Kg 49 70 - 130 o-Xylene <0.00200 UF1 0.100 0.05004 F1 50 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18361 **RPD**

Sample Sample Spike MSD MSD %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Benzene <0.00200 U F1 0.100 0.03234 F1 mg/Kg 70 - 130 35 32 27 Toluene <0.00200 UF1 0.100 0.03586 F1 36 70 - 130 20 35 mg/Kg 27 Ethylbenzene <0.00200 UF1 0.100 0.03495 F1 mg/Kg 35 70 - 130 35 m-Xylene & p-Xylene <0.00401 UF1 0.201 0.07455 F1 mg/Kg 37 70 - 130 26 35 <0.00200 UF1 0.100 0.04331 F1 43 70 - 130 o-Xylene mg/Kg 14 35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

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

Prep Batch: 18405

MB MB Analyte Result Qualifier RL Unit **Prepared** Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 02/02/22 14:28 02/05/22 11:54 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 02/02/22 14:28 02/05/22 11:54

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	02/02/22 14:28	02/05/22 11:54	1
o-Terphenyl	97		70 - 130	02/02/22 14:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

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

Prep Batch: 18405

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1218 122 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1331 *+ mg/Kg 133 70 - 130 C10-C28)

Project/Site: PLU 13 DTD 903H

Client: WSP USA Inc.

Job ID: 890-1896-1 SDG: TE012921034 TASK 02

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

LCS LCS

Lab Sample ID: LCS 880-18405/2-A

Lab Sample ID: LCSD 880-18405/3-A

Matrix: Solid

C10-C28)

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 18620 Prep Batch: 18405

LCSD LCSD RPD %Rec. Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 1098 mg/Kg 110 70 - 130 10 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1165 mg/Kg 117 70 - 130 13 20

LCSD LCSD

Lab Sample ID: 880-10891-A-21-D MS

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 97 70 - 130 70 - 130 o-Terphenyl 103

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analysis Batch: 18620 Prep Batch: 18405 Sample Sample Spike MS MS %Rec.

Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec Ū Gasoline Range Organics <50.0 1000 996.6 mg/Kg 97 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1008 <50.0 U*+ F1 mg/Kg 101 70 - 130 C10-C28) F2

MS MS

<50.0 U*+ F1

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 72 o-Terphenyl 75 70 - 130

Lab Sample ID: 880-10891-A-21-E MSD

Matrix: Solid

Analysis Batch: 18620

Diesel Range Organics (Over

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prep Batch: 18405

133

70 - 130

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Limits **RPD** Limit Analyte Unit %Rec <50.0 U 998 1148 112 70 - 130 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10

1328 F1 F2

mg/Kg

998

C10-C28) F2 MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	86		70 - 130

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QC Sample Results

Client: WSP USA Inc. Job ID: 890-1896-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A

Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 18607

Analyte Result Qualifier RL Unit D Analyzed Dil Fac Prepared Chloride 5.00 02/04/22 22:17 <5.00 U mg/Kg

Lab Sample ID: LCS 880-18363/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Soluble

Client Sample ID: SS08

Prep Type: Soluble

Analysis Batch: 18607

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 246.6 90 - 110 mg/Kg 99

MB MB

Lab Sample ID: LCSD 880-18363/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Soluble

Analysis Batch: 18607

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Limits **RPD** Limit Unit D %Rec Chloride 250 269.2 108 mg/Kg

Lab Sample ID: 890-1896-1 MS Client Sample ID: SS08 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 18607

Spike MS MS %Rec. Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 114 F1 248 399.7 F1 90 - 110 mg/Kg 116

Lab Sample ID: 890-1896-1 MSD

Matrix: Solid

Analysis Batch: 18607

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Unit %Rec Limits RPD Limit Result Qualifier Chloride 114 F1 248 343.9 93 20 mg/Kg 90 - 110 15

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	5035	
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Total/NA	Solid	8015 NM	

Analysis Batch: 18620

Lab Sample ID 890-1896-1	Client Sample ID SS08	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Soluble	Solid	DI Leach	-
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Job ID: 890-1896-1 Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1 MS	SS08	Soluble	Solid	DI Leach	
890-1896-1 MSD	SS08	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-1	SS08	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
890-1896-1 MS	SS08	Soluble	Solid	300.0	18363
890-1896-1 MSD	SS08	Soluble	Solid	300.0	18363

Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Client Sample ID: SS08 Lab Sample ID: 890-1896-1

Date Collected: 01/31/22 10:36

Date Received: 01/31/22 16:53

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 01:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 15:47	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	CH	XEN MID
Soluble	Analysis	300.0		1	18607	02/05/22 00:01	CH	XEN MID

Laboratory References:

XEN MID = Eurofins 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: 890-1896-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

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 06-30-22	
		ELAP	T104704400-21-22		
The following analyte	are included in this rene	art but the laboratory is r	and contified by the devenies outbority	This list may include analytes for u	
the agency does not	offer certification.	•	not certified by the governing authority.	This list may include analytes for w	
	•	Matrix	Analyte	This list may include analytes for w	
the agency does not	offer certification.	•		This list may include analytes for w	

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Method Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1896-1

SDG: TE012921034 TASK 02

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

Protocol References:

ASTM = ASTM International

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1896-1 SDG: TE012921034 TASK 02

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Depth

 890-1896-1
 SS08
 Solid
 01/31/22 10:36
 01/31/22 16:53
 0.5

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Chain of Custody

Revised Date 051418 Rev 2018 1		o .			-		
		2 2	1.81.22 1653		Jue Crook		Menry
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Signature)	Received by: (Signature)	(Signature)	Relinquished by: (Signature)
	I terms and conditions nees beyond the control lously negotiated.	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 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 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.	It company to Xenco, its aff ses or expenses incurred by Itted to Xenco, but not analy	valid purchase order from clien ne any responsibility for any loss rge of \$5 for each sample submi	f samples constitutes a les and shall not assun each project and a cha	ocument and relinquishment c able only for the cost of samp ge of \$75.00 will be applied to	otice: Signature of this do service. Xenco will be li Xenco. A minimum char
Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	Ag SiO2	Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Sb As Ba Sb As Ba	13PPM Texas 11 / SPLP 6010 : 8RCF	<u></u> %	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s)
				0.0			
Discrete			×	10:36 0.6' 1	01/31/22	S	SS08
Sample Comments			TPH (E BTEX (Time Depth	Date Sampled	fication Matrix	Sample Identification
lab, if received by 4:30pm			PA 8		Total Containers:	Yes No	sample Custody Seals:
TAT starts the day recevied by the	-	890-1896 Chair of Const.	015) 0=80	1012	Correction Factor:	Υe	Cooler Custody Seals:
	Pustody		021)	Ĭ	124	(Fe) No	Received Intact:
						2.4/2.2	emperature (°C):
				Wet Ice: (Yes) No	(Yes) No	PT Temp Blank:	SAMPLE RECEIPT
API:30-015-45845				Due Date:		Mercy Rotich.	sampler's Name:
CC: 1665081001				Rush: Sduys			O. Number:
				Routine 4	1 Task 02	TE012921034 Task 02	roject Number:
Work Order Notes		ANALYSIS REQUEST		Turn Around		PLU 13 DTD 903H	oroject Name:
Other:	Deliverables: EDD ADaP1		nmobil.com,aimee.co	Email: amy.ruth@exxonmobil.com,aimee.cole@wsp.com		720-384-7365	hone:
	eve		Carlsbad, NM 88220	City, State ZIP:		Midland, Texas 79705	City, State ZIP:
j]		3104 E Green Street	Address:		3300 North A Street	Address:
ds ¶CC {□perfund □	Program: UST/PST ☐RP ☐rownfields	Prog	XTO Energy	Company Name:		WSP USA	Company Name:
nments	Work Order Comments		Amy Ruth	Bill to: (if different)		Kalei Jennings	roject Manager:
⊃age1 of1_	www.xenco.com	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)	Dallas,TX (214) 902-0300 EL Paso,TX (915)585-34 180-355-0900) Atlanta,G/	Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 909- Midland,TX (432-704-5440) EL Paso,TX (916)585-3443 Lubbock,TX (806)794-1 (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,F	Hobbs,NM	MN NO CO	XE
		1010 FOR 2024					1

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1896-1 SDG Number: TE012921034 TASK 02

List Source: Eurofins Carlsbad

Login Number: 1896 Li С

Login Nambor. 1000			Liot Cource: Laronnio Gariobaa
List Number: 1			
Creator: Clifton, Cloe			
• 41	•	•	

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: 890-1896-1 SDG Number: TE012921034 TASK 02

List Source: Eurofins Midland

List Number: 2 Creator: Kramer, Jessica

Login Number: 1896

List Creation: 02/02/22 01:36 PM

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

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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1897-1

Laboratory Sample Delivery Group: TE012921034 TASK 02

Client Project/Site: PLU 13 DTD 903H

Revision: 1

For:

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

Attn: Kalei Jennings

KRAMER

Authorized for release by: 2/25/2022 12:14:34 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: 10/27/2022 9:25:01 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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Н

Client: WSP USA Inc.

Laboratory Job ID: 890-1897-1

Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Qualifiers

GC VOA

Qualifier **Qualifier Description** F1

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

GC Semi VOA

Qualifier **Qualifier Description**

*+ LCS and/or LCSD is outside acceptance limits, high biased.

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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

Glossary

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

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

%R Percent Recovery Contains Free Liquid **CFL** 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) Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1897-1

SDG: TE012921034 TASK 02

Job ID: 890-1897-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1897-1

REVISION

The report being provided is a revision of the original report sent on 2/7/2022. The report (revision 1) is being revised due to Per client email, correcting sample depths from 0.6' to 0.5'.

Report revision history

Receipt

The sample was received on 1/31/2022 4:52 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18361 and analytical batch 880-18462 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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 880-18363 and analytical batch 880-18607 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.

Eurofins Carlsbad 2/25/2022 (Rev. 1)

Matrix: Solid

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1897-1

Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02 Lab Sample ID: 890-1897-1

Date Collected: 01/31/22 10:20 Date Received: 01/31/22 16:52

Client Sample ID: SS07

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	
Toluene	< 0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	
Ethylbenzene	< 0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	
m-Xylene & p-Xylene	< 0.00403	U	0.00403	mg/Kg		02/03/22 09:00	02/04/22 03:01	
o-Xylene	< 0.00202	U	0.00202	mg/Kg		02/03/22 09:00	02/04/22 03:01	
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/03/22 09:00	02/04/22 03:01	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	111		70 - 130			02/03/22 09:00	02/04/22 03:01	
1,4-Difluorobenzene (Surr)	102		70 - 130			02/03/22 09:00	02/04/22 03:01	
Method: Total BTEX - Total B	TEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	< 0.00403	U	0.00403	mg/Kg			02/04/22 14:29	
	_		•		_	D		D'' F
Method: 8015 NM - Diesel Rai Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
	_	Qualifier	•		<u>D</u>	Prepared		Dil Fa
Analyte Total TPH	Result <50.0	Qualifier U	RL 50.0	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel R	Result <50.0	Qualifier U	RL 50.0	Unit	<u>D</u> D	Prepared Prepared	Analyzed	
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics	Result <50.0	Qualifier U ics (DRO) Qualifier	RL 50.0	Unit mg/Kg		· ·	Analyzed 02/03/22 11:27	
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 ange Organ Result	Qualifier U ics (DRO) Qualifier U	RL 50.0	Unit mg/Kg		Prepared 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed	
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 ange Organ Result <50.0	Qualifier U ics (DRO) Qualifier U U *+	(GC) RL 50.0	Unit mg/Kg Unit mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed 02/05/22 16:09	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U ics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed 02/05/22 16:09 02/05/22 16:09	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	Result <50.0 ange Organ Result <50.0 <50.0 <50.0	Qualifier U ics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed 02/05/22 16:09 02/05/22 16:09	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0	Qualifier U ics (DRO) Qualifier U U *+	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed 02/05/22 16:09 02/05/22 16:09 02/05/22 16:09 Analyzed	Dil Fa
Analyte	Result <50.0	Qualifier U CS (DRO) Qualifier U U *+ U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed 02/05/22 16:09 02/05/22 16:09 Analyzed 02/05/22 16:09	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel R 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	Qualifier U CS (DRO) Qualifier U U *+ U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 02/02/22 14:28 02/02/22 14:28 02/02/22 14:28 Prepared 02/02/22 14:28	Analyzed 02/03/22 11:27 Analyzed 02/05/22 16:09 02/05/22 16:09 Analyzed 02/05/22 16:09	Dil Fa

OTPH = o-Terphenyl

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Perce	ent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-10875-A-48-D MS	Matrix Spike	118	99	
880-10875-A-48-E MSD	Matrix Spike Duplicate	128	96	
890-1897-1	SS07	111	102	
LCS 880-18361/1-A	Lab Control Sample	115	104	
LCSD 880-18361/2-A	Lab Control Sample Dup	119	102	
MB 880-18361/5-A	Method Blank	109	105	
Surrogate Legend				
BFB = 4-Bromofluorobe	enzene (Surr)			
DFBZ = 1,4-Difluorober	nzene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

			Perce			
		1001	OTPH1			
Lab Sample ID	Client Sample ID	(70-130)	(70-130)			
880-10891-A-21-D MS	Matrix Spike	72	75			
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86			
890-1897-1	SS07	105	110			
Surrogate Legend						
1CO = 1-Chlorooctane						

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

Matrix: Solid Prep Type: Total/NA

			Percen	t Surrogate Recovery (Acceptance Limits)
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-18405/2-A	Lab Control Sample	104	109	
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103	
MB 880-18405/1-A	Method Blank	96	97	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18361

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/03/22 09:00	02/03/22 22:14	1

MB MB

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109	70 - 130	02/03/22 09:00	02/03/22 22:14	1
1,4-Difluorobenzene (Surr)	105	70 - 130	02/03/22 09:00	02/03/22 22:14	1

Lab Sample ID: LCS 880-18361/1-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18361

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08168		mg/Kg		82	70 - 130	
Toluene	0.100	0.08307		mg/Kg		83	70 - 130	
Ethylbenzene	0.100	0.08488		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	0.200	0.1732		mg/Kg		87	70 - 130	
o-Xylene	0.100	0.08940		mg/Kg		89	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-18361/2-A

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18361

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07641		mg/Kg		76	70 - 130	7	35
Toluene	0.100	0.08096		mg/Kg		81	70 - 130	3	35
Ethylbenzene	0.100	0.08209		mg/Kg		82	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1694		mg/Kg		85	70 - 130	2	35
o-Xylene	0.100	0.08747		mg/Kg		87	70 - 130	2	35

LCSD LCSD

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

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

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

Prep Batch: 18361

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.04223	F1	mg/Kg		42	70 - 130	
Toluene	<0.00200	U F1	0.100	0.04381	F1	mg/Kg		44	70 - 130	

Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H Job ID: 890-1897-1

SDG: TE012921034 TASK 02

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

Lab Sample ID: 880-10875-A-48-D MS

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 18361

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U F1 0 100 0.04603 F1 mg/Kg 46 70 - 130 m-Xylene & p-Xylene <0.00401 U F1 0.200 0.09724 F1 mg/Kg 49 70 - 130 0.100 0.05004 F1 50 70 - 130 o-Xylene <0.00200 UF1 mg/Kg

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 118 1,4-Difluorobenzene (Surr) 70 - 130 99

Lab Sample ID: 880-10875-A-48-E MSD

Matrix: Solid

Analysis Batch: 18462

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18361 **RPD**

Sample Sample Spike MSD MSD %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <0.00200 UF1 0.100 0.03234 F1 70 - 130 35 Benzene mg/Kg 32 27 Toluene 0.100 0.03586 F1 36 70 - 130 20 35 <0.00200 UF1 mg/Kg Ethylbenzene <0.00200 UF1 0.100 0.03495 F1 mg/Kg 35 70 - 130 27 35 m-Xylene & p-Xylene <0.00401 UF1 0.201 0.07455 F1 37 70 - 130 26 35 mq/Kq <0.00200 UF1 0.100 0.04331 F1 43 70 - 130 o-Xylene mg/Kg 14 35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

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

Prep Batch: 18405

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 02/02/22 14:28 02/05/22 11:54 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 02/02/22 14:28 02/05/22 11:54

MB MB

Qualifier Surrogate %Recovery Limits Prepared Dil Fac Analyzed 1-Chlorooctane 70 - 130 02/02/22 14:28 02/05/22 11:54 96 70 - 130 02/02/22 14:28 02/05/22 11:54 o-Terphenyl 97

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits 1000 1218 122 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1331 *+ mg/Kg 133 70 - 130 C10-C28)

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H

SDG: TE012921034 TASK 02

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

Lab Sample ID: LCS 880-18405/2-A

Lab Sample ID: LCSD 880-18405/3-A

Lab Sample ID: 880-10891-A-21-D MS

Lab Sample ID: 880-10891-A-21-E MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

LCS LCS

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 109 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 18620

Prep Batch: 18405 RPD %Rec. Unit %Rec Limits RPD Limit

LCSD LCSD Spike Analyte Added Result Qualifier Gasoline Range Organics 1000 1098 mg/Kg 110 70 - 130 10 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1165 mg/Kg 117 70 - 130 13 20

C10-C28)

Matrix: Solid

Matrix: Solid

Analysis Batch: 18620

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	103		70 - 130

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18405

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec <50.0 U 1000 Gasoline Range Organics 996.6 mg/Kg 97 70 - 130 (GRO)-C6-C10 <50.0 U *+ F1 Diesel Range Organics (Over 1000 1008 mg/Kg 101 70 - 130 C10-C28) F2

MS MS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	72	70 - 130
o-Terphenyl	75	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analysis Batch: 18620 Prep Batch: 18405 Sample Sample Snika MED MED %Pac DDD

	Sample	Sample	Spike	IVISD	IVIOD				MRC.		KFD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<50.0	U	998	1148		mg/Kg		112	70 - 130	14	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<50.0	U *+ F1	998	1328	F1 F2	mg/Kg		133	70 - 130	27	20	
C10-C28)		F2										

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	86		70 - 130

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Client Sample ID: Matrix Spike

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1897-1 Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18363/1-A

Matrix: Solid

Analysis Batch: 18607

MB MB Analyte

Result Qualifier RL Unit Analyzed Dil Fac D Prepared 5.00 02/04/22 22:17 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-18363/2-A

Matrix: Solid

Analysis Batch: 18607

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 246.6 90 - 110 mg/Kg 99

Lab Sample ID: LCSD 880-18363/3-A

Matrix: Solid

Analysis Batch: 18607

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Limits **RPD** Limit Unit %Rec Chloride 250 269.2 108 90 - 110 20 mg/Kg

Lab Sample ID: 890-1896-A-1-B MS

Matrix: Solid

Analysis Batch: 18607

Spike MS MS %Rec. Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 114 F1 248 399.7 F1 90 - 110 mg/Kg 116

Lab Sample ID: 890-1896-A-1-B MSD

Matrix: Solid

Analysis Batch: 18607

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Unit Limits RPD Limit Result Qualifier %Rec Chloride 114 F1 248 343.9 93 20 mg/Kg 90 - 110 15

QC Association Summary

Job ID: 890-1897-1 Client: WSP USA Inc. Project/Site: PLU 13 DTD 903H SDG: TE012921034 TASK 02

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	5035	
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8021B	18361
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
LCS 880-18361/1-A	Lab Control Sample	Total/NA	Solid	8021B	18361
LCSD 880-18361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18361
880-10875-A-48-D MS	Matrix Spike	Total/NA	Solid	8021B	18361
880-10875-A-48-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18361

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8015 NM	

Analysis Batch: 18620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Total/NA	Solid	8015B NM	18405
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

HPLC/IC

Leach Batch: 18363

Released to Imaging: 10/27/2022 9:25:01 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Soluble	Solid	DI Leach	-
MB 880-18363/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

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HPLC/IC (Continued)

Leach Batch: 18363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1896-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1896-A-1-B MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1897-1	SS07	Soluble	Solid	300.0	18363
MB 880-18363/1-A	Method Blank	Soluble	Solid	300.0	18363
LCS 880-18363/2-A	Lab Control Sample	Soluble	Solid	300.0	18363
LCSD 880-18363/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18363
890-1896-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	18363
890-1896-A-1-B MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18363

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Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Client Sample ID: SS07 Lab Sample ID: 890-1897-1

Date Collected: 01/31/22 10:20 Matrix: Solid
Date Received: 01/31/22 16:52

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18361	02/03/22 09:00	MR	XEN MID
Total/NA	Analysis	8021B		1	18462	02/04/22 03:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	18599	02/04/22 14:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18620	02/05/22 16:09	AJ	XEN MID
Soluble	Leach	DI Leach			18363	02/04/22 11:52	CH	XEN MID
Soluble	Analysis	300.0		1	18607	02/05/22 00:20	CH	XEN MID

Laboratory References:

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

Eurofins Carlsbad

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Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1897-1

 Project/Site: PLU 13 DTD 903H
 SDG: TE012921034 TASK 02

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date 06-30-22	
Texas	NE	ELAP	T104704400-21-22		
The following analyte	are included in this rene	art but the laboratory is r	and contified by the devenies outbority	This list may include analytes for u	
the agency does not	offer certification.	•	not certified by the governing authority.	This list may include analytes for w	
	•	Matrix	Analyte	This list may include analytes for w	
the agency does not	offer certification.	•		This list may include analytes for w	

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Method Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1897-1

SDG: TE012921034 TASK 02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
3015B 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
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.

Project/Site: PLU 13 DTD 903H

Job ID: 890-1897-1 SDG: TE012921034 TASK 02

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Depth

 890-1897-1
 SS07
 Solid
 01/31/22 10:20
 01/31/22 16:52
 0.5

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Total 200.7 / 6010 200.8 / 6020: Recription 3 = Recription 3	TE012921034 Task 02 me: Mercy Rotich. Temp Blank: Yes No NIA Correlation Total Correlation Temp Blank: Yes No NIA Correlation Matrix Sampled	treet 79705	YENDO
CRA 13PPM Texas 11 A TCLP / SPLP 6010: 8RCRA ttes a valid purchase order from client ssume any responsibility for any losse a charge of \$5 for each sample submitt y; (Signature)	이 후 후 내려 [현 [첫] 현 [현 [12] 등 [전]	Midland,TX (432-704-5440) (575-392-7550) Phoenix,AZ Bill to: (if different) Company Name: Address: City, State ZIP: Email: amy.ruth@exxx	Houston,TX (281) 240-420
1 AI Sb As Ba Be B Cd Ca Cr Co Cu CDRA Sb As Ba Be Cd Cr Co Cu Pb M client company to Xenco, its affiliates and subcontractors. losses or expenses incurred by the client if such losses ar abmitted to Xenco, but not analyzed. These terms will be er Date/Time Relinquished by: 1 3 1 22 1653	Number of Containers TPH (EPA 8015) BTEX (EPA 0=8021) Chloride (EPA 300.0)	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) Bill to: (If different) Amy Ruth Progra Company Name: XTO Energy Progra Address: 3104 E Green Street Stat City, State ZIP: Carlsbad, NM 88220 Reporti Email: amy.ruth@exxonmobil.com,aimee.cole@wsp.com Deliver	Chain of Custody Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Mn Mo Ni Se Ag SiO2 Na Sr Tl Sn U V Zn Hg Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg s. It assigns standard terms and conditions are due to circumstances beyond the control enforced unless previously negotiated. Y: (Signature) Received by: (Signature) Date/Time	API:30-015-45845 API:30-015-45845 1897 Chain of Custody TAT starts the day received by 4:30pm Sample Comments	Www.xenco.com Page 1 of	Work Order No:

Sample containers have legible labels.

Sample collection date/times are provided.

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Appropriate sample containers are used.

Containers are not broken or leaking.

Sample bottles are completely filled.

Sample Preservation Verified.

MS/MSDs

<6mm (1/4").

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1897-1 SDG Number: TE012921034 TASK 02

List Source: Eurofins Carlsbad

Login Number: 1897 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	

True

True

True

True

True

N/A

True

N/A

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1897-1 SDG Number: TE012921034 TASK 02

List Source: Eurofins Midland

List Number: 2 Creator: Kramer, Jessica

Login Number: 1897

List Creation: 02/02/22 01:36 PM

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

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 118793

CONDITIONS

On worders	OCDID:
·	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	118793
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2108540573 PLU 13 DTD 903H, thank you. This closure is approved.	10/27/2022