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	NAPP2200356328
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

			•	•	
				OGRID 5	5380
Contact Name Shelby Pennington				Contact Te	Selephone 281-723-9353
Contact email shelby.g.pennington@exxonmobil.com			mobil.com	Incident #	(assigned by OCD)
			Rd Bldg 5, Midlar	nd, Texas, 79707	
			Location	of Release So	ource
Latitude 32.3′	7988			Longitude	-103.88687
			(NAD 83 in dec	imal degrees to 5 decim	
Site Name JRU	J DI 1 Batt	erv		Site Type T	Tank Battery
Date Release D	Discovered	12/20/2021		API# (if app	
Unit Letter	Section	Township	Range	Coun	·
F	21	22S	30E	Eddy	ły
Surface Owner:				Volume of F	
Crude Oil	Materia	Volume Release		calculations or specific	volume Recovered (bbls)
X Produced V	Vater	Volume Release	d (bbls) 5.08		Volume Recovered (bbls) 5
			ion of total dissolv water >10,000 mg/	\ /	☐ Yes ☐ No
Condensate	е	Volume Release			Volume Recovered (bbls)
□ Natural Gas Volume Released (Mcf)			Volume Recovered (Mcf)		
Other (describe) Volume/Weight Released (provide units		units)	Volume/Weight Recovered (provide units)		
Cause of Relea	A pin h standing	ole leak on a flow g fluids. A third pa	line connection de arty contractor will	veloped due to corr l be retained for ren	rrosion. A vacuum truck was dispatched to recover emediation activities.

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NAPP2200356328	

Incident ID	NAPP2200356328
District RP	
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Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	N/A	
☐ Yes ☐ No		
	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
N/A		
	Initial Re	esponse
The responsible	party must undertake the following actions immediately	unless they could create a safety hazard that would result in injury
✓ The source of the rele	ease has been stopped.	
★ The impacted area has	is been secured to protect human health and	the environment.
■ Released materials have a compared to the compared	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and	managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
NA		
has begun, please attach	a narrative of actions to date. If remedial e	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
I hereby certify that the info	rmation given above is true and complete to the h	est of my knowledge and understand that pursuant to OCD rules and
regulations all operators are public health or the environi failed to adequately investig	required to report and/or file certain release notified ment. The acceptance of a C-141 report by the O ate and remediate contamination that pose a threa	ications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In esponsibility for compliance with any other federal, state, or local laws
Adrian Ba Printed Name:	aker	Title: SSHE Coordinator
	Rayer	
Signature:	ian Dako	Date:
adrian.baker@exx	conmobil.com	Telephone:
OCD Only		
Received by: Ramona	Marcus	Date: 1/3/2022

Location:	JRU DI 1		
Spill Date:	12/20/2021		
	Area 1		
Approximate A	rea =	360.00	sq. ft.
Average Satura	tion (or depth) of spill =	0.50	inches
Average Porosity Factor = 0.03			
	VOLUME OF LEAK		
Total Condensa	te =	0.00	bbls
Total Produced Water = 0.08 k		bbls	
	TOTAL VOLUME OF LE	AK	
Total Condens	ate=	0.00	bbls
Total Produced Water = 5.08		bbls	
	TOTAL VOLUME RECOVI	ERED	
Total Condens	ate=	0.00	bbls
Fotal Produced Water = 5.00 bbls			bbls

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 70018

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	70018
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
rmarcus	None	1/3/2022

e of New Mexico

Incident ID	NAPP2200356328
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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.

☐ Laboratory data including chain of custody

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1	NAPP2200356328	

Incident ID	NAPP2200356328
11101001111112	IVAI I 2200330328
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.				
Printed Name: Adrian Baker	Title:Environmental Coordinator			
Signature: Odrian Bats	Date:03/18/2022			
email: <u>adrian.baker@exxonmobil.com</u> T	Selephone: (432) 236-3808			
OCD O. I.				
OCD Only				
Received by:	Date:			

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Incident ID	NAPP2200356328
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.					
 □ Detailed description of proposed remediation technique □ Scaled sitemap with GPS coordinates showing delineation points □ Estimated volume of material to be remediated □ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC □ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 					
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.					
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.					
Contamination does not cause an imminent risk to human health, the environment, or groundwater.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and					
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Printed Name: Adr <u>ian Baker Title: Environmental Coordinator</u>					
Printed Name: Adrian Baker Title: Environmental Coordinator Outsian Baker Date:03/18/2022					
email: <u>adrian.baker@exxonmobil.com</u> Telephone: <u>(432 236-3808</u>					
OCD Only					
Received by: Date:					
☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved					
Signature: Jennifer Nobui Date: 03/22/2022					



WSP USA

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

March 18, 2022

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

RE: Deferral Request
JRU DI 1 Battery
Incident Number NAPP2200356328
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Deferral Request detailing site assessment, soil sampling, and excavation activities at the JRU DI 1 Battery (Site) in Unit F, Section 21, Township 22 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of produced water at the Site. Based on field observations, field screening activities, and soil sampling laboratory analytical results, XTO is submitting this Deferral Request, describing remediation that has occurred and requesting deferral of final remediation for Incident Number NAPP2200356328 until the Site is reconstructed, and/or the well pad is abandoned.

RELEASE BACKGROUND

On December 20, 2021, a flow line connection developed a pin hole leak due to corrosion. Approximately 5.08 barrels (bbls) of produced water were released onto the surface of the well pad within and around active production equipment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 5 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on January 3, 2022. The release was assigned Incident Number NAPP2200356328.

SITE CHARACTERIZATION

WSP characterized the Site 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). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-03015, located approximately 0.97 miles southeast of the Site. The groundwater well was most



recently measured in January 2004 has a reported depth to groundwater of 262 feet bgs and a total depth of 1,318 feet bgs. Ground surface elevation at the groundwater well location is 3,285 feet above mean sea level (amsl), which is approximately 118 feet higher in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is a dry riverine, located approximately 886 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

Benzene: 10 milligrams per kilogram (mg/kg)

• Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg

Total petroleum hydrocarbons (TPH): 100 mg/kg

Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On February 15, 2022, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected two preliminary assessment soil samples (SS01 through SS02) within the release extent from a depth of approximately 0.5 feet bgs to assess the impacted soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed, and a photographic log is included in Attachment 2.

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range



organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 through SS02 indicated that TPH and/or chloride concentrations exceeded the Closure Criteria. Based on visible staining in the release extent, elevated field screening results, and laboratory analytical results for the preliminary soil samples, excavation and delineation activities were warranted.

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

Between February 24, 2022 and February 28, 2022, WSP personnel were at the Site to oversee delineation and excavation activities. Boreholes BH01 through BH08 were advanced via hand auger to a maximum depth of 8 feet bgs within and around the release extent, to assess the lateral and vertical extent of the impacted soil. Delineation soil samples were collected from each borehole from depths ranging from 1-foot bgs to 8 feet bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride using a PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The boreholes and delineation soil sample locations are depicted on Figure 2.

Following delineation activities, impacted soil was excavated from accessible areas of release extent, as indicated by visible staining, field screening activities, and laboratory analytical results for the preliminary soil samples. Excavation activities were performed using a backhoe, transport vehicle, and hydrovac. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Excavation could not be completed in the release areas immediately adjacent to or beneath active production equipment where remediation would require major facility deconstruction and where XTO safety policy restricts soil disturbing activities to a 2-foot radius of active production equipment.

Following excavation of impacted soil to the extent possible, WSP collected 5-point composite soil samples representing at least 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Floor soil samples FS01 through FS04 were collected from the floor of the excavations from a depth of 1.5 feet bgs. Due to the shallow depth of the excavations, the floor samples were also representative of the sidewalls. Further excavation of impacted soil beyond the excavation extents was limited by the presence the active production equipment. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above at Eurofins in Midland, Texas.



The western excavation extent measured approximately 550 square feet and the eastern excavation extent measured approximately 50 square feet. A total of approximately 35 cubic yards of impacted soil was removed from the release extent during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Carlsbad, New Mexico. After completion of confirmation sampling, the excavation areas were secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples collected from boreholes BH01 through BH03, advanced within the release extent, indicated that chloride concentrations exceeded the Closure Criteria at depths ranging from 1-foot to 4 feet bgs. The terminal depth sample from boreholes BH01 through BH03 was compliant with the Closure Criteria and provided vertical delineation of impacted soil within the release extent.

Laboratory analytical results for delineation soil samples collected from boreholes BH04 through BH08, advanced around the release extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria, and provided lateral delineation of the release and impacted soil left in place near active production equipment.

Laboratory analytical results for excavation floor samples FS01, FS02, and FS03 indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria, and no further excavation was required in this area. Laboratory analytical results for excavation floor sample FS04 indicated that chloride concentrations exceeded the Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 4.

DEFERRAL REQUEST

A total of approximately 35 cubic yards of impacted soil were excavated from the Site; however, residual impacted soil was left in place immediately adjacent to active production equipment for compliance with XTO safety policy, which restricts earth moving activities within 2 feet of active production equipment. This XTO safety policy is established to protect workers and reduce the likelihood of compromising the foundation of the production equipment. Impacted soil was left in place immediately adjacent to or beneath active production equipment where remediation would require a major facility deconstruction, and in the area around floor sample FS04 and borehole BH03 for compliance with XTO safety policy.

The impacted soil left in place is delineated vertically by delineation soil sample BH03E collected at 8 feet bgs and laterally by delineation soil samples from boreholes BH04 through BH08 collected at depths ranging from 1 foot bgs to 4 feet bgs. An estimated 45 cubic yards of impacted soil remains in place, based on the release extent and delineation soil samples listed above, that



were compliant with the Closure Criteria. Floor sample FS04, borehole BH03, the deferral area, and all lateral delineation soil sample locations are depicted on Figure 4.

XTO requests to complete final remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. WSP and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The majority of the released fluids were recovered during initial response activities and the impacted soil remaining in place is limited to the area immediately adjacent or beneath active production equipment. XTO requests deferral of final remediation for Incident Number NAPP2200356328.

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

Sincerely,

WSP USA Inc.

Korey Kennedy

Korey Kernedy

Consultant, Environmental Scientist

Aimee Cole

Sinée Cole

Sr. Consultant, Environmental Scientist

cc: Shelby Pennington, XTO

Adrian Baker, XTO

Bureau of Land Management

Attachments:

Figure 1 Site Location Map

Figure 2 Soil Sample Locations

Figure 3 Excavation Soil Sample Locations

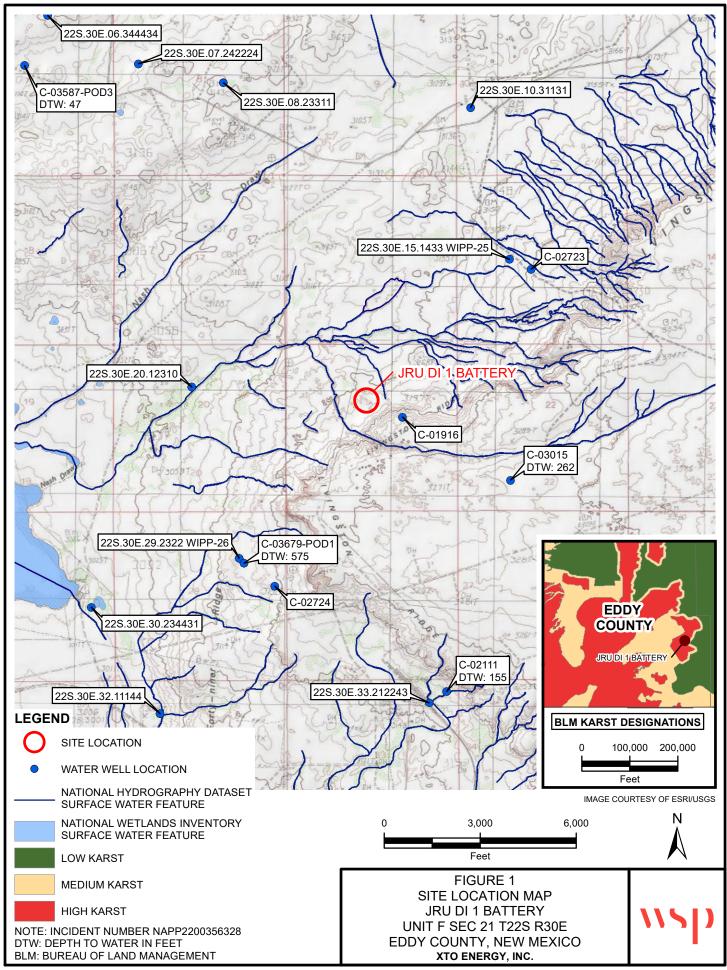
Figure 4 Deferral Area

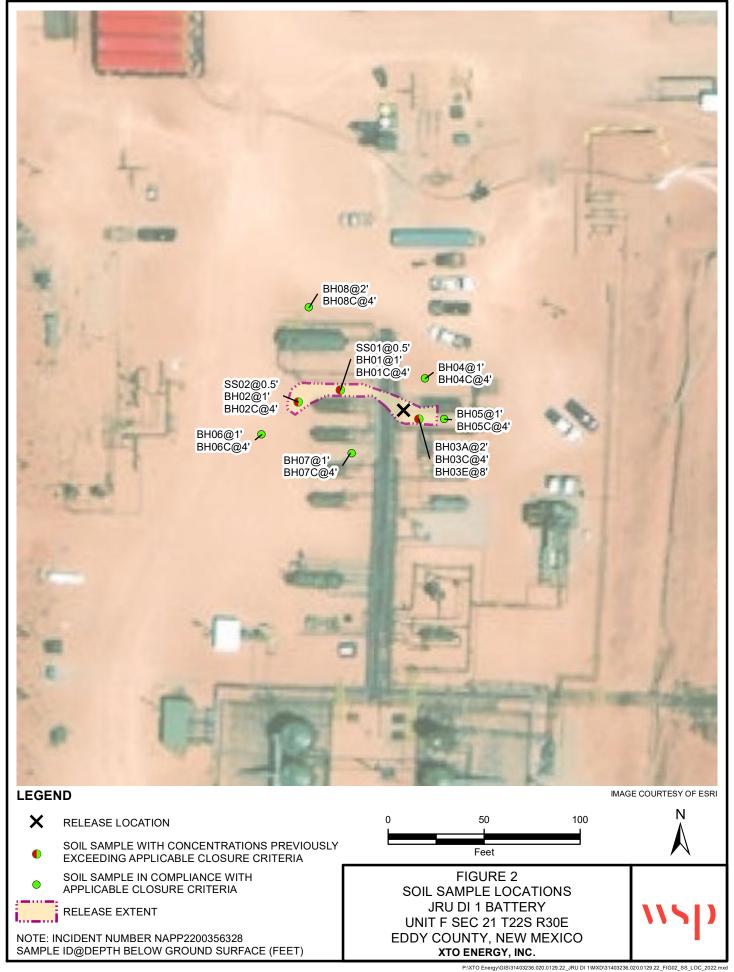
Table 1 Soil Analytical Results
Attachment 1 Referenced Well Records

Attachment 2 Photographic Log

Attachment 3 Lithologic/Sampling Logs

Attachment 4 Laboratory Analytical Reports







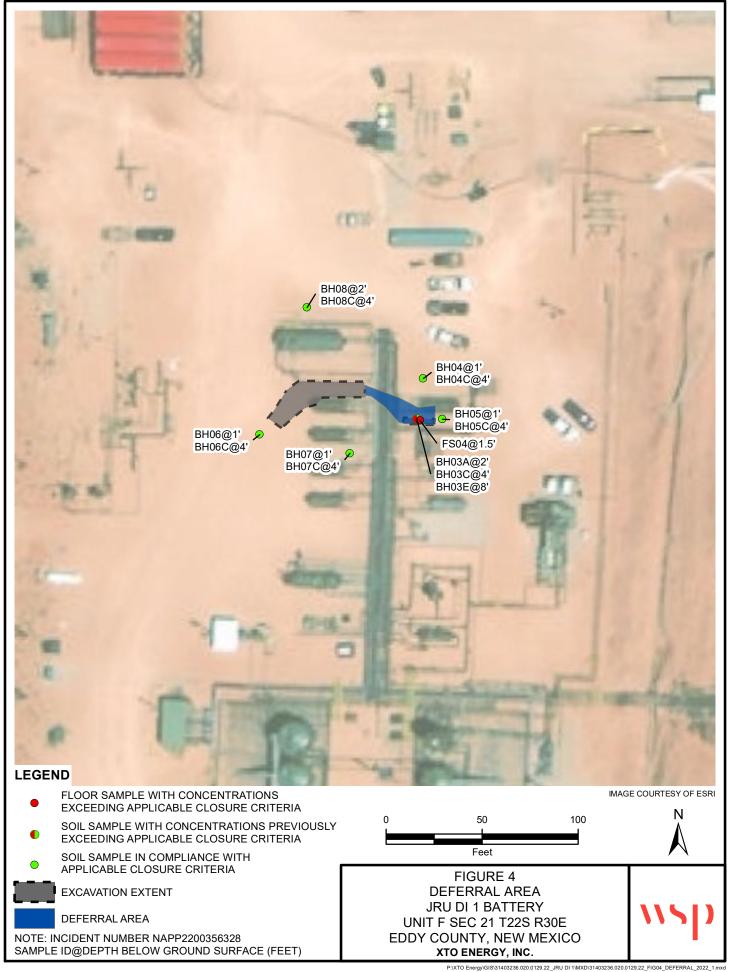


Table 1

Soil Analytical Results

JRU DI 1 Battery
Incident Number NAPP2200356328
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	Closure Criteria (N	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
Preliminary Asse	ssment Samples									
SS01	02/15/2022	0.5	<0.00200	0.0435	750	<49.9	<49.9	750	750	13,800
SS02	02/15/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	14,700
Delineation Samp	ples									
BH01	02/24/2022	1'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	3,110
BH01C	02/24/2022	4'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	195
BH02	02/24/2022	1'	<0.00202	< 0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	2,150
BH02C	02/24/2022	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	31.0
вноза	02/24/2022	2'	<0.00199	<0.00398	<50.0	62.2	<50.0	62.2	62.2	11,400
внозс	02/24/2022	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,950
внозе	02/24/2022	8'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	450
BH04	02/25/2022	1'	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	264
BH04C	02/25/2022	4'	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	136
BH05	02/25/2022	1'	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	141
вно5С	02/25/2022	4'	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	232
BH06	02/25/2022	1'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	246
вно6С	02/25/2022	4'	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	110
BH07	02/28/2022	1'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	276
вно7С	02/28/2022	4'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	98.3
BH08	02/28/2022	2'	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	197
BH08C	02/28/2022	4'	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	281

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Table 1

Soil Analytical Results JRU DI 1 Battery Incident Number NAPP2200356328 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 (N	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
Excavation Floor S	Samples									
FS01	02/28/2022	1.5	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	529
FS02	02/28/2022	1.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	268
FS03	02/28/2022	1.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	147
FS04	02/28/2022	1.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	3,180

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 - 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 Greyed data represents samples that were excavated



New Mexico Office of the State Engineer

Water Right Summary

WR File Number: C 03015 Subbasin: CUB Cross Reference: -

Primary Purpose: MON MONITORING WELL

Primary Status: PMT PERMIT

Total Acres: Subfile: - Header: -

Total Diversion: 0 Cause/Case: -

Owner: U.S. DEPT OF ENERGY - WIPP

Contact: HAROLD JOHNSON

Documents on File

Status From/

Trn # Doc File/Act 1 2 Transaction Desc. To Acres Diversion Consumptive

<u>288525 EXPL 2003-11-25</u> PMT LOG C 03015 MONITORING T 0 0

WELL

Current Points of Diversion

(NAD83 UTM in meters)

POD Number Well Tag Source 64Q16Q4Sec Tws Rng X Y Other Location Desc

<u>C 03015</u> Artesian 1 4 3 22 22S 30E 606099 3582353*

An () after northing value indicates UTM location was derived from PLSS - see Help

Source

Acres Diversion CU Use Priority Source Description

0 MON GW

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability for any particular purpose of the data.

2/3/22 7:56 AM WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number**

Q64 Q16 Q4 Sec Tws Rng

X Y

C 03015

3 22 22S 30E

606099 3582353*

Driller License: 331

Driller Company:

SBQ2, LLC DBA STEWART BROTHERS DRILLING

CO.

Driller Name:

Drill Start Date: 01/21/2004 **Drill Finish Date:**

01/25/2004

Plug Date:

Log File Date:

03/04/2004

PCW Rcv Date:

Depth Well:

Source:

Artesian

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

6.00

1316 feet

Depth Water:

262 feet

Water Bearing Stratifications:

Top Bottom Description

362

385 Other/Unknown

Casing Perforations:

Top Bottom

261 386

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/3/22 7:57 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access)

Data Category:		Geographic Area:		
Site Information	~	United States	~	GO

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- Full News

USGS 322252103541401 22S.30E.20.12310

Available data for this site SUMMARY OF ALL AVAILABLE DATA
GO

Well Site

DESCRIPTION:

Latitude 32°22'52", Longitude 103°54'14" NAD27 Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 129 feet

Land surface altitude: 3,065 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer. Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1952-02-26	1959-02-19	2
Revisions	Unavailable (site:0) (timeseries:		

Released to Imaging: 3/22/2022 3:32:03 PM

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OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
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U.S. Department of the Interior | U.S. Geological Survey

Title: NWIS Site Information for USA: Site Inventory

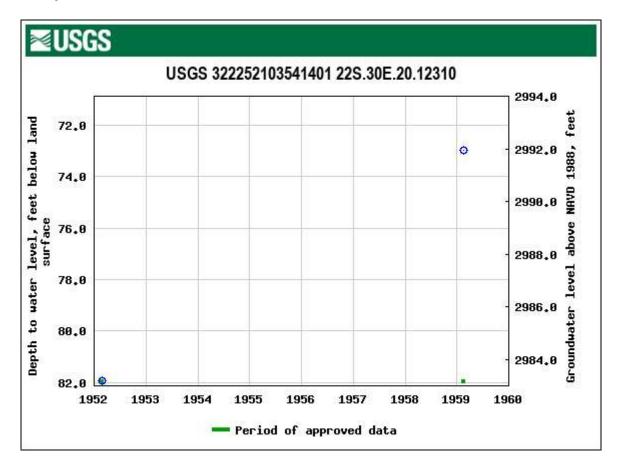
URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=322252103541401

Page Contact Information: New Mexico Water Data Support Team

Page Last Modified: 2022-02-03 09:48:59 EST

0.26 0.25 sdww02







PHOTOGRAPHIC LOG				
XTO Energy, Inc	JRU DI 1 Battery	NAPP2200356328		
	Eddy County, NM			

Photo No.	Date		
1	December 21,		
	2021		
Western view of release area.			

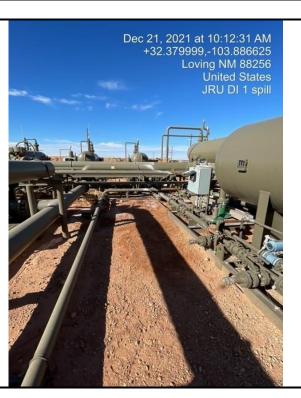
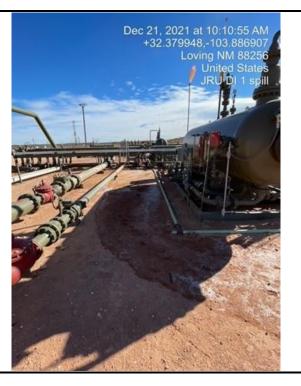


Photo No.	Date	
2	December 21,	
	2021	
Eastern view of release area		





PHOTOGRAPHIC LOG				
XTO Energy, Inc	JRU DI 1 Battery	NAPP2200356328		
	Eddy County, NM			

Photo No.	Date	
3	February 24, 2022	
Western excavation area.		



	BH or MW Name: BH O MW Name: B													
Lat/Lo					Field Scre	ening:			Logged By: N Hole Diameter:	K	Total Depth:	1ger		
				88687 erials / Comm	ents:	. Chlor			Depth to Water:					
Moisture Content	Chloride (ppm) Vapor (ppm) Staining Sample # Sample (tt pds) Debtth (tt pds) USCS/Rock Symbol								Lithok	Backfill / Well Completion				
P	7.4 (2968)	0.0	- 2	Вноі	1	0	CCHE 5P				won, fine to			
	3.2 621.6)	0.0		BHOLA	2-	- 2		SAND		n, fine	grain, silt;			
H	1.2 (< 162-4)	0.3		BHQ B	3 -	3	ř	SAA	+ abun	dout g	ypsm			
8	1.2	0.1		вна с	4 -	4	TD&I/	SA	A					
					-						ii.			
					-		18							
					-									
					1						nt.			
					-									
				1.5										
					2									
					-									

Received by OCD: 3/18/2022 12:31:06 PM

Lat/Lo	.3798	LITH	OLOG		Field Scre	BH or MW Name: BH O) Site Name: JR U D1 1 RP or Incident Number: NAPP 2200 356 32 8 WSP Job Number: Logged By: NK Method: Hand Aug U Hole Diameter: Total Depth: Al Depth to Water:		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Backfill / Lithology/Remarks Well Completion
	6.2 2016) 2.4 (380.8 1.2 (162.4) (1162.4)	0.0		BHOZA BHOZB BHOZG	-	2 3 4	SP	CALICHE, tan-light brown, fine to medium grain, sult, not correct dated, no stain, no odor. SAND, brown, fine grain, poorly loxted, no stain, no odor SAA+ trace gypen SHA+ aburdant gypen

Received by OCD: 3/18/2022 12:31:06 PM

eleased to Imaging: 3/22/2022 3:32:03 PM		11.]	Car	OS West Island Tue	PUSA Simperar S w Mission	88220	BH or MW Name: Date: 2 2 4 22 Site Name: JRU DJ 1 RP or Incident Number: NAPP 2200356328 WSP Job Number: Logged By: NK Method: Hand Augur						
: 3/	LITHOLOGIC / SOIL SAMPLING LOG Lat/Long: Field Screening:									Logged By: NK Hole Diameter:	Method: F		ger_		
22/2	Lavet	Jilg.					Chlor	ides		Troic Blattico.	Depth to V		-8	コ	
022	Backf	Backfill or Well Construction Materials / Comments:													
3:32:03 PM	Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lithology/Remarks				/ ion	
+	0	(H.R.) 6.6 (0,684.	0.2	7	BH 3	1 -	-	SP	brow	, trace calic on, give to m solidated, no	ledium g	rou'ned			
•		(μ.ε.) 4.ψ (12,46¢) (μ.ε.)	0.2		BH3A	2 -		Dec	SAA	+ abundant	8it.				
		5.8 (7901.6) (LR)	φ		BH3B	3 - -	3		SA	4-		28			
٠		6.6 [657.6]	φ		BH3C	4-	4			t trace g					
	D	3.6 161.6 LA	ϕ		BH3D	6 -	6	98	SAA	+ no calcute	on gy per	m.			
· &		2.8 492.8	/	7	BH3E	8 -	8		SA	4					
		112.8)			- - - -									
						- - -			-						
						- - -			,				277.1		
						- - -									

Page 33 of 208

Received by OCD: 3/18/2022 12:31:06 PM

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eased to Imaging: 3/22/2022 3:32:03 PM		11.	LITH	OLOG		08 West : shed No	n Museus	BH or MW Name: BH 04 O2 2 5 22 Site Name: JRU DI 1 RP or Incident Number: NAPP 2 2 00 3 5 6 3 2 8 WSP Job Number: Logged By: NK Method: Hand Augur						
3/22/2022	Lat/Lo 32 Backfi	ng: . 379(Il or Well C			8687 erials / Comm	Field Scre	enina:		·	Hole Diameter: Total Depth: 4 Depth to Water:				
3:32:03 PM	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgs)	US			//Remarks		Back We Comp	ell
1:53	DI	1.& 235.2	4	2	BH 4	1	1	CCHE	tan,	the trace fire gravitately bor	silt, red, us rtod, s	light brown monolidately no staun,		
1:58	D(1.8 235.2		7	844A	2 -	2	SP	SAN	D, trace grouned,	wilt, to	orowan,		
2:00	D	1.6 (196)	ϕ	N	BH4B	3 -	3		rar	r, unconsi	oli date	ed, pearly		
2:06	D	(162 H	ϕ	7	ВН4С	4	4		SA	A for 3	1			
									SA	A for 4				

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Re									
Released to Imaging: 3/22/2022 3:32:03 PM		11	1)			P USA Stevens S a Makkot	BH or MW Name: BH 05 2 2 5 2 2 Site Name: RP or Incident Number: NAPP 2200 356 3 2 8 WSP Job Number:	
ig: 3,			LITH	OLO	GIC / SOIL			G	Logged By: NK Method: Hard Auger
/22/2	Lat/Long: Field Screening: TPH, Chlonic							on'de	Hole Diameter: Total Depth: Depth to Water:
022	Backf	ill or Well C	Constructi	on Mat	erials / Comm	ents:	,		
8:32:03 PM	Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	1 2 5	Lithology/Remarks Backfill / Well Completio
2:2:	D	\ (\(\)(\)(\)(\)	ф	7	BH 5	1	-	CHE SP	GALICHE, ton-light brown,
2: 3:	1	1624)	\$	N	ВНБД	2-			SIND, brown, bre grained, abundant with, no stain, no odor, abundant gypsm
36		1.8	ф	N	BH5B	3 -			SAA + trace gyperr
:40	0 (1.8	ф)	7	8H 5 C	4			SAA
3									

leased to Imaging: 3/22/2022 3:32:03 PM	Lat/Lo				GIC / SOIL	SAMPL Field Scree	ING LO	88220 G		Site Name:	TRU D IN Number: NAP mber: NK	Pd20035632	& Augu	٨.
3:32:03 PM	Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lit	hology/Remarl	(S	W	kfill / 'ell oletion
3:00		1.6 16.21	φ	2 2 2	846A 846B 846C	1 2 3 4	2 3 4	SP	brown unw	growne indolidar, to the property of the prope	ed, poort outed, no outed, no o	ght brown, y sorted, o stain, no ed, reddish u sorted to materately itain, no ada . plasticity		

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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: 890-1980-1

Laboratory Sample Delivery Group: 31403236.020.0129

Client Project/Site: JRU DI 1

For:

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

Attn: Tacoma Morrissey

MRAMER

Authorized for release by: 2/24/2022 6:52:34 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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М

 Client: WSP USA Inc.
 Laboratory Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Table of Contents

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1980-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Qualifiers

GC VOA

Qualifier **Qualifier Description**

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

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

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

Glossary

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

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

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

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

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

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Job ID: 890-1980-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1980-1

Receipt

The samples were received on 2/21/2022 10:14 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-1980-1) and SS02 (890-1980-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-1980-1), SS02 (890-1980-2), (890-1972-A-1-E), (890-1972-A-1-F MS) and (890-1972-A-1-G MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Lab Sample ID: 890-1980-1

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Client Sample ID: SS01

Date Collected: 02/15/22 13:40 Date Received: 02/21/22 10:14

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/22/22 15:21	02/23/22 16:09	1
Toluene	0.00516		0.00200	mg/Kg		02/22/22 15:21	02/23/22 16:09	1
Ethylbenzene	0.00839		0.00200	mg/Kg		02/22/22 15:21	02/23/22 16:09	1
m-Xylene & p-Xylene	0.0299		0.00399	mg/Kg		02/22/22 15:21	02/23/22 16:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/22/22 15:21	02/23/22 16:09	1
Xylenes, Total	0.0299		0.00399	mg/Kg		02/22/22 15:21	02/23/22 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	181	S1+	70 - 130			02/22/22 15:21	02/23/22 16:09	1
1,4-Difluorobenzene (Surr)	76		70 - 130			02/22/22 15:21	02/23/22 16:09	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0435		0.00399	mg/Kg			02/24/22 17:03	1
Method: 8015 NM - Diesel Range	•							
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
_	•		RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 02/23/22 09:21	
Analyte	Result 750	Qualifier			<u>D</u>	Prepared		
Analyte Total TPH	Result 750 ge Organics (Di	Qualifier			<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result 750 ge Organics (Di	Qualifier RO) (GC) Qualifier	49.9	mg/Kg			02/23/22 09:21	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 750 ge Organics (DI Result	Qualifier RO) (GC) Qualifier	49.9	mg/Kg		Prepared	02/23/22 09:21 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 750 ge Organics (Di Result <49.9	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 02/22/22 09:05	02/23/22 09:21 Analyzed 02/22/22 17:11	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 750 ge Organics (DI Result <49.9	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/22/22 09:05 02/22/22 09:05	02/23/22 09:21 Analyzed 02/22/22 17:11 02/22/22 17:11	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 750	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/22/22 09:05 02/22/22 09:05	02/23/22 09:21 Analyzed 02/22/22 17:11 02/22/22 17:11	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result 750	Qualifier RO) (GC) Qualifier U	49.9 RL 49.9 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/22/22 09:05 02/22/22 09:05 02/22/22 09:05 Prepared	02/23/22 09:21 Analyzed 02/22/22 17:11 02/22/22 17:11 Analyzed	Dil Fac
Analyte Total TPH 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	Result 750	Qualifier RO) (GC) Qualifier U Qualifier S1-	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/22/22 09:05 02/22/22 09:05 02/22/22 09:05 Prepared 02/22/22 09:05	02/23/22 09:21 Analyzed 02/22/22 17:11 02/22/22 17:11 Analyzed 02/22/22 17:11	Dil Fac 1 1 Dil Fac 1 Dil Fac
Analyte Total TPH 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	Result 750	Qualifier RO) (GC) Qualifier U Qualifier S1-	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 02/22/22 09:05 02/22/22 09:05 02/22/22 09:05 Prepared 02/22/22 09:05	02/23/22 09:21 Analyzed 02/22/22 17:11 02/22/22 17:11 Analyzed 02/22/22 17:11	Dil Fac Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: SS02

Date Collected: 02/15/22 13:45

Lab Sample ID: 890-1980-2

Matrix: Solid

Date Collected: 02/15/22 13:45 Date Received: 02/21/22 10:14

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/22/22 15:21	02/23/22 16:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/22/22 15:21	02/23/22 16:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/22/22 15:21	02/23/22 16:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/22/22 15:21	02/23/22 16:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/22/22 15:21	02/23/22 16:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/22/22 15:21	02/23/22 16:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	185	S1+	70 - 130			02/22/22 15:21	02/23/22 16:37	1

Eurofins Carlsbad

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-1980-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: SS02 Lab Sample ID: 890-1980-2 Date Collected: 02/15/22 13:45

14700

Date Received: 02/21/22 10:14

Matrix: Solid

02/23/22 12:17

Sample Depth: 0.5

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	73		70 - 130			02/22/22 15:21	02/23/22 16:37	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/24/22 17:03	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/23/22 09:21	1
Method: 8015B NM - Diesel Rang	• • •	, , ,						
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	Result	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared 02/22/22 09:05	Analyzed 02/22/22 17:31	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result	Qualifier U			<u>D</u>	<u>.</u>		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	02/22/22 09:05	02/22/22 17:31	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	02/22/22 09:05	02/22/22 17:31	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	02/22/22 09:05	02/22/22 17:31	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9	Qualifier U U U	49.9 49.9 49.9	mg/Kg	<u>D</u>	02/22/22 09:05 02/22/22 09:05 02/22/22 09:05	02/22/22 17:31 02/22/22 17:31 02/22/22 17:31	1
Analyte	Result	Qualifier U U Qualifier	49.9 49.9 49.9 Limits	mg/Kg	<u> </u>	02/22/22 09:05 02/22/22 09:05 02/22/22 09:05 Prepared	02/22/22 17:31 02/22/22 17:31 02/22/22 17:31 Analyzed	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier S1-	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	02/22/22 09:05 02/22/22 09:05 02/22/22 09:05 Prepared 02/22/22 09:05	02/22/22 17:31 02/22/22 17:31 02/22/22 17:31 Analyzed 02/22/22 17:31	Dil Fac

252

mg/Kg

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11473-A-8-E MS	Matrix Spike	171 S1+	81	
880-11473-A-8-F MSD	Matrix Spike Duplicate	170 S1+	82	
890-1980-1	SS01	181 S1+	76	
890-1980-2	SS02	185 S1+	73	
LCS 880-20070/1-A	Lab Control Sample	175 S1+	88	
LCSD 880-20070/2-A	Lab Control Sample Dup	160 S1+	90	
MB 880-20024/5-A	Method Blank	120	73	
MB 880-20070/5-A	Method Blank	118	71	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limit
		1CO1	OTPH1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-1972-A-1-F MS	Matrix Spike	70	60 S1-	
390-1972-A-1-G MSD	Matrix Spike Duplicate	72	61 S1-	
390-1980-1	SS01	69 S1-	72	
90-1980-2	SS02	69 S1-	79	
CS 880-20026/2-A	Lab Control Sample	101	106	
CSD 880-20026/3-A	Lab Control Sample Dup	100	106	
MB 880-20026/1-A	Method Blank	75	91	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-1980-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20024/5-A

Matrix: Solid Analysis Batch: 20021 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20024

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/22/22 08:49	02/22/22 12:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/22/22 08:49	02/22/22 12:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/22/22 08:49	02/22/22 12:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/22/22 08:49	02/22/22 12:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/22/22 08:49	02/22/22 12:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/22/22 08:49	02/22/22 12:32	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	02/22/22 08.	49 02/22/22 12:32	1
1,4-Difluorobenzene (Surr)	73		70 - 130	02/22/22 08.	49 02/22/22 12:32	1

Lab Sample ID: MB 880-20070/5-A

Client Sample ID: Method Blank Total/NA

ch: 20070

Matrix: Solid	Prep Type: ⁻
Analysis Batch: 20021	Prep Batcl
MB MB	

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	J	0.00200	mg/Kg		02/22/22 15:21	02/23/22 09:15	1
Toluene	<0.00200 U	J	0.00200	mg/Kg		02/22/22 15:21	02/23/22 09:15	1
Ethylbenzene	<0.00200 U	J	0.00200	mg/Kg		02/22/22 15:21	02/23/22 09:15	1
m-Xylene & p-Xylene	<0.00400 U	J	0.00400	mg/Kg		02/22/22 15:21	02/23/22 09:15	1
o-Xylene	<0.00200 U	J	0.00200	mg/Kg		02/22/22 15:21	02/23/22 09:15	1
Xylenes, Total	<0.00400 U	J	0.00400	mg/Kg		02/22/22 15:21	02/23/22 09:15	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	02/22/22 15:21	02/23/22 09:15	1
1,4-Difluorobenzene (Surr)	71		70 - 130	02/22/22 15:21	02/23/22 09:15	1

Lab Sample ID: LCS 880-20070/1-A

Matrix: Solid

Analysis Batch: 20021

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

Prep Batch: 20070

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09229		mg/Kg		92	70 - 130	
Toluene	0.100	0.1031		mg/Kg		103	70 - 130	
Ethylbenzene	0.100	0.1091		mg/Kg		109	70 - 130	
m-Xylene & p-Xylene	0.200	0.2323		mg/Kg		116	70 - 130	
o-Xylene	0.100	0.1211		mg/Kg		121	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	175	S1+	70 - 130
1.4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-20070/2-A

Matrix: Solid

Analysis Batch: 20021

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

Prep Batch: 20070

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08443		mg/Kg		84	70 - 130	9	35

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-20070/2-A

Matrix: Solid

Analysis Batch: 20021

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20070

	Spike	LCSD	LCSD				%Rec.		RPD
nalyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
oluene	0.100	0.09693		mg/Kg		97	70 - 130	6	35
thylbenzene	0.100	0.1019		mg/Kg		102	70 - 130	7	35
n-Xylene & p-Xylene	0.200	0.2146		mg/Kg		107	70 - 130	8	35
-Xylene	0.100	0.1125		mg/Kg		112	70 - 130	7	35
	chalyte Coluene Ithylbenzene n-Xylene & p-Xylene -Xylene	Added Invalide Added Invalide 0.100 Ithylbenzene 0.100 In-Xylene & p-Xylene 0.200	knalyte Added Result foluene 0.100 0.09693 thylbenzene 0.100 0.1019 n-Xylene & p-Xylene 0.200 0.2146	Added olluene Added olluene Result olluene Qualifier chtylbenzene 0.100 0.09693 n-Xylene & p-Xylene 0.200 0.2146	Added column Result qualifier Unit oluene 0.100 0.09693 mg/Kg thylbenzene 0.100 0.1019 mg/Kg n-Xylene & p-Xylene 0.200 0.2146 mg/Kg	Added Result Qualifier Unit Unit Unit Unit Unit Unit Unit Unit	Added olluene Result olluene Qualifier olluene Unit olluene D %Recommendation Sthylbenzene 0.100 0.09693 mg/Kg 97 sthylbenzene 0.100 0.1019 mg/Kg 102 n-Xylene & p-Xylene 0.200 0.2146 mg/Kg 107	Added column Result Qualifier Unit D %Rec NRec Limits oluene 0.100 0.09693 mg/Kg 97 70 - 130 ithylbenzene 0.100 0.1019 mg/Kg 102 70 - 130 n-Xylene & p-Xylene 0.200 0.2146 mg/Kg 107 70 - 130	Added column Result pullifier Unit D %Rec pullifier Limits RPD pullifier Solutione 0.100 0.09693 mg/Kg 97 70 - 130 6 Sthylbenzene 0.100 0.1019 mg/Kg 102 70 - 130 7 n-Xylene & p-Xylene 0.200 0.2146 mg/Kg 107 70 - 130 8

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 880-11473-A-8-E MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 20021 Prep Batch: 20070

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.1038		mg/Kg		104	70 - 130	
Toluene	<0.00200	U	0.0998	0.1150		mg/Kg		115	70 - 130	
Ethylbenzene	<0.00200	U	0.0998	0.1147		mg/Kg		115	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2364		mg/Kg		118	70 - 130	
o-Xylene	<0.00200	U	0.0998	0.1185		mg/Kg		119	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

Lab Sample ID: 880-11473-A-8-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 20021 Prep Batch: 20070

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0992	0.07988		mg/Kg		81	70 - 130	26	35
Toluene	<0.00200	U	0.0992	0.09431		mg/Kg		95	70 - 130	20	35
Ethylbenzene	<0.00200	U	0.0992	0.09956		mg/Kg		100	70 - 130	14	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.2088		mg/Kg		105	70 - 130	12	35
o-Xylene	<0.00200	U	0.0992	0.1094		mg/Kg		110	70 - 130	8	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	170	S1+	70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

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

Lab Sample ID: MB 880-20026/1-A

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Analysis Batch: 20030 Prep Batch: 20026

MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 02/22/22 09:05 02/22/22 11:45 1

(GRO)-C6-C10

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Client: WSP USA Inc. Job ID: 890-1980-1 SDG: 31403236.020.0129 Project/Site: JRU DI 1

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

Lab Sample ID: MB 880-20026/1-A **Matrix: Solid**

Analysis Batch: 20030

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 20026

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 11:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/22/22 09:05	02/22/22 11:45	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	02/22/22 09:05	02/22/22 11:45	1
o-Terphenyl	91		70 - 130	02/22/22 09:05	02/22/22 11:45	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-20026/2-A **Matrix: Solid** Prep Type: Total/NA Prep Batch: 20026

Analysis Batch: 20030

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	849.9		mg/Kg		85	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1050		mg/Kg		105	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-20026/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 20030							Prep	Batch:	20026
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	802.5		mg/Kg		80	70 - 130	6	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	986.2		mg/Kg		99	70 - 130	6	20

C10-C28)

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

Lab Sample ID: 890-1972-A-1-F MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 20030

	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	1225		mg/Kg		123	70 - 130
Diesel Range Organics (Over	<50.0	U	1000	1240		ma/Ka		122	70 - 130

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	70		70 - 130
o-Terphenyl	60	S1-	70 - 130

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Prep Batch: 20026

Job ID: 890-1980-1

Client: WSP USA Inc. Project/Site: JRU DI 1

SDG: 31403236.020.0129

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

Lab Sample ID: 890-1972-A-1-G MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA Prep Batch: 20026

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 20030 Sample Sample Spike MSD MSD RPD Result Qualifier Limit Analyte Added Result Qualifier Unit %Rec Limits RPD Gasoline Range Organics <50.0 U 998 1256 mg/Kg 126 70 - 130 2 20 (GRO)-C6-C10

1271

mg/Kg

998

Diesel Range Organics (Over

C10-C28)

70 - 130 126 2 20

MSD MSD

<50.0 U

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 72 o-Terphenyl 61 S1-70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20032/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20033

MB MB

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

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

Analysis Batch: 20033

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

Lab Sample ID: LCSD 880-20032/3-A

Matrix: Solid

Analysis Batch: 20033

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

Lab Sample ID: 890-1914-A-4-F MS

Matrix: Solid

Analysis Batch: 20033

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

Lab Sample ID: 890-1914-A-4-G MSD

Matrix: Solid

Analysis Ratch: 20033

Alialysis Batch, 20033											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	808	F1	248	1016	F1	mg/Kg		84	90 - 110	1	20

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

GC VOA

Analysis Batch: 20021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Total/NA	Solid	8021B	20070
890-1980-2	SS02	Total/NA	Solid	8021B	20070
MB 880-20024/5-A	Method Blank	Total/NA	Solid	8021B	20024
MB 880-20070/5-A	Method Blank	Total/NA	Solid	8021B	20070
LCS 880-20070/1-A	Lab Control Sample	Total/NA	Solid	8021B	20070
LCSD 880-20070/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20070
880-11473-A-8-E MS	Matrix Spike	Total/NA	Solid	8021B	20070
880-11473-A-8-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20070

Prep Batch: 20024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20024/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 20070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Total/NA	Solid	5035	
890-1980-2	SS02	Total/NA	Solid	5035	
MB 880-20070/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20070/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20070/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11473-A-8-E MS	Matrix Spike	Total/NA	Solid	5035	
880-11473-A-8-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Total/NA	Solid	Total BTEX	
890-1980-2	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Total/NA	Solid	8015NM Prep	
890-1980-2	SS02	Total/NA	Solid	8015NM Prep	
MB 880-20026/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20026/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1972-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1972-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Total/NA	Solid	8015B NM	20026
890-1980-2	SS02	Total/NA	Solid	8015B NM	20026
MB 880-20026/1-A	Method Blank	Total/NA	Solid	8015B NM	20026
LCS 880-20026/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20026
LCSD 880-20026/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20026
890-1972-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	20026
890-1972-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20026

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QC Association Summary

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

GC Semi VOA

Analysis Batch: 20124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Total/NA	Solid	8015 NM	
890-1980-2	SS02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Soluble	Solid	DI Leach	
890-1980-2	SS02	Soluble	Solid	DI Leach	
MB 880-20032/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20032/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20032/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-A-4-F MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1914-A-4-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1980-1	SS01	Soluble	Solid	300.0	20032
890-1980-2	SS02	Soluble	Solid	300.0	20032
MB 880-20032/1-A	Method Blank	Soluble	Solid	300.0	20032
LCS 880-20032/2-A	Lab Control Sample	Soluble	Solid	300.0	20032
LCSD 880-20032/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20032
890-1914-A-4-F MS	Matrix Spike	Soluble	Solid	300.0	20032
890-1914-A-4-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20032

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Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1980-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: SS01

Date Received: 02/21/22 10:14

Lab Sample ID: 890-1980-1 Date Collected: 02/15/22 13:40

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20070	02/22/22 15:21	MR	XEN MID
Total/NA	Analysis	8021B		1	20021	02/23/22 16:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	20265	02/24/22 17:03	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20124	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20030	02/22/22 17:11	AJ	XEN MID
Soluble	Leach	DI Leach			20032	02/22/22 12:00	CH	XEN MID
Soluble	Analysis	300.0		50	20033	02/23/22 12:08	CH	XEN MID

Client Sample ID: SS02 Lab Sample ID: 890-1980-2

Date Collected: 02/15/22 13:45 Matrix: Solid

Date Received: 02/21/22 10:14

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20070	02/22/22 15:21	MR	XEN MID
Total/NA	Analysis	8021B		1	20021	02/23/22 16:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	20265	02/24/22 17:03	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20124	02/23/22 09:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20026	02/22/22 09:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20030	02/22/22 17:31	AJ	XEN MID
Soluble	Leach	DI Leach			20032	02/22/22 12:00	СН	XEN MIC
Soluble	Analysis	300.0		50	20033	02/23/22 12:17	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Laboratory: Eurofins Midland

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

Authority	Pre	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-21-22	06-30-22	
The following analytes	are included in this report, bu	t the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for wh	
the agency does not of	fer certification.	•	3,	.,	
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	.,	
0 ,		Matrix Solid	, , ,		

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Method Summary

 Client: WSP USA Inc.
 Job ID: 890-1980-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Carlsbad

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU DI 1 Job ID: 890-1980-1

SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1980-1	SS01	Solid	02/15/22 13:40	02/21/22 10:14	0.5
890-1980-2	SS02	Solid	02/15/22 13:45	02/21/22 10:14	0.5

Project Manager: Company Name: WSP USA Inc. Tacoma Morrissey

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1298 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) Rompany Name: XTO Energy XTO Energy State City, State ZIP: Carlsbad, NM 88220 Chair Company Name: State Street Reportir									
nain of Custody las, Tx (214) 902-0300 San Antonio, Tx (210) 509-33 . Paso, Tx (915)585-3443 Lubbock, Tx (806)794-129 . 355-0900) Atlanta, GA (770-449-8800) Tampa, FL (Kyle Littrell XTO Energy 3104 E Green Street Carlsbad, NM 88220	ł		Address:	Company Name:	Bill to: (if different)	Hobbs,NM (575-392-7550) Phoenix.AZ (480	Midland,TX (432-704-5440) El	Houston,TX (281) 240-4200 Dal	Ω
<u> </u>		Carlsbad, NM 88220	3104 E Green Street	XTO Energy	Kyle Littrell)-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (81:	_ Paso,TX (915)585-3443 Lubbock,TX (806)794-1296	las,TX (214) 902-0300 San Antonio,TX (210) 509-3334	Chain of Custody
www.xeng work Or Work O m: UST/PST □PRP □ s of Project: g:Level □Level]	Reporting:Level	State of Project:	Program: UST/PST ☐PRP ☐Brownfields ☐RRC ☐Superfund ☐	Work Order Comments	www.xenco.com		4/5	Work Order No:

i MiM	Relinquished by: (Signature	Notice: Signature of this docu of service. Xenco will be liable of Xenco. A minimum charge	Total 200.7 / 6010 Circle Method(s) a					\$802	SS01	Sample Identification	Sample Custody Seals:	Cooler Custody Seals:	Received Intact:	Temperature (°C):	SAMPLE RECEIPT	me:	P.O. Number:	Project Number:	Project Name:	Phone: 432	City, State ZIP: Mic	Address: 330
En (life (m	ignature) Received i	ment and relinquishment of samples const e only for the cost of samples and shall not of \$75.00 will be applied to each project an	200.8 / 6020: and Metal(s) to be analyzed		1			S 02/15/2022	S 02/15/2022	Natrix Date Sampled	NO (NA)	Yes No NA Corre	MINI)	1.6/1.4	Temp Blank: Yes No	Alexis Castro	12/20/2021	31403236.020.0129	JRU DI 1	432.236.3849	Midland, TX 79705	3300 North A Street
	Received by: (Signature)	itutes a valid purchase order fro assume any responsibility for a d a charge of \$5 for each sampl	8RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8RC			\		1345 0.5'	1340 0.5'	Time Depth	Total Containers:	Correction Factor: -0, 2	1001	Thermometer ID	Wet Ice: Yes No	Due Date:	Rush: 24h/	Routine	Turn Around	Email: Alexis.Castr	City, State ZIP	Address:
ට නි	Date/Time Relinquished by: (Sig	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75,00 will be applied to each project and a charge of \$7 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	Al Sb As Ba Be B Cd Ca Cr Co RA Sb As Ba Be Cd Cr Co Cu P					×		Numb TPH (E BTEX (PA 8	0=8	3021 300.)	S				ANALYSIS REQUEST	Email: Alexis.Castro@wsp.com; Tacoma.Morrissey@wsp.com	P: Carlsbad, NM 88220	3104 E Green Street
	by: (Signature) Received by: (Signature)	assigns standard terms and conditions due to circumstances beyond the control ored unless previously negotiated.	Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr b Mn Mo Ni Se Ag Tl U 1631/2										890-1980 Chain of Custody						QUEST	Deliverables: EDD ADaPT L	Level III	State of Floject:
	Date/Time		2 Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg					Pan	10.1	Sample Comments 5	lab, if received by 4:30pm	TAT starts the day recevied by the					CC: 1082551001	API: 30-015-47514	Work Order Notes	Other:	☐RRP ☐Level IV ☐]

Login Sample Receipt Checklist

 Client: WSP USA Inc.
 Job Number: 890-1980-1

 SDG Number: 31403236.020.0129

SDG Number: 31403236.020.0129

List Source: Eurofins Carlsbad

Login Number: 1980 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	N/A	

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<6mm (1/4").

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1980-1 SDG Number: 31403236.020.0129

List Source: Eurofins Midland List Creation: 02/22/22 02:59 PM

Creator: Rodriguez, Leticia

Login Number: 1980

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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

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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: 890-2031-1

Laboratory Sample Delivery Group: 31403236.020.0129

Client Project/Site: JRU DI 1

For:

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

Attn: Tacoma Morrissey

MRAMER

Authorized for release by: 3/8/2022 12:28:29 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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www.eurofinsus.com/Env

Released to Imaging: 3/22/2022 3:32:03 PM

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: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

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Definitions/Glossary

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Qualifiers

GC VOA

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

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.

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

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

PRES Presumptive

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Eurofins Carlsbad

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Case Narrative

Client: WSP USA Inc. Job ID: 890-2031-1 SDG: 31403236.020.0129 Project/Site: JRU DI 1

Job ID: 890-2031-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2031-1

Receipt

The samples were received on 3/1/2022 9:19 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

GC VOA

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

GC Semi VOA

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

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

Eurofins Carlsbad 3/8/2022

Lab Sample ID: 890-2031-1

Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: FS01

Date Collected: 02/28/22 12:15 Date Received: 03/01/22 09:19

Sample Depth: 1.5

	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:01	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/04/22 07:45	03/04/22 17:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:01	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/04/22 07:45	03/04/22 17:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			03/04/22 07:45	03/04/22 17:01	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/04/22 07:45	03/04/22 17:01	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/06/22 20:58	1
Analyte Total TPH		Qualifier	RL 49.8	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8		49.8	mg/Kg	— <u> </u>			
							03/02/22 17:02	1
							03/02/22 17:02	1
Method: 8015B NM - Diesel Ran							03/02/22 17:02	·
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier	RL	Unit mg/Kg	<u>D</u>	Prepared 03/02/22 08:58		·
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U			<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.8	Qualifier U	49.8	mg/Kg	<u>D</u>	03/02/22 08:58	Analyzed 03/02/22 15:23	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.8 <49.8	Qualifier U U U	49.8	mg/Kg	<u>D</u>	03/02/22 08:58	Analyzed 03/02/22 15:23 03/02/22 15:23	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.8 <49.8 <49.8	Qualifier U U U	49.8 49.8 49.8	mg/Kg	<u>D</u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58	Analyzed 03/02/22 15:23 03/02/22 15:23	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.8 <49.8 <49.8 <49.8 <80.8 <40.8	Qualifier U U U	49.8 49.8 49.8 Limits	mg/Kg	<u> </u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58 Prepared	Analyzed 03/02/22 15:23 03/02/22 15:23 03/02/22 15:23 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.8 <49.8 <49.8 <49.8 <49.8 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0	Qualifier U U Qualifier	49.8 49.8 49.8 Limits 70 - 130	mg/Kg	<u>D</u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58 Prepared 03/02/22 08:58	Analyzed 03/02/22 15:23 03/02/22 15:23 03/02/22 15:23 Analyzed 03/02/22 15:23	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	49.8 49.8 49.8 Limits 70 - 130	mg/Kg	<u>D</u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58 Prepared 03/02/22 08:58	Analyzed 03/02/22 15:23 03/02/22 15:23 03/02/22 15:23 Analyzed 03/02/22 15:23	Dil Fac

Client Sample ID: FS02

Date Collected: 02/28/22 12:25 Date Received: 03/01/22 09:19

Sample Depth: 1.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 17:21	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 17:21	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 17:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		03/04/22 07:45	03/04/22 17:21	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 17:21	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		03/04/22 07:45	03/04/22 17:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			03/04/22 07:45	03/04/22 17:21	1

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Lab Sample ID: 890-2031-2

Matrix: Solid

Lab Sample ID: 890-2031-2

Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: FS02

Date Collected: 02/28/22 12:25 Date Received: 03/01/22 09:19

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
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Surrogate	%Recovery Quality	fier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	03/04/22 07:45	03/04/22 17:21	1

Method:	Total BT	FX - Tota	al BTFX	Calculation

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403 L	J	0.00403	mg/Kg			03/06/22 20:58	1

Mothod: 9015 NM - Diocol Pango Oro	rapice (DPO) (CC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/02/22 17:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 15:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 15:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 15:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surroyate	76Kecovery	Qualifier	LIIIIII	Frepareu	Allalyzeu	DIIF
1-Chlorooctane	98		70 - 130	03/02/22 08:58	03/02/22 15:44	
o-Terphenyl	98		70 - 130	03/02/22 08:58	03/02/22 15:44	
_						

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	268		4.97	mg/Kg			03/07/22 11:27	1

Client Sample ID: FS03 Lab Sample ID: 890-2031-3 Matrix: Solid

Date Collected: 02/28/22 12:35 Date Received: 03/01/22 09:19

Sample Depth: 1.5

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

nic Compounds (GC)						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:42	1
<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:42	1
<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:42	1
<0.00401	U	0.00401	mg/Kg		03/04/22 07:45	03/04/22 17:42	1
<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 17:42	1
<0.00401	U	0.00401	mg/Kg		03/04/22 07:45	03/04/22 17:42	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
105		70 - 130			03/04/22 07:45	03/04/22 17:42	1
98		70 - 130			03/04/22 07:45	03/04/22 17:42	1
	Result <0.00200 <0.00200 <0.00200 <0.00401 <0.00200 <0.00401		Result Qualifier RL	Result Qualifier RL Unit <0.00200	Result Qualifier RL Unit D <0.00200	Result Qualifier RL Unit D Prepared <0.00200	Result Qualifier RL Unit D Prepared Analyzed <0.00200

ı						
ı	Mothod	Total	DTEV	Total	DTEV	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401	ma/Ka			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/02/22 17:02	1

Lab Sample ID: 890-2031-3

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Client Sample ID: FS03

Date Collected: 02/28/22 12:35 Date Received: 03/01/22 09:19

Sample Depth: 1.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 16:05	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 16:05	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 16:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			03/02/22 08:58	03/02/22 16:05	1
o-Terphenyl	108		70 - 130			03/02/22 08:58	03/02/22 16:05	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FS04

Date Collected: 02/28/22 12:45

Lab Sample ID: 890-2031-4

Matrix: Solid

Date Received: 03/01/22 09:19

Sample Depth: 1.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 18:02	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 18:02	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 18:02	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/04/22 07:45	03/04/22 18:02	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/04/22 07:45	03/04/22 18:02	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/04/22 07:45	03/04/22 18:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			03/04/22 07:45	03/04/22 18:02	1
1,4-Difluorobenzene (Surr)	102		70 - 130			03/04/22 07:45	03/04/22 18:02	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/06/22 20:58	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/02/22 17:02	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 16:26	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 16:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			03/02/22 08:58	03/02/22 16:26	1
o-Terphenyl	99		70 - 130			03/02/22 08:58	03/02/22 16:26	1

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Lab Sample ID: 890-2031-4

Client: WSP USA Inc.

Job ID: 890-2031-1

Project/Site: JRU DI 1

SDG: 31403236.020.0129

Client Sample ID: FS04

Date Collected: 02/28/22 12:45 Date Received: 03/01/22 09:19

Sample Depth: 1.5

Method: 300.0 - Anions, Ion Chron	natography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3180		99.2	mg/Kg			03/05/22 19:39	20

Client Sample ID: BH07

Date Collected: 02/28/22 13:35

Lab Sample ID: 890-2031-5

Matrix: Solid

Date Collected: 02/28/22 13:35 Date Received: 03/01/22 09:19

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 18:23	
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 18:23	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 18:23	
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		03/04/22 07:45	03/04/22 18:23	
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 18:23	
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		03/04/22 07:45	03/04/22 18:23	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	102		70 - 130			03/04/22 07:45	03/04/22 18:23	
1,4-Difluorobenzene (Surr)	97		70 - 130			03/04/22 07:45	03/04/22 18:23	1
· Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399	mg/Kg			03/06/22 20:58	•
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/02/22 17:02	•
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 16:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 16:46	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 16:46	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	107		70 - 130			03/02/22 08:58	03/02/22 16:46	1
o-Terphenyl	108		70 - 130			03/02/22 08:58	03/02/22 16:46	:
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Lab Sample ID: 890-2031-6

Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: BH07C

Date Collected: 02/28/22 14:00 Date Received: 03/01/22 09:19

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/04/22 07:45	03/04/22 18:43	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/04/22 07:45	03/04/22 18:43	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/04/22 07:45	03/04/22 18:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/04/22 07:45	03/04/22 18:43	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/04/22 07:45	03/04/22 18:43	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/04/22 07:45	03/04/22 18:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			03/04/22 07:45	03/04/22 18:43	1
1,4-Difluorobenzene (Surr)	97		70 - 130			03/04/22 07:45	03/04/22 18:43	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range	•		Б.	11-14	_	Danagad	Amakanad	D!! F
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/02/22 17:02	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
	go o. gaoo (=	(00)						
Analyte	• •	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	• •	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared 03/02/22 08:58	Analyzed 03/02/22 17:07	
Gasoline Range Organics	Result	Qualifier U			<u>D</u>	<u>·</u>		1
5 5 ,	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	03/02/22 08:58	03/02/22 17:07	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9	Qualifier U U U	49.9	mg/Kg	<u> </u>	03/02/22 08:58	03/02/22 17:07	1 1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 <49.9 <49.9	Qualifier U U U	49.9 49.9 49.9	mg/Kg	<u> </u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58	03/02/22 17:07 03/02/22 17:07 03/02/22 17:07	1 1 1 1 Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	Result	Qualifier U U U	49.9 49.9 49.9 <i>Limits</i>	mg/Kg	<u> </u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58 Prepared	03/02/22 17:07 03/02/22 17:07 03/02/22 17:07 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u> </u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58 Prepared 03/02/22 08:58	03/02/22 17:07 03/02/22 17:07 03/02/22 17:07 Analyzed 03/02/22 17:07	Dil Fac
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 U Qualifier	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	03/02/22 08:58 03/02/22 08:58 03/02/22 08:58 Prepared 03/02/22 08:58	03/02/22 17:07 03/02/22 17:07 03/02/22 17:07 Analyzed 03/02/22 17:07	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Client Sample ID: BH08 Lab Sample ID: 890-2031-7

Date Collected: 02/28/22 15:05 Date Received: 03/01/22 09:19

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/04/22 07:45	03/04/22 19:04	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/04/22 07:45	03/04/22 19:04	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/04/22 07:45	03/04/22 19:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/04/22 07:45	03/04/22 19:04	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/04/22 07:45	03/04/22 19:04	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/04/22 07:45	03/04/22 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			03/04/22 07:45	03/04/22 19:04	1

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Matrix: Solid

Lab Sample ID: 890-2031-7

Job ID: 890-2031-1

Client: WSP USA Inc. Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: BH08

Date Collected: 02/28/22 15:05 Date Received: 03/01/22 09:19

Sample Depth: 2

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
mothodi coz iz rolatilo olgalilo compt	Julius (33)	(Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	03/04/22 07:45	03/04/22 19:04	1

Method: Total E	BTEX - Total	BTEX C	alculation
Mictiliou. Total L	JIEA - IOLUI	DILA	aiculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/06/22 20:58	1

ı			
ı	Mothod: 8015 NM -	Diesel Range Organio	e (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/02/22 17:02	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/02/22 08:58	03/02/22 17:28	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/02/22 08:58	03/02/22 17:28	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/02/22 08:58	03/02/22 17:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qua	ialifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102	70 - 130	03/02/22 08:58	03/02/22 17:28	1
o-Terphenyl	101	70 - 130	03/02/22 08:58	03/02/22 17:28	1

Method: 300	.0 - Anions, Ion	Chromatograph	y - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	197		5.00	mg/Kg			03/08/22 12:05	1

Client Sample ID: BH08C Lab Sample ID: 890-2031-8 Matrix: Solid

Date Collected: 02/28/22 15:25 Date Received: 03/01/22 09:19

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

		()						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 19:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 19:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 19:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/04/22 07:45	03/04/22 19:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 19:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/04/22 07:45	03/04/22 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			03/04/22 07:45	03/04/22 19:24	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/04/22 07:45	03/04/22 19:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/02/22 17:02	1

Lab Sample ID: 890-2031-8

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Client Sample ID: BH08C

Date Collected: 02/28/22 15:25 Date Received: 03/01/22 09:19

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 17:49	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 17:49	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/02/22 08:58	03/02/22 17:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			03/02/22 08:58	03/02/22 17:49	1
o-Terphenyl	100		70 - 130			03/02/22 08:58	03/02/22 17:49	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11741-A-1-H MS	Matrix Spike	105	102	
880-11741-A-1-I MSD	Matrix Spike Duplicate	104	102	
890-2031-1	FS01	102	98	
890-2031-2	FS02	102	98	
890-2031-3	FS03	105	98	
890-2031-4	FS04	110	102	
890-2031-5	BH07	102	97	
890-2031-6	BH07C	103	97	
890-2031-7	BH08	102	98	
890-2031-8	BH08C	104	98	
LCS 880-20668/1-A	Lab Control Sample	97	101	
LCSD 880-20668/2-A	Lab Control Sample Dup	99	102	
MB 880-20668/5-A	Method Blank	104	95	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11908-A-1-B MS	Matrix Spike	107	105	
880-11908-A-1-C MSD	Matrix Spike Duplicate	93	87	
390-2031-1	FS01	109	114	
390-2031-2	FS02	98	98	
390-2031-3	FS03	104	108	
390-2031-4	FS04	98	99	
390-2031-5	BH07	107	108	
390-2031-6	BH07C	101	100	
390-2031-7	BH08	102	101	
390-2031-8	BH08C	102	100	
_CS 880-20659/2-A	Lab Control Sample	104	97	
_CSD 880-20659/3-A	Lab Control Sample Dup	107	95	
MB 880-20659/1-A	Method Blank	101	110	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20668/5-A

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20668

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 11:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/04/22 07:45	03/04/22 11:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/04/22 07:45	03/04/22 11:31	1

мв мв

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/04/22 07	3/04/22 11:31	1 1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/04/22 07	:45 03/04/22 11:31	1

Lab Sample ID: LCS 880-20668/1-A

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20668

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1062		mg/Kg		106	70 - 130	
Toluene	0.100	0.1031		mg/Kg		103	70 - 130	
Ethylbenzene	0.100	0.09905		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.2035		mg/Kg		102	70 - 130	
o-Xylene	0.100	0.09826		mg/Kg		98	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-20668/2-A

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	Control San	iple Dup
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Prep Type: Total/NA

Prep Batch: 20668

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1116		mg/Kg		112	70 - 130	5	35
Toluene	0.100	0.1082		mg/Kg		108	70 - 130	5	35
Ethylbenzene	0.100	0.1035		mg/Kg		104	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2121		mg/Kg		106	70 - 130	4	35
o-Xylene	0.100	0.1025		mg/Kg		102	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery Qu	ıalifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-11741-A-1-H MS

Matrix: Solid

Analysis Batch: 20854

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

Prep Batch: 20668

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0988	0.09517		mg/Kg		96	70 - 130	
Toluene	< 0.00199	U	0.0988	0.09286		mg/Kg		94	70 - 130	

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

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

Lab Sample ID: 880-11741-A-1-H MS Client Sample ID: Matrix Spike

Matrix: Solid Analysis Batch: 20854

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00199 U 0.0988 0.08880 90 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.198 0.1824 mg/Kg 92 70 - 130 0.0988 o-Xylene <0.00199 U 0.08865 90 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1 4-Difluorobenzene (Surr)	102	70 130

Lab Sample ID: 880-11741-A-1-I MSD

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 20668

Prep Batch: 20668 Rec. RPD

Sample Sample Spike MSD MSD %Rec. Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits Benzene <0.00199 U 0.100 0.09169 mg/Kg 92 70 - 130 4 35 Toluene <0.00199 0.100 0.08797 mg/Kg 87 70 - 130 5 35 Ethylbenzene <0.00199 U 0.100 0.08420 84 70 - 130 5 35 mg/Kg 0.200 35 m-Xylene & p-Xylene <0.00398 U 0.1735 mg/Kg 87 70 - 130 5 <0.00199 U 0.100 0.08423 70 - 130 o-Xylene mg/Kg 84

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-20659/1-A

Matrix: Solid

Analysis Batch: 20655

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20659

Prep Batch: 20

	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		03/02/22 08:58	03/02/22 09:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 09:04	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/02/22 08:58	03/02/22 09:04	1

MB MB

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Surrogate	%Recovery	Qualifier	Limits	Prej	pared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/02/2	22 08:58	03/02/22 09:04	1
o-Terphenyl	110		70 - 130	03/02/2	22 08:58	03/02/22 09:04	1

Lab Sample ID: LCS 880-20659/2-A

Matrix: Solid

Analysis Batch: 20655

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

Tep Type. Total/NA

Prep Batch: 20659

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1064		mg/Kg		106	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	884.1		mg/Kg		88	70 - 130	
C10-C28)								

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Job ID: 890-2031-1

SDG: 31403236.020.0129

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

LCS LCS

Lab Sample ID: LCS 880-20659/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Client: WSP USA Inc.

Project/Site: JRU DI 1

Analysis Batch: 20655

Prep Type: Total/NA

Prep Batch: 20659

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 97 70 - 130

Lab Sample ID: LCSD 880-20659/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 20655

Prep Type: Total/NA

Prep Batch: 20659

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1088 109 70 - 1302 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 892.2 mg/Kg 89 70 - 13020

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 880-11908-A-1-B MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 20655

Prep Type: Total/NA

Prep Batch: 20659

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 1000 1050 mg/Kg 103 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 949.8 mg/Kg 95 70 - 130 C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 107 o-Terphenyl 105 70 - 130

Lab Sample ID: 880-11908-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 20655

Prep Type: Total/NA Prep Batch: 20659

Sample Sample MSD MSD RPD Spike %Rec. Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit <50.0 U 998 973.2 96 Gasoline Range Organics mg/Kg 70 - 130 8 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 998 800.0 mg/Kg 80 70 - 130 17 20

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	87		70 - 130

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Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: Method Blank

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20806/1-A

Matrix: Solid

Analysis Batch: 20936

Prep Type: Soluble

MB MB Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 03/07/22 19:36

Lab Sample ID: LCS 880-20806/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20936

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 200 201.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-20806/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20936

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 203.3 200 mg/Kg 102 90 - 110

Lab Sample ID: 880-11928-A-8-D MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20936

MS MS Spike %Rec. Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 104 250 353.8 100 90 - 110 mg/Kg

Lab Sample ID: 880-11928-A-8-E MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20936

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 104 250 364.0 mg/Kg 104 90 - 110

Lab Sample ID: MB 880-20681/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20963

мв мв Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 03/05/22 13:14

Lab Sample ID: LCS 880-20681/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20963

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

Lab Sample ID: LCSD 880-20681/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20963

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 257.4 mg/Kg 103 90 - 110 20

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Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2030-A-7-D MS

Matrix: Solid

Analysis Batch: 20963

Analysis Batom 20000										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	77.5		250	316.5		mg/Kg		96	90 - 110	

Lab Sample ID: 890-2030-A-7-E MSD

Matrix: Solid

Analysis Batch: 20963

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	77.5		250	321.4		mg/Kg		98	90 - 110	2	20

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

GC VOA

Prep Batch: 20668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-1	FS01	Total/NA	Solid	5035	
890-2031-2	FS02	Total/NA	Solid	5035	
890-2031-3	FS03	Total/NA	Solid	5035	
890-2031-4	FS04	Total/NA	Solid	5035	
890-2031-5	BH07	Total/NA	Solid	5035	
890-2031-6	BH07C	Total/NA	Solid	5035	
890-2031-7	BH08	Total/NA	Solid	5035	
890-2031-8	BH08C	Total/NA	Solid	5035	
MB 880-20668/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20668/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20668/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11741-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
880-11741-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-1	FS01	Total/NA	Solid	8021B	20668
890-2031-2	FS02	Total/NA	Solid	8021B	20668
890-2031-3	FS03	Total/NA	Solid	8021B	20668
890-2031-4	FS04	Total/NA	Solid	8021B	20668
890-2031-5	BH07	Total/NA	Solid	8021B	20668
890-2031-6	BH07C	Total/NA	Solid	8021B	20668
890-2031-7	BH08	Total/NA	Solid	8021B	20668
890-2031-8	BH08C	Total/NA	Solid	8021B	20668
MB 880-20668/5-A	Method Blank	Total/NA	Solid	8021B	20668
LCS 880-20668/1-A	Lab Control Sample	Total/NA	Solid	8021B	20668
LCSD 880-20668/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20668
880-11741-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	20668
880-11741-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20668

Analysis Batch: 20993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-1	FS01	Total/NA	Solid	Total BTEX	
890-2031-2	FS02	Total/NA	Solid	Total BTEX	
890-2031-3	FS03	Total/NA	Solid	Total BTEX	
890-2031-4	FS04	Total/NA	Solid	Total BTEX	
890-2031-5	BH07	Total/NA	Solid	Total BTEX	
890-2031-6	BH07C	Total/NA	Solid	Total BTEX	
890-2031-7	BH08	Total/NA	Solid	Total BTEX	
890-2031-8	BH08C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 20655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-1	FS01	Total/NA	Solid	8015B NM	20659
890-2031-2	FS02	Total/NA	Solid	8015B NM	20659
890-2031-3	FS03	Total/NA	Solid	8015B NM	20659
890-2031-4	FS04	Total/NA	Solid	8015B NM	20659
890-2031-5	BH07	Total/NA	Solid	8015B NM	20659
890-2031-6	внотс	Total/NA	Solid	8015B NM	20659

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Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

GC Semi VOA (Continued)

Analysis Batch: 20655 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-7	BH08	Total/NA	Solid	8015B NM	20659
890-2031-8	BH08C	Total/NA	Solid	8015B NM	20659
MB 880-20659/1-A	Method Blank	Total/NA	Solid	8015B NM	20659
LCS 880-20659/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20659
LCSD 880-20659/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20659
880-11908-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	20659
880-11908-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20659

Prep Batch: 20659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-1	FS01	Total/NA	Solid	8015NM Prep	
890-2031-2	FS02	Total/NA	Solid	8015NM Prep	
890-2031-3	FS03	Total/NA	Solid	8015NM Prep	
890-2031-4	FS04	Total/NA	Solid	8015NM Prep	
890-2031-5	BH07	Total/NA	Solid	8015NM Prep	
890-2031-6	BH07C	Total/NA	Solid	8015NM Prep	
890-2031-7	BH08	Total/NA	Solid	8015NM Prep	
890-2031-8	BH08C	Total/NA	Solid	8015NM Prep	
MB 880-20659/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20659/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20659/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11908-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11908-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2031-1	FS01	Total/NA	Solid	8015 NM	
890-2031-2	FS02	Total/NA	Solid	8015 NM	
890-2031-3	FS03	Total/NA	Solid	8015 NM	
890-2031-4	FS04	Total/NA	Solid	8015 NM	
890-2031-5	BH07	Total/NA	Solid	8015 NM	
890-2031-6	BH07C	Total/NA	Solid	8015 NM	
890-2031-7	BH08	Total/NA	Solid	8015 NM	
890-2031-8	BH08C	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2031-1	FS01	Soluble	Solid	DI Leach	_
890-2031-2	FS02	Soluble	Solid	DI Leach	
890-2031-3	FS03	Soluble	Solid	DI Leach	
890-2031-4	FS04	Soluble	Solid	DI Leach	
MB 880-20681/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20681/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20681/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2030-A-7-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2030-A-7-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

HPLC/IC

Leach Batch: 20806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-5	BH07	Soluble	Solid	DI Leach	
890-2031-6	BH07C	Soluble	Solid	DI Leach	
890-2031-7	BH08	Soluble	Solid	DI Leach	
890-2031-8	BH08C	Soluble	Solid	DI Leach	
MB 880-20806/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20806/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20806/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11928-A-8-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11928-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-5	BH07	Soluble	Solid	300.0	20806
890-2031-6	BH07C	Soluble	Solid	300.0	20806
890-2031-7	BH08	Soluble	Solid	300.0	20806
890-2031-8	BH08C	Soluble	Solid	300.0	20806
MB 880-20806/1-A	Method Blank	Soluble	Solid	300.0	20806
LCS 880-20806/2-A	Lab Control Sample	Soluble	Solid	300.0	20806
LCSD 880-20806/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20806
880-11928-A-8-D MS	Matrix Spike	Soluble	Solid	300.0	20806
880-11928-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20806

Analysis Batch: 20963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2031-1	FS01	Soluble	Solid	300.0	20681
890-2031-2	FS02	Soluble	Solid	300.0	20681
890-2031-3	FS03	Soluble	Solid	300.0	20681
890-2031-4	FS04	Soluble	Solid	300.0	20681
MB 880-20681/1-A	Method Blank	Soluble	Solid	300.0	20681
LCS 880-20681/2-A	Lab Control Sample	Soluble	Solid	300.0	20681
LCSD 880-20681/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20681
890-2030-A-7-D MS	Matrix Spike	Soluble	Solid	300.0	20681
890-2030-A-7-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20681

Eurofins Carlsbad

Job ID: 890-2031-1 SDG: 31403236.020.0129

Project/Site: JRU DI 1

Client: WSP USA Inc.

Lab Sample ID: 890-2031-1

Client Sample ID: FS01 Date Collected: 02/28/22 12:15

Matrix: Solid

Date Received: 03/01/22 09:19

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	20854	03/04/22 17:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20993	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20724	03/02/22 17:02	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20659	03/02/22 08:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20655	03/02/22 15:23	AJ	XEN MID
Soluble	Leach	DI Leach			20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		1	20963	03/07/22 11:15	SC	XEN MID

Lab Sample ID: 890-2031-2

Matrix: Solid

Date Collected: 02/28/22 12:25 Date Received: 03/01/22 09:19

Client Sample ID: FS02

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Prep 5035 XEN MID Total/NA 20668 03/04/22 07:45 KL Total/NA 8021B 03/04/22 17:21 XEN MID Analysis 1 20854 KL Total/NA Total BTEX 20993 03/06/22 20:58 XEN MID Analysis 1 A.I Total/NA Analysis 8015 NM 20724 03/02/22 17:02 XEN MID 20659 XEN MID Total/NA Prep 8015NM Prep 03/02/22 08:58 DM Total/NA Analysis 8015B NM 20655 03/02/22 15:44 AJ XEN MID Soluble XEN MID Leach DI Leach 20681 03/02/22 10:50 CH Soluble Analysis 300.0 1 20963 03/07/22 11:27 SC XEN MID

Client Sample ID: FS03

Lab Sample ID: 890-2031-3

XEN MID

Matrix: Solid

Date Collected: 02/28/22 12:35 Date Received: 03/01/22 09:19

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	20854	03/04/22 17:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20993	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20724	03/02/22 17:02	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20659	03/02/22 08:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20655	03/02/22 16:05	AJ	XEN MID
Soluble	Leach	DI Leach			20681	03/02/22 10:50	СН	XEN MID

Lab Sample ID: 890-2031-4 **Client Sample ID: FS04** Date Collected: 02/28/22 12:45

20963

03/07/22 11:39

Date Received: 03/01/22 09:19

Analysis

300.0

Soluble

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	20854	03/04/22 18:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20993	03/06/22 20:58	AJ	XEN MID

Eurofins Carlsbad

Matrix: Solid

Client: WSP USA Inc. Job ID: 890-2031-1 Project/Site: JRU DI 1 SDG: 31403236.020.0129

Client Sample ID: FS04

Date Collected: 02/28/22 12:45 Date Received: 03/01/22 09:19

Lab Sample ID: 890-2031-4

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	20724	03/02/22 17:02	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20659	03/02/22 08:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20655	03/02/22 16:26	AJ	XEN MID
Soluble	Leach	DI Leach			20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		20	20963	03/05/22 19:39	SC	XEN MID

Client Sample ID: BH07 Lab Sample ID: 890-2031-5

Date Collected: 02/28/22 13:35 Date Received: 03/01/22 09:19

Batch Batch Dilution Batch Prepared Prep Type Method Run Number or Analyzed Type Factor Analyst Lab 5035 XEN MID Total/NA Prep 20668 03/04/22 07:45 KL Total/NA Analysis 8021B 20854 03/04/22 18:23 KL XEN MID 1 Total/NA Total BTEX XEN MID Analysis 1 20993 03/06/22 20:58 AJ Total/NA Analysis 8015 NM 20724 03/02/22 17:02 XEN MID 1 AJXEN MID Total/NA Prep 8015NM Prep 20659 03/02/22 08:58 DM XEN MID Total/NA Analysis 8015B NM 20655 03/02/22 16:46 1 AJSoluble Leach DI Leach 20806 03/03/22 12:05 СН XEN MID XEN MID Soluble Analysis 300.0 1 20936 03/07/22 22:09 СН

Client Sample ID: BH07C Lab Sample ID: 890-2031-6 Date Collected: 02/28/22 14:00 **Matrix: Solid**

Date Received: 03/01/22 09:19

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	20854	03/04/22 18:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20993	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20724	03/02/22 17:02	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20659	03/02/22 08:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20655	03/02/22 17:07	AJ	XEN MID
Soluble	Leach	DI Leach			20806	03/03/22 12:05	CH	XEN MID
Soluble	Analysis	300.0		1	20936	03/08/22 11:59	CH	XEN MID

Client Sample ID: BH08 Lab Sample ID: 890-2031-7

Date Collected: 02/28/22 15:05 Date Received: 03/01/22 09:19

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	20854	03/04/22 19:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20993	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20724	03/02/22 17:02	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20659	03/02/22 08:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20655	03/02/22 17:28	AJ	XEN MID

Eurofins Carlsbad

Page 22 of 30

Matrix: Solid

Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Client Sample ID: BH08

Date Collected: 02/28/22 15:05
Date Received: 03/01/22 09:19

Lab Sample ID: 890-2031-7 Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			20806	03/03/22 12:05	СН	XEN MID
Soluble	Analysis	300.0		1	20936	03/08/22 12:05	CH	XEN MID

Client Sample ID: BH08C Lab Sample ID: 890-2031-8

Date Collected: 02/28/22 15:25 Matrix: Solid

Date Received: 03/01/22 09:19

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	20854	03/04/22 19:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	20993	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	20724	03/02/22 17:02	AJ	XEN MID
Total/NA	Prep	8015NM Prep			20659	03/02/22 08:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1	20655	03/02/22 17:49	AJ	XEN MID
Soluble	Leach	DI Leach			20806	03/03/22 12:05	CH	XEN MID
Soluble	Analysis	300.0		1	20936	03/08/22 12:11	CH	XEN MID

Laboratory References:

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

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Released to Imaging: 3/22/2022 3:32:03 PM

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Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

Laboratory: Eurofins Midland

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

Authority	Pre	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	t the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for wh
the agency does not of	fer certification.	•	3,	.,
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	.,
0 ,		Matrix Solid	, , ,	

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Method Summary

 Client: WSP USA Inc.
 Job ID: 890-2031-1

 Project/Site: JRU DI 1
 SDG: 31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Carlsbad

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU DI 1 Job ID: 890-2031-1

SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2031-1	FS01	Solid	02/28/22 12:15	03/01/22 09:19	1.5
890-2031-2	FS02	Solid	02/28/22 12:25	03/01/22 09:19	1.5
890-2031-3	FS03	Solid	02/28/22 12:35	03/01/22 09:19	1.5
890-2031-4	FS04	Solid	02/28/22 12:45	03/01/22 09:19	1.5
890-2031-5	BH07	Solid	02/28/22 13:35	03/01/22 09:19	1
890-2031-6	BH07C	Solid	02/28/22 14:00	03/01/22 09:19	4
890-2031-7	BH08	Solid	02/28/22 15:05	03/01/22 09:19	2
890-2031-8	BH08C	Solid	02/28/22 15:25	03/01/22 09:19	4

Revised Date 051418 Rev 2018 1	σ					G
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Received by: (Signature) Date/Tim	Relinquished by: (Signature)	Date∕Time	Received by: (Signature)	Received	y: (Şignature)	Relinquished by: (Signature)
to circumstances beyond the collinol dunless previously negotiated.	. 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 it such losses are due to circumstances beyond the control. 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 negotilated.	ny losses or expenses inci- submitted to Xenco, but r	t assume any responsibility for a darage of \$5 for each sample	f samples and shall not blied to each project an	e liable only for the cost o harge of \$75.00 will be app	of Xenco. A minimum c
igns standard terms and conditions	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	n client company to Xenco	ltutes a valid purchase order fro	ment of samples const	document and relinquish	Notice: Signature of this
Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg	B Cd Ca Cr Co Cu Fe Pb Cd Cr Co Cu Pb Mn Mo	CRA ≥	8RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8R(otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) a
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	×	×	1245 1.5'	S 02/28/2022	04	FS04
	×	-\ ×	1235 1.5'	S 02/28/2022	03	FS03
	×		1225 1.5'	S 02/28/2022	02	FS02
	×	×	1215 1.5'	S 02/28/2022	01	FS01
Sample Comments	Chlori	Numb	Time Depth	Matrix Date Sampled		Sample Identification
lab, if received by 4:30pm	de (E	EPA	Total Containers:		Yes No	Sample Custody Seals:
TAT	890-2031 Chain of Custody	0=4	Correction Factor: - 0.7	N/A Corre	Yes No	Cooler Custody Seals
	300	5) 8021	25	1-N~	(Yes) No	Received Intact:
	.0))	Thermometer ID	7.2	4.6/4.	Temperature (°C):
		rs	Wet ice: Xes No	Blank: (Yes No	EIPT Temp Blank:	SAMPLE RECEIPT
			Due Date:		Alexis Castro	Sampler's Name:
CC: 1082551001			Rush:	12/20/2021	12	P.O. Number:
API: 30-015-47514			Routine	31403236.020.0129	314032	Project Number:
EST Work Order Notes	ANALYSIS REQUEST		Turn Around	JRU DI 1	JF	Project Name:
Deliverables: EDD	Tacoma.Morrissey@wsp.com	Alexis Castro@wsp.com; Tacom	Email: Alexis Castr		432.236.3849	Phone:
Level III PST/UST L	88220	Carlsbad, NM 88220	City, State ZIP:		Midland, TX 79705	City, State ZIP:
State of Project:	Street	3104 E Green Street	Address:	et	3300 North A Street	Address:
Program: UST/PST PRP Brownfields RC Superfund		me: XTO Energy	Company Name:		WSP USA Inc.	Company Name:
Work Order Comments		Myle Littrell	Bill to: (if different)		Tacoma Morrissey	Project Manager:
-620-2000) www.xenco.com Page 1 of L	Hobbs.NM (575-392-7550) Phoenix.AZ (480-355-0900) Atlanta.GA (770-449-8800) Tampa.FL (813-620-2000)	Z (480-355-0900) Atlant	NM (575-392-7550) Phoenix,	Hobbs.		
- 2	Houston, I X (281) 240-4200 Dallas, I X (214) 902-0300 San Antonio, I X (210) 908-3334 Midland, T X (432-704-5440) EL Paso, T X (915)585-3443 Lubbock, T X (806)794-1296	00 Dallas, IX (214) 902-0 40) EL Paso,TX (915)58	Houston, i X (281) 240-42 Midland, TX (432-704-54			-
Work Order No:	Custody	Chain of Custody				

5		,				5		9	Clialli of Custody	Work Order No.	
L A B		in.		Houston,T>	< (281) 240-420 X (432-704-544	0 Dalla:	s,TX (21 aso.TX	4) 902-0 (915)58	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	334 96	2
			Hobbs, NA	M (575-392-75	50) Phoenix,A	Z (480-3	55-0900) Atlant	Hobbs,NM (575-392-7550) Phoenix AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL ((813-620-2000) www.xenco.com	Page L of L
t Manager:	Tacoma Morrissey	у			Bill to: (if different)	nt)	Kyle Littrell	rell		Work Order Comments	mments
	WSP USA Inc.				Company Name:		XTO Energy	ergy		Program: UST/PST _PRP _Brownfields _RRC	elds
	3300 North A Street	eet			Address:		3104 E	3104 E Green Street	street	State of Project:]
tate ZIP:	Midland, TX 79705	55			City, State ZIP:		arlsba	Carlsbad, NM 88220	8220		JST RRP Level IV
	432.236.3849			Email:	Email: Alexis Castro@wsp.com;	@wsp	com;	Tacom	Tacoma.Morrissey@wsp.com	Deliverables: EDD ADaPT	Other:
t Name:		JRU DI 1		Tur	Turn Around				ANALYSIS RE	QUEST	Work Order Notes
t Number:	31403	31403236.020.0129	.0129	Routine	e Q						API: 30-015-47514
umber:	1:	12/20/2021	1	Rush:				_			CC: 1082551001
er's Name:	Alexis Castro			Due Date:)ate:						
IPLE RECEIPT		Temp Blank:	Yes No	Wet Ice:	Yes No	's		_			
rature (°C):			/Ih	Thermometer ID	D	ine		-			
ed Intact:	Yes	\$				onta	5)	_			
e Custody Seals:	s: Yes No	NA	Total (Total Containers	ack	er of	PA 80	-			lab, if received by 4:30pm
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Numb	TPH (E	BTEX	Chlorid		Sample Comments
ВН07		S 0:	02/28/2022	1335	1.	_	×	×	×		
ВН07С	S	S O	02/28/2022	1400	4'		×	×	×		
ВН08А		S 0.	02/28/2022	1505	2'		×	×	×	-	
вновс		s 0:	02/28/2022	1525	4	-	\\×	\\×	\x		
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tal 200.7 / 6010 ircle Method(s) a	ial 200.7 / 6010 200.8 / 6020: ircle Method(s) and Metal(s) to be analyzed	20: o be anal	8R	RA 13PPM	CRA 13PPM Texas 11 AITCLP / SPLP 6010: 8RCRA	ا در ا	AS AS	Ba Be s Ba Be	3a Be B Cd Ca Cr Co Cu Fe Ba Be Cd Cr Co Cu Pb Mn N	Pho Mg Mn Mo Ni K Se Ag SiO2 Mo Ni Se Ag TI U	2 Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg
ignature of this d	ocument and relinquis able only for the cost	shment of samples	amples constitu	ites a valid pur ssume any res	chase order from	n client c ly losses	ompany or exper	lo Xenco	signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It is, a constant to the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are a charge of \$75.00 will be applied to each project and a charge of \$75.00 will be applied to each project and a charge of \$75.00 will be applied to each project and a charge of \$75.00 will be applied to each project and a charge of \$75.00 will be applied to the contract of \$75.00 will be applied to each project and a charge of \$75.00 will be applied to the contract of \$75.00 will be applied to \$75.00 will be applied to \$75.00 will be applied to the contract of \$75.00 will be applied to \$75.00 will	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 e. 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 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 applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed.	
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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2031-1

SDG Number: 31403236.020.0129

List Source: Eurofins Carlsbad
List Number: 1

Creator: Olivas, Nathaniel

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or 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: 890-2031-1

SDG Number: 31403236.020.0129

List Source: Eurofins Midland

List Creation: 03/02/22 11:22 AM

List Number: 2 Creator: Kramer, Jessica

Login Number: 2031

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-11739-1

Laboratory Sample Delivery Group: 32.37988,-103.88687

Client Project/Site: JRU D1 1

For:

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

Attn: Tacoma Morrissey

LAMER

Authorized for release by: 3/7/2022 9:17:37 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: 3/22/2022 3:32:03 PM

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

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

Client: WSP USA Inc.
Project/Site: JRU D1 1

Laboratory Job ID: 880-11739-1 SDG: 32.37988,-103.88687

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Case Narrative	4
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QC Sample Results	8
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Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Qualifiers

GC VOA Qualifier

Qualifier Description 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.

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report. Listed under the "D" column to designate that the result is reported on a dry weight basis %R Percent Recovery

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

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

Job ID: 880-11739-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-11739-1

Receipt

The samples were received on 2/25/2022 2:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-20669 and analytical batch 880-20859 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA

Method TX_1005: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20369 and analytical batch 880-20378 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

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Client Sample Results

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Da Date Received: 02/25/22 14:58

Sample Depth: 1'

Client Sample ID: BH 02	Lab Sample ID: 880-11739-1
ate Collected: 02/24/22 11:15	Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 16:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 16:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 16:08	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/04/22 07:30	03/04/22 16:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 16:08	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/04/22 07:30	03/04/22 16:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				03/04/22 07:30	03/04/22 16:08	1
1,4-Difluorobenzene (Surr)	101		70 - 130				03/04/22 07:30	03/04/22 16:08	1

Method: Total BTEX - Total BTEX C	alculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/04/22 16:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U F1	50.0		mg/Kg		02/25/22 17:26	02/26/22 22:54	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 22:54	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 22:54	1
Total Petroleum Hydrocarbons (C6-C35)	<50.0	U	50.0		mg/Kg			02/28/22 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Pre	pared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130	02/25/	/22 17:26	02/26/22 22:54	1
o-Terphenyl (Surr)	101		70 - 130	02/25/	/22 17:26	02/26/22 22:54	1

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2150	49.5	mg/Kg			03/03/22 13:48	10

Client Sample ID: BH 02 C Lab Sample ID: 880-11739-2 Date Collected: 02/24/22 11:33 Matrix: Solid

Date Received: 02/25/22 14:58

Sample Depth: 4'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 16:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 16:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 16:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 07:30	03/04/22 16:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 16:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 07:30	03/04/22 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				03/04/22 07:30	03/04/22 16:29	1
1,4-Difluorobenzene (Surr)	105		70 - 130				03/04/22 07:30	03/04/22 16:29	1

Matrix: Solid

Lab Sample ID: 880-11739-2

Analyzed

02/26/22 18:14

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

Client Sample ID: BH 02 C

Date Collected: 02/24/22 11:33 Date Received: 02/25/22 14:58

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

31.0

Sample Depth: 4'

Analyte

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/04/22 16:35	1
Method: TX 1005 - Texas - Total	l Petroleum Hyd	rocarbon (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/26/22 22:54	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/26/22 22:54	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/26/22 22:54	1
Total Petroleum Hydrocarbons (C6-C35)	<50.0	U	50.0		mg/Kg			02/28/22 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	70		70 - 130				02/26/22 10:55	02/26/22 22:54	1
o-Terphenyl (Surr)	76		70 - 130				02/26/22 10:55	02/26/22 22:54	1

RL

4.99

MDL Unit

mg/Kg

D

Prepared

Eurofins Midland

2

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14

Dil Fac

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11739-1	BH 02	108	101	
880-11739-2	BH 02 C	110	105	
880-11740-A-1-I MS	Matrix Spike	80	101	
880-11740-A-1-J MSD	Matrix Spike Duplicate	105	100	
LCS 880-20669/1-A	Lab Control Sample	94	100	
LCSD 880-20669/2-A	Lab Control Sample Dup	96	101	
MB 880-20669/5-A	Method Blank	97	100	

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

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits
		100	ОТРН	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
0-11739-1	BH 02	105	101	
0-11739-1 MS	BH 02	106	90	
0-11739-1 MSD	BH 02	107	100	
0-11739-2	BH 02 C	70	76	
0-11739-2 MS	BH 02 C	82	74	
0-11739-2 MSD	BH 02 C	81	72	
S 880-20369/2-A	Lab Control Sample	104	103	
S 880-20381/2-A	Lab Control Sample	96	90	
SD 880-20369/3-A	Lab Control Sample Dup	128	114	
SD 880-20381/3-A	Lab Control Sample Dup	86	82	
3 880-20369/1-A	Method Blank	115	119	
3 880-20381/1-A	Method Blank	73	74	

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11739-1 SDG: 32.37988,-103.88687 Project/Site: JRU D1 1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20669/5-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20669

l		MB	МВ							
l	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
l	Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
l	Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
l	m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
l	o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
l	Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
ı										

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/04/22 07:30	03/04/22 12:56	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/04/22 07:30	03/04/22 12:56	1

Lab Sample ID: LCS 880-20669/1-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20669

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1051		mg/Kg		105	70 - 130	
Toluene	0.100	0.09641		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09532		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.2204		mg/Kg		110	70 - 130	
o-Xylene	0.100	0.1072		mg/Kg		107	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-20669/2-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 20669

RPD %Rec.

Analyte	Added	Result	Qualifier U	Jnit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1089	m	ng/Kg		109	70 - 130	4	35
Toluene	0.100	0.09986	m	ng/Kg		100	70 - 130	4	35
Ethylbenzene	0.100	0.09805	m	ng/Kg		98	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2269	n	ng/Kg		113	70 - 130	3	35
o-Xylene	0.100	0.1112	m	ng/Kg		111	70 - 130	4	35

Spike

LCSD LCSD

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 880-11740-A-1-I MS

Matrix: Solid

Analysis Batch: 20859

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

Prep Batch: 20669

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.07143		mg/Kg	_	71	70 - 130	
Toluene	< 0.00199	U F2 F1	0.101	0.06327	F1	mg/Kg		62	70 - 130	

Prep Batch: 20669

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

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

Lab Sample ID: 880-11740-A-1-I MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 20859

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00199	U F1	0.101	0.06285	F1	mg/Kg		62	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1445		mg/Kg		72	70 - 130
o-Xylene	<0.00199	U	0.101	0.07131		mg/Kg		71	70 - 130

MS MS

Surrogate	%Recovery Qเ	ıalifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-11740-A-1-J MSD **Client Sample ID: Matrix Spike Duplicate**

Matrix: Solid

Analysis Batch: 20859

			Prep Type	: Total/NA
			Prep Bat	ch: 20669
Sample Sample	Snika	MSD MSD	%Pac	PPN

Spike %Rec RPD Analyte Result Qualifier Result Qualifier Limits Limit Added Unit Benzene <0.00199 U 0.0998 0.1001 mg/Kg 100 70 - 130 33 35 Toluene <0.00199 U F2 F1 0.0998 0.09162 F2 mg/Kg 91 70 - 130 37 35 Ethylbenzene <0.00199 UF1 0.0998 0.08914 89 70 - 130 35 35 mg/Kg <0.00398 U 0.200 0.2065 70 - 130 35 35 m-Xylene & p-Xylene mg/Kg 103 0.0998 o-Xylene <0.00199 U 0.1009 101 70 - 130 34 mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-20369/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 20378

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 21:46	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 21:46	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 21:46	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	115		70 - 130	02/25/22 17:26	02/26/22 21:46	1
o-Terphenyl (Surr)	119		70 - 130	02/25/22 17:26	02/26/22 21:46	1

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ab Sample ID: LCS 880-20369/2-A			Client Sample ID: Lab Control Sample
latrix: Solid			Prep Type: Total/NA
nalysis Batch: 20378			Prep Batch: 20369
	Spike	LCS LCS	%Rec.

	орико		_00				701100.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	1000	929.2		mg/Kg		93	75 - 125	_
>C12-C28 Range Hydrocarbons	1000	1165		mg/Kg		117	75 - 125	

LCS LCS

1 Chloroctane (Surr)	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130

Eurofins Midland

Prep Batch: 20369

Prep Batch: 20369

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 880-20369/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid Analysis Batch: 20378

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 103 70 - 130

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

Lab Sample ID: LCSD 880-20369/3-A **Matrix: Solid**

Analysis Batch: 20378 Prep Batch: 20369 LCSD LCSD Spike %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit

C6-C12 Range Hydrocarbons 1000 924.7 mg/Kg 92 75 - 125 0 25 >C12-C28 Range Hydrocarbons 1000 961.9 96 75 - 125 19 25 mg/Kg

Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 128 70 - 130 114 70 - 130 o-Terphenyl (Surr)

LCSD LCSD

Lab Sample ID: 880-11739-1 MS Client Sample ID: BH 02 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 20378 Prep Batch: 20369

Sample Sample Spike MS MS %Rec. Qualifier Added Qualifier D %Rec Limits Result Result Unit <50.0 U F1 998 C6-C12 Range Hydrocarbons 1308 F1 131 75 _ 125 mg/Kg >C12-C28 Range Hydrocarbons <50.0 U 998 1073 mg/Kg 108 75 - 125

MS MS Limits %Recovery Qualifier Surrogate 70 - 130 1-Chlorooctane (Surr) 106 70 - 130 o-Terphenyl (Surr) 90

MR MR

Lab Sample ID: 880-11739-1 MSD Client Sample ID: BH 02

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 20378** Prep Batch: 20369

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 112 <50.0 U F1 997 1115 mg/Kg 75 - 125 16 25

C6-C12 Range Hydrocarbons >C12-C28 Range Hydrocarbons <50.0 U 997 1175 mg/Kg 118 75 - 125 25 MSD MSD

%Recovery Qualifier Limits Surrogate 1-Chlorooctane (Surr) 107 70 - 130 o-Terphenyl (Surr) 100 70 - 130

Lab Sample ID: MB 880-20381/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 20380** Prep Batch: 20381

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac C6-C12 Range Hydrocarbons 50.0 02/26/22 10:55 02/26/22 21:46 <50.0 U mg/Kg 50.0 02/26/22 21:46 >C12-C28 Range Hydrocarbons <50.0 U 02/26/22 10:55 mg/Kg >C28-C35 Range Hydrocarbons <50.0 U 50.0 02/26/22 10:55 02/26/22 21:46 mg/Kg

Job ID: 880-11739-1

SDG: 32.37988,-103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: MB 880-20381/1-A

Matrix: Solid

Client: WSP USA Inc.

Project/Site: JRU D1 1

Analysis Batch: 20380

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20381

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	73		70 - 130	02/26/22 10:	55 02/26/22 21:46	1
o-Terphenyl (Surr)	74		70 - 130	02/26/22 10:	55 02/26/22 21:46	1

Lab Sample ID: LCS 880-20381/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 20380

Prep Type: Total/NA Prep Batch: 20381

-	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
C6-C12 Range Hydrocarbons	1000	1132		mg/Kg		113	75 - 125
>C12-C28 Range Hydrocarbons	1000	898.7		mg/Kg		90	75 - 125

LCS LCS

Surrogate 1-Chlorocotane (Surr)	%Recovery Qualifier	Limits
1-Chlorooctane (Surr)	96	70 - 130
o-Terphenyl (Surr)	90	70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 20380

Lab Sample ID: LCSD 880-20381/3-A

Prep Batch: 20381

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C12 Range Hydrocarbons	1000	1016		mg/Kg		102	75 - 125	11	25
>C12-C28 Range Hydrocarbons	1000	791.5		mg/Kg		79	75 - 125	13	25

LCSD LCSD

MSD MSD %Recovery Qualifier

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Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	86		70 - 130
o-Terphenyl (Surr)	82		70 - 130

Client Sample ID: BH 02 C Lab Sample ID: 880-11739-2 MS

Matrix: Solid

Surrogate

1-Chlorooctane (Surr)

o-Terphenyl (Surr)

Analysis Batch: 20380

Prep Type: Total/NA

Prep Batch: 20381

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	82		70 - 130
o-Ternhenyl (Surr)	74		70 130

Lab Sample ID: 880-11739-2 MSD Client Sample ID: BH 02 C **Matrix: Solid**

Limits

70 - 130

70 - 130

Prep Type: Total/NA

Analysis Batch: 20380 Prep Batch: 20381

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20319/1-A

Matrix: Solid

Analysis Batch: 20365

мв мв

Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 02/25/22 16:45

Lab Sample ID: LCS 880-20319/2-A

Matrix: Solid

Analysis Batch: 20365

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 252.4 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-20319/3-A

Matrix: Solid

Analysis Batch: 20365

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 251.2 mg/Kg 100 90 - 110

Lab Sample ID: 880-11731-A-9-F MS

Matrix: Solid

Analysis Batch: 20365

MS MS Spike %Rec. Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 28.3 248 290.7 106 90 - 110 mg/Kg

Lab Sample ID: 880-11731-A-9-G MSD

Matrix: Solid

Analysis Batch: 20365

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 28.3 248 285.7 mg/Kg 104 90 - 110

Lab Sample ID: MB 880-20419/1-A

Matrix: Solid

Analysis Batch: 20698

мв мв

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 03/03/22 11:44

Lab Sample ID: LCS 880-20419/2-A

Matrix: Solid

Analysis Batch: 20698

LCS LCS %Rec. Spike Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 253.6 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-20419/3-A

Matrix: Solid

Analysis Batch: 20698

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 253.5 mg/Kg 101 90 - 110 20

Lab Sample ID: 880-11740-A-3-D MS

Lab Sample ID: 880-11740-A-3-E MSD

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analysis Batch: 20698

Matrix: Solid

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 450 1260 1793 mg/Kg 106 90 - 110

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Matrix: Solid

Analysis Batch: 20698

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 450 1260 1789 mg/Kg 106 90 - 110 0 20

 Client: WSP USA Inc.
 Job ID: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

GC VOA

Prep Batch: 20669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Total/NA	Solid	5035	
880-11739-2	BH 02 C	Total/NA	Solid	5035	
MB 880-20669/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20669/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20669/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11740-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-11740-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Total/NA	Solid	8021B	20669
880-11739-2	BH 02 C	Total/NA	Solid	8021B	20669
MB 880-20669/5-A	Method Blank	Total/NA	Solid	8021B	20669
LCS 880-20669/1-A	Lab Control Sample	Total/NA	Solid	8021B	20669
LCSD 880-20669/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20669
880-11740-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	20669
880-11740-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20669

Analysis Batch: 20939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Total/NA	Solid	Total BTEX	
880-11739-2	BH 02 C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Total/NA	Solid	TX_1005_S_Pre	
				р	
MB 880-20369/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCS 880-20369/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCSD 880-20369/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11739-1 MS	BH 02	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11739-1 MSD	BH 02	Total/NA	Solid	TX_1005_S_Pre	
				р	

Analysis Batch: 20378

Lab Sample ID 880-11739-1	Client Sample ID BH 02	Prep Type Total/NA	Matrix Solid	Method TX 1005	Prep Batch 20369
MB 880-20369/1-A	Method Blank	Total/NA	Solid	TX 1005	20369
LCS 880-20369/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	20369
LCSD 880-20369/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20369
880-11739-1 MS	BH 02	Total/NA	Solid	TX 1005	20369
880-11739-1 MSD	BH 02	Total/NA	Solid	TX 1005	20369

Analysis Batch: 20380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-2	BH 02 C	Total/NA	Solid	TX 1005	20381
MB 880-20381/1-A	Method Blank	Total/NA	Solid	TX 1005	20381

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 Client: WSP USA Inc.
 Job ID: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

GC Semi VOA (Continued)

Analysis Batch: 20380 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-20381/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	20381
LCSD 880-20381/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20381
880-11739-2 MS	BH 02 C	Total/NA	Solid	TX 1005	20381
880-11739-2 MSD	BH 02 C	Total/NA	Solid	TX 1005	20381

Prep Batch: 20381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batc
880-11739-2	BH 02 C	Total/NA	Solid	TX_1005_S_Pre
				p
MB 880-20381/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre
				p
LCS 880-20381/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre
				p
LCSD 880-20381/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre
				p
880-11739-2 MS	BH 02 C	Total/NA	Solid	TX_1005_S_Pre
				p
880-11739-2 MSD	BH 02 C	Total/NA	Solid	TX_1005_S_Pre
				p

Analysis Batch: 20510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Total/NA	Solid	TX 1005	
880-11739-2	BH 02 C	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 20319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-2	BH 02 C	Soluble	Solid	DI Leach	
MB 880-20319/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20319/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20319/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11731-A-9-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11731-A-9-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-2	BH 02 C	Soluble	Solid	300.0	20319
MB 880-20319/1-A	Method Blank	Soluble	Solid	300.0	20319
LCS 880-20319/2-A	Lab Control Sample	Soluble	Solid	300.0	20319
LCSD 880-20319/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20319
880-11731-A-9-F MS	Matrix Spike	Soluble	Solid	300.0	20319
880-11731-A-9-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20319

Leach Batch: 20419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Soluble	Solid	DI Leach	_
MB 880-20419/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20419/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20419/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11740-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11740-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

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Page 15 of 22

 Client: WSP USA Inc.
 Job ID: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

HPLC/IC

Analysis Batch: 20698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11739-1	BH 02	Soluble	Solid	300.0	20419
MB 880-20419/1-A	Method Blank	Soluble	Solid	300.0	20419
LCS 880-20419/2-A	Lab Control Sample	Soluble	Solid	300.0	20419
LCSD 880-20419/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20419
880-11740-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	20419
880-11740-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20419

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Client: WSP USA Inc. Job ID: 880-11739-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 02

Date Received: 02/25/22 14:58

Lab Sample ID: 880-11739-1 Date Collected: 02/24/22 11:15

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5035 4.96 g 5 mL 20669 03/04/22 07:30 KL XEN MID Total/NA Analysis 8021B 1 5 mL 5 mL 20859 03/04/22 16:08 KLXEN MID Total/NA Analysis Total BTEX 20939 03/04/22 16:35 ΑJ XEN MID 1 02/25/22 17:26 Total/NA 20369 Prep TX_1005_S_Prep 10.01 g 10 mL DM XEN MID Total/NA Analysis TX 1005 1 20378 02/26/22 22:54 AJ XEN MID Total/NA Analysis TX 1005 20510 02/28/22 13:31 AJ XEN MID Soluble DI Leach 5.05 g 50 mL 20419 02/28/22 09:23 СН XEN MID Leach Soluble Analysis 300.0 10 20698 03/03/22 13:48 СН XEN MID

Client Sample ID: BH 02 C Lab Sample ID: 880-11739-2

Date Collected: 02/24/22 11:33 Matrix: Solid Date Received: 02/25/22 14:58

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep Total/NA 5035 5.03 g 5 mL 20669 03/04/22 07:30 KL XEN MID 8021B Total/NA Analysis 1 5 mL 5 mL 20859 03/04/22 16:29 KL XEN MID Total/NA Total BTEX 20939 Analysis 1 03/04/22 16:35 A.I XEN MID Total/NA Analysis TX 1005 20510 02/28/22 13:31 XEN MID TX_1005_S_Prep Total/NA 10.01 g 20381 02/26/22 10:55 AM XEN MID Prep 10 mL Total/NA Analysis TX 1005 20380 02/26/22 22:54 AJ XEN MID Soluble DI Leach 5.01 g 50 mL 20319 02/25/22 16:25 SC XEN MID Leach Soluble Analysis 300.0 20365 02/26/22 18:14 СН XEN MID 1

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: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

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	NI	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report hi	it the laboratory is not certifi	ied by the governing authority. This list ma	taradi alar ara adi alar a da ara
				iv include analytes for t
,	• •	at the laboratory is not certifi	led by the governing authority. This list the	ay include analytes for
the agency does not of	• •	at the laboratory is not certifi	led by the governing authority. This list me	ay include analytes for
,	• •	Matrix	Analyte	y include analytes for

Eurofins Midland

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Method Summary

 Client: WSP USA Inc.
 Job ID: 880-11739-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID
TX 1005 S Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

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

Eurofins Midland

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU D1 1 Job ID: 880-11739-1

SDG: 32.37988,-103.88687

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	D
880-11739-1	BH 02	Solid	02/24/22 11:15	02/25/22 14:58	1'
880-11739-2	BH 02 C	Solid	02/24/22 11:33	02/25/22 14:58	4'

Project Manager:

Monrissey

Company Name: Address:

3300 NASE BLAISWE222 Midland, TX - 79757

City, State ZIP:

Company Name: Bill to: (if different)

City, State ZIP:

Chain o

Tampa, FL (813) 620-2000, Tallahassee Houston, TX (281) 240-4200, Dallas, T. Hobbs, NM (575) 392-7550, Carlsbad Midland, TX (432) 704-5440, EL Pas

nain of Custody	Work)22
), Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334	9-3334	/20
40, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296		3/7
0, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900	-0900 880-11739 Chain of Custody	3
allahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701	689-6701	
Atlanta, GA (770) 449-8800		
	www.xenco.com rageoi	
Admin Rokes	Work Order Comments	
×TO Energy	Program: UST/PST□ PRP□ BrownfieldS□ RRC□ Superfund □	
٢	State of Project:	
	Reporting:Level P Level P PST/USP TRRP Level W	
The copy of the copy	Deliverables: EDD ADAPT Other:	

Revised Date101419 Rev. 2019 1				*	(
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Date/Time	Signature)	Received by: (Signature)	Relinquished by: (Signature)	Relinquished	ate/Time) Pate/		Repeived by: (Signature)	Received t	(e) (f)	y: (Signatur	Relinquished by: (Signature)
		d terms and conditions ances beyond the control viously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	filiates and subcontra y the client if such lo lyzed. These terms w	to Xenco, its affi enses incurred by nco, but not analy	ent company sses or expe mitted to Xe	e order from cl sibility for any la ach sample sul	tes a valid purchas ssume any respons a charge of \$5 for e	samples constitus s and shall not a each project and	relinquishment of the cost of sample will be applied to	document and e liable only for harge of \$75.00	otice: Signature of this service. Xenco will bu Xenco. A minimum cl
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)2 Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Ha	Se Ag SiO2 Na Sr Tl	$\overline{}$	Cu Fe Pb Mg Mr	Cd Ca Cr Co	Ba Be B	Al Sb As	Texas 11	RA 13PPM	8RCRA	200.8 / 6020:		Total 200.7 / 6010
:												
					X	X	f,	က	1-24-22-11:33	218	C	BH02_
					X	X	7	17:15	2-24-22 11:15	SL		BH 02
Sample Comments	Samı				B. CH		Depth Numb	<u> </u>	Date Sampled	Matrix	ntification	Sample Identification
lab, if received by 4:30pm	lab, if n				TE TL			ers:	Total Containers:	S No SHA	als: Yes	Sample Custody Seals:
TAT starts the day recevied by the	TAT starts				× 01			ctor: c	Correction Factor:	Yes No W		Cooler Custody Seals:
Zn Acetate+ NaOH: Zn	Zn Acetate				R1		C 4	あれ	827	(Yes) No		Received Intact:
	MeOH: Me		-		0			Thermometer ID,	(てらる	Ś	Temperature (°C):
	NaOH: Na				2		® No	Wet Ice: ₹	Yes Mo	Temp Blank:	EIPT	SAMPLE RECEIPT
	None. NO				3 (PO#:
	HCL: HL				30		٠.	Due Date:500	Katach	と	Nihoan	Sampler's Name:
2	H2S04: H2				00			↑ Rush:	-103.88687	98810	32-37988.	Project Location
	HNO3: HN				>			Routine:	0.0120	31403236-020-0129	3,403	Project Number:
Preservative Codes	Prese		ANALYSIS REQUEST	ANALY		-	round	Turn Around		TRU DI 1	TRU	Project Name:
Codes	- 14			Email: QUENTA - PLOYTIME (W WAD: UST N	very low or	YUNN	i pullar	Email: [A	107	337-257-6307	337-	Phone:
Other:	ADaPT O	Deliverables: EDD	Delivera	27.50	٠ >			, Į				

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 880-11739-1

SDG Number: 32.37988,-103.88687

List Source: Eurofins Midland

Login Number: 11739 List Number: 1 Creator: Teel, Brianna

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

Eurofins Midland

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<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-11740-1

Laboratory Sample Delivery Group: 32.37988,-103.88687

Client Project/Site: JRU D1 1

For:

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

Attn: Tacoma Morrissey

JURAMER

Authorized for release by: 3/4/2022 4:02:38 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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Released to Imaging: 3/22/2022 3:32:03 PM

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: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

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Definitions/Glossary

 Client: WSP USA Inc.
 Job ID: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

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Qualifiers

GC VOA Qualifier

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

%R Percent Recovery

CFL Contains Free Liquid

CFU Colony Forming Unit

CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent
POS Positive / Present
POL Present Oversities Oversities of the Pole

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

Job ID: 880-11740-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-11740-1

Receipt

The samples were received on 2/25/2022 2:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

GC VOA

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

GC Semi VOA

Method TX_1005: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20369 and analytical batch 880-20378 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

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Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 03 A

Lab Sample ID: 880-11740-1 Date Collected: 02/24/22 14:30 Matrix: Solid Date Received: 02/25/22 14:58

Sample Depth: 2'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:25	
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:25	
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:25	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 07:30	03/04/22 13:25	
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:25	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 07:30	03/04/22 13:25	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	108		70 - 130				03/04/22 07:30	03/04/22 13:25	
1,4-Difluorobenzene (Surr)	104		70 - 130				03/04/22 07:30	03/04/22 13:25	
1,4-Difluorobenzene (Surr) Method: Total BTEX - Total BTE Analyte	X Calculation	Qualifier	70 ₋ 130 RL	MDL	Unit	D	03/04/22 07:30 Prepared	03/04/22 13:25 Analyzed	
Method: Total BTEX - Total BTE	X Calculation			MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX	EX Calculation Result <0.00398	U	RL 0.00398	MDL		<u>D</u>		Analyzed	
Method: Total BTEX - Total BTE Analyte Total BTEX Method: TX 1005 - Texas - Total	Result CO.00398 Petroleum Hyd	U	RL 0.00398	MDL MDL	mg/Kg	<u>D</u>		Analyzed	
Method: Total BTEX - Total BTE Analyte Total BTEX Method: TX 1005 - Texas - Total	EX Calculation Result <0.00398 Petroleum Hyd	rocarbon (C	RL 0.00398		mg/Kg		Prepared	Analyzed 03/04/22 16:35	Dil Fa
Method: Total BTEX - Total BTE Analyte Total BTEX Method: TX 1005 - Texas - Total Analyte	Calculation Result CO.00398 Petroleum Hyd Result	U rocarbon (C Qualifier U	RL 0.00398		mg/Kg		Prepared Prepared	Analyzed 03/04/22 16:35	Dil Fa
Method: Total BTEX - Total BTE Analyte Total BTEX Method: TX 1005 - Texas - Total Analyte C6-C12 Range Hydrocarbons >C12-C28 Range Hydrocarbons	Result Petroleum Hyd Result Result 550.0	U rocarbon (C Qualifier U	RL 0.00398 GC) RL 50.0		mg/Kg Unit mg/Kg		Prepared 02/25/22 17:26	Analyzed 03/04/22 16:35 Analyzed 02/27/22 02:39	Dil Fa
Method: Total BTEX - Total BTE Analyte Total BTEX Method: TX 1005 - Texas - Total Analyte C6-C12 Range Hydrocarbons	Calculation Result <0.00398 Petroleum Hyd Result <50.0 <50.0	U rocarbon (C Qualifier U	RL 0.00398 GC) RL 50.0 50.0		mg/Kg Unit mg/Kg mg/Kg		Prepared Prepared 02/25/22 17:26 02/25/22 17:26	Analyzed 03/04/22 16:35 Analyzed 02/27/22 02:39 02/27/22 02:39	Dil Fa

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	104		70 - 130	02/25/22 17:26	02/27/22 02:39	1
o-Terphenyl (Surr)	102		70 - 130	02/25/22 17:26	02/27/22 02:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11400	250	mg/Kg			03/03/22 13:57	50

Client Sample ID: BH 03 C

Date Collected: 02/24/22 14:33

Date Received: 02/25/22 14:58

Sample Depth: 4'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 07:30	03/04/22 13:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:30	03/04/22 13:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 07:30	03/04/22 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				03/04/22 07:30	03/04/22 13:45	1
1,4-Difluorobenzene (Surr)	105		70 - 130				03/04/22 07:30	03/04/22 13:45	1

Eurofins Midland

Lab Sample ID: 880-11740-2

Matrix: Solid

Client: WSP USA Inc. Project/Site: JRU D1 1

Job ID: 880-11740-1

SDG: 32.37988,-103.88687

Lab Sample ID: 880-11740-2

02/27/22 03:20

02/27/22 03:20

02/25/22 17:26

02/25/22 17:26

02/25/22 17:26

Prepared

02/25/22 17:26

02/25/22 17:26

Client Sample ID: BH 03 C

Sample Depth: 4'

-	•	
Date Collected: 02/24/22 14:33		Matrix: Solid
Date Received: 02/25/22 14:58		

Method: Total BTEX - Total BTEX Calculation										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/04/22 16:35	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/27/22 03:20	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/27/22 03:20	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/27/22 03:20	1
Total Petroleum Hydrocarbons (C6-C35)	<50.0	U	50.0		mg/Kg			02/28/22 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

70 - 130

70 - 130

99

99

<50.0 U

<50.0 U

%Recovery Qualifier

99

96

<u> </u>							
Method: 300.0 - Anions, Ion Chrom	natography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	<u>D</u> _	Prepared	Analyzed	Dil Fac

Chloride 1950 24.9 mg/Kg 03/04/22 09:44

Client Sample ID: BH 03 E Lab Sample ID: 880-11740-3 Date Collected: 02/24/22 15:15 **Matrix: Solid**

Date Received: 02/25/22 14:58

1-Chlorooctane (Surr)

o-Terphenyl (Surr)

Method: 8021B - Volatile Orga Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200		0.00200		mg/Kg	_ <u>-</u>	03/04/22 07:30	03/04/22 14:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 14:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 14:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/22 07:30	03/04/22 14:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 14:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/22 07:30	03/04/22 14:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				03/04/22 07:30	03/04/22 14:06	1
1,4-Difluorobenzene (Surr)	103		70 - 130				03/04/22 07:30	03/04/22 14:06	1
Method: Total BTEX - Total B	ΓEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/04/22 16:35	1
Method: TX 1005 - Texas - Tot	al Petroleum Hvd	rocarbon (0	GC)						
	•	Qualifier	RL.	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	11					, y = 0 w	
Analyte C6-C12 Range Hydrocarbons	Result <50.0		50.0		mg/Kg		02/25/22 17:26	02/27/22 03:41	1

Eurofins Midland

02/27/22 03:41

02/28/22 13:31

Analyzed

02/27/22 03:41

02/27/22 03:41

50.0

50.0

Limits

70 - 130

70 - 130

mg/Kg

mg/Kg

3/4/2022

Dil Fac

>C28-C35 Range Hydrocarbons

Total Petroleum Hydrocarbons

(C6-C35)

Surrogate

1-Chlorooctane (Surr)

o-Terphenyl (Surr)

Client Sample Results

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 03 E Lab Sample ID: 880-11740-3 Matrix: Solid

Date Collected: 02/24/22 15:15 Date Received: 02/25/22 14:58

Sample Depth: 8'

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	450		25.3		mg/Kg			03/03/22 14:15	5

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recov
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11740-1	BH 03 A	108	104	
880-11740-1 MS	BH 03 A	80	101	
880-11740-1 MSD	BH 03 A	105	100	
880-11740-2	BH 03 C	106	105	
880-11740-3	BH 03 E	105	103	
LCS 880-20669/1-A	Lab Control Sample	94	100	
LCSD 880-20669/2-A	Lab Control Sample Dup	96	101	
MB 880-20669/5-A	Method Blank	97	100	
Surrogate Legend BFB = 4-Bromofluorobei	(0.17)			

DFBZ = 1,4-Difluorobenzene (Surr)

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid Prep Type: Total/NA

_			
		1CO	ОТРН
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11739-A-1-B MS	Matrix Spike	106	90
880-11739-A-1-C MSD	Matrix Spike Duplicate	107	100
880-11740-1	BH 03 A	104	102
880-11740-2	BH 03 C	99	99
880-11740-3	BH 03 E	99	96
LCS 880-20369/2-A	Lab Control Sample	104	103
LCSD 880-20369/3-A	Lab Control Sample Dup	128	114
MB 880-20369/1-A	Method Blank	115	119
Surrogate Legend			

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20669/5-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20669

MB	MB	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
Toluene	< 0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 07:30	03/04/22 12:56	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	03/04/22 07:30	03/04/22 12:56	1
1,4-Difluorobenzene (Surr)	100	70 - 130	03/04/22 07:30	03/04/22 12:56	1

Lab Sample ID: LCS 880-20669/1-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20669

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1051		mg/Kg		105	70 - 130	
Toluene	0.100	0.09641		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09532		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.2204		mg/Kg		110	70 - 130	
o-Xylene	0.100	0.1072		mg/Kg		107	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-20669/2-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 20669

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1089 mg/Kg 109 70 - 130 35 Toluene 0.100 0.09986 mg/Kg 100 70 - 130 35 Ethylbenzene 0.100 0.09805 mg/Kg 98 70 - 130 3 35 0.200 m-Xylene & p-Xylene 0.2269 mg/Kg 113 70 - 130 35 0.100 0.1112 o-Xylene mg/Kg 111 70 - 130 35

LCSD LCSD

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 880-11740-1 MS

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: BH 03 A Prep Type: Total/NA

Prep Batch: 20669

		Sample	Sample	Spike	MS	MS				%Rec.	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	<0.00199	U	0.101	0.07143		mg/Kg	_	71	70 - 130	
ı	Toluene	<0.00199	U F2 F1	0.101	0.06327	F1	mg/Kg		62	70 - 130	

Eurofins Midland

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QC Sample Results

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

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

Lab

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Ana

b Sample ID: 880-11740-1 MS	Client Sample ID: BH	03 A
trix: Solid	Prep Type: Tota	al/NA
alysis Batch: 20859	Prep Batch: 2	0669

				MS	MS	Spike	Sample	Sample	
Limits	%Rec	D	Unit	Qualifier	Result	Added	Qualifier	Result	Analyte
70 - 130	62		mg/Kg	F1	0.06285	0.101	U F1	<0.00199	Ethylbenzene
70 - 130	72		mg/Kg		0.1445	0.202	U	<0.00398	m-Xylene & p-Xylene
70 _ 130	71		mg/Kg		0.07131	0.101	U	<0.00199	o-Xylene
	72 71						U		, , ,

MS MS

Surrogate	%Recovery Qualifi	ier Limits
4-Bromofluorobenzene (Surr)	80	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 880-11740-1 MSD

Client Sample ID: BH 03 A **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 20859** Prep Batch: 20669

Sample Sample Spike MSD MSD %Rec. Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 0.0998 0.1001 Benzene <0.00199 U mg/Kg 100 70 - 130 33 35 Toluene 0.0998 0.09162 F2 <0.00199 U F2 F1 mg/Kg 91 70 - 130 37 35 Ethylbenzene <0.00199 UF1 0.0998 0.08914 89 70 - 130 35 35 mg/Kg <0.00398 U 0.200 0.2065 70 - 130 35 35 m-Xylene & p-Xylene mg/Kg 103 0.0998 <0.00199 U 0.1009 70 - 130 34 o-Xylene mg/Kg 101

MSD MSD

Surrogate	%Recovery (Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-20369/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 20378

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 21:46	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 21:46	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/25/22 17:26	02/26/22 21:46	1
	C6-C12 Range Hydrocarbons >C12-C28 Range Hydrocarbons	C6-C12 Range Hydrocarbons <50.0 >C12-C28 Range Hydrocarbons <50.0	AnalyteResultQualifierC6-C12 Range Hydrocarbons<50.0	Analyte Result Qualifier RL C6-C12 Range Hydrocarbons <50.0	Analyte Result Qualifier RL MDL C6-C12 Range Hydrocarbons <50.0	Analyte Result Qualifier RL MDL Unit C6-C12 Range Hydrocarbons <50.0	Analyte Result Qualifier RL MDL Unit D C6-C12 Range Hydrocarbons <50.0	Analyte Result Qualifier RL MDL Unit D Prepared C6-C12 Range Hydrocarbons <50.0	Analyte Result Qualifier RL MDL Unit D Prepared Analyzed C6-C12 Range Hydrocarbons <50.0

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	115		70 - 130	02/25/22 17:26	02/26/22 21:46	1
o-Terphenyl (Surr)	119		70 - 130	02/25/22 17:26	02/26/22 21:46	1

Lab

Mat

Analysis Batch: 20378

ab Sample ID: LCS 880-20369/2-A	Client Sample ID: Lab Control Sample
atrix: Solid	Prep Type: Total/NA
nalysis Batch: 20378	Prep Batch: 20369

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits C6-C12 Range Hydrocarbons 1000 929.2 93 mg/Kg 75 - 125 1000 >C12-C28 Range Hydrocarbons 1165 mg/Kg 117 75 - 125

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane (Surr)	104	70 - 130

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Prep Batch: 20369

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 880-20369/2-A

Matrix: Solid

Analysis Batch: 20378

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20369

LCS LCS

Surrogate %Recovery Qualifier o-Terphenyl (Surr) 103 70 - 130

Lab Sample ID: LCSD 880-20369/3-A Client Sample ID: Lab Control Sample Dup

Limits

Matrix: Solid

Analysis Batch: 20378

Prep Type: Total/NA

Prep Batch: 20369

%Rec. RPD

LCSD LCSD Spike RPD Analyte Added Result Qualifier Unit D %Rec Limits Limit C6-C12 Range Hydrocarbons 1000 924.7 mg/Kg 92 75 - 125 0 25 >C12-C28 Range Hydrocarbons 1000 961.9 96 75 - 125 25 mg/Kg 19

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 128 70 - 130 114 70 - 130 o-Terphenyl (Surr)

Lab Sample ID: 880-11739-A-1-B MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 20378

Prep Type: Total/NA

Prep Batch: 20369

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	<50.0	U F1	998	1308	F1	mg/Kg		131	75 - 125	
>C12-C28 Range Hydrocarbons	<50.0	U	998	1073		mg/Kg		108	75 - 125	
	мѕ	MS								

%Recovery Qualifier

Limits Surrogate 70 - 130 1-Chlorooctane (Surr) 106 70 - 130 o-Terphenyl (Surr) 90

Lab Sample ID: 880-11739-A-1-C MSD

Matrix: Solid

Analysis Batch: 20378

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20369

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit C6-C12 Range Hydrocarbons <50.0 U F1 997 1115 mg/Kg 112 75 - 125 16 25 >C12-C28 Range Hydrocarbons <50.0 U 997 1175 mg/Kg 118 75 - 125 25

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane (Surr) 107 70 - 130 o-Terphenyl (Surr) 100 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20419/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20698

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 03/03/22 11:44

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 03 E

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-20419/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20698

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 253.6 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-20419/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20698

Spike LCSD LCSD %Rec. RPD Added Result Qualifier RPD Limit Analyte Unit D %Rec Limits Chloride 250 253.5 mg/Kg 101 0

Lab Sample ID: 880-11740-3 MS Client Sample ID: BH 03 E **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20698

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 450 1260 1793 106 90 - 110 mg/Kg

Lab Sample ID: 880-11740-3 MSD

Matrix: Solid

Analysis Batch: 20698

Sample Sample MSD MSD RPD Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec RPD Limit Limits 1260 1789 Chloride 450 106 90 - 110 20 mg/Kg

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

GC VOA

Prep Batch: 20669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Total/NA	Solid	5035	
880-11740-2	BH 03 C	Total/NA	Solid	5035	
880-11740-3	BH 03 E	Total/NA	Solid	5035	
MB 880-20669/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20669/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20669/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11740-1 MS	BH 03 A	Total/NA	Solid	5035	
880-11740-1 MSD	BH 03 A	Total/NA	Solid	5035	

Analysis Batch: 20859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Total/NA	Solid	8021B	20669
880-11740-2	BH 03 C	Total/NA	Solid	8021B	20669
880-11740-3	BH 03 E	Total/NA	Solid	8021B	20669
MB 880-20669/5-A	Method Blank	Total/NA	Solid	8021B	20669
LCS 880-20669/1-A	Lab Control Sample	Total/NA	Solid	8021B	20669
LCSD 880-20669/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20669
880-11740-1 MS	BH 03 A	Total/NA	Solid	8021B	20669
880-11740-1 MSD	BH 03 A	Total/NA	Solid	8021B	20669

Analysis Batch: 20937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Total/NA	Solid	Total BTEX	
880-11740-2	BH 03 C	Total/NA	Solid	Total BTEX	
880-11740-3	BH 03 E	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Total/NA	Solid	TX_1005_S_Pre	
				p	
880-11740-2	BH 03 C	Total/NA	Solid	TX_1005_S_Pre	
				p	
880-11740-3	BH 03 E	Total/NA	Solid	TX_1005_S_Pre	
				р	
MB 880-20369/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
				p	
CS 880-20369/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
				p	
CSD 880-20369/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11739-A-1-B MS	Matrix Spike	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11739-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	TX_1005_S_Pre	
				р	

Analysis Batch: 20378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Total/NA	Solid	TX 1005	20369
880-11740-2	BH 03 C	Total/NA	Solid	TX 1005	20369
880-11740-3	BH 03 E	Total/NA	Solid	TX 1005	20369
MB 880-20369/1-A	Method Blank	Total/NA	Solid	TX 1005	20369

Eurofins Midland

Page 13 of 20

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

GC Semi VOA (Continued)

Analysis Batch: 20378 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-20369/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	20369
LCSD 880-20369/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20369
880-11739-A-1-B MS	Matrix Spike	Total/NA	Solid	TX 1005	20369
880-11739-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	TX 1005	20369

Analysis Batch: 20513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Total/NA	Solid	TX 1005	
880-11740-2	BH 03 C	Total/NA	Solid	TX 1005	
880-11740-3	BH 03 E	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 20419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Soluble	Solid	DI Leach	
880-11740-2	BH 03 C	Soluble	Solid	DI Leach	
880-11740-3	BH 03 E	Soluble	Solid	DI Leach	
MB 880-20419/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20419/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20419/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11740-3 MS	BH 03 E	Soluble	Solid	DI Leach	
880-11740-3 MSD	BH 03 E	Soluble	Solid	DI Leach	

Analysis Batch: 20698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11740-1	BH 03 A	Soluble	Solid	300.0	20419
880-11740-2	BH 03 C	Soluble	Solid	300.0	20419
880-11740-3	BH 03 E	Soluble	Solid	300.0	20419
MB 880-20419/1-A	Method Blank	Soluble	Solid	300.0	20419
LCS 880-20419/2-A	Lab Control Sample	Soluble	Solid	300.0	20419
LCSD 880-20419/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20419
880-11740-3 MS	BH 03 E	Soluble	Solid	300.0	20419
880-11740-3 MSD	BH 03 E	Soluble	Solid	300.0	20419

Client: WSP USA Inc. Job ID: 880-11740-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 03 A

Lab Sample ID: 880-11740-1 Date Collected: 02/24/22 14:30

Matrix: Solid

Date Received: 02/25/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20669	03/04/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/04/22 13:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20937	03/04/22 16:35	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	20369	02/25/22 17:26	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20378	02/27/22 02:39	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20513	02/28/22 13:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20419	02/28/22 09:23	CH	XEN MID
Soluble	Analysis	300.0		50			20698	03/03/22 13:57	CH	XEN MID

Client Sample ID: BH 03 C Lab Sample ID: 880-11740-2

Date Collected: 02/24/22 14:33

Date Received: 02/25/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20669	03/04/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/04/22 13:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20937	03/04/22 16:35	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.00 g	10 mL	20369	02/25/22 17:26	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20378	02/27/22 03:20	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20513	02/28/22 13:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20419	02/28/22 09:23	CH	XEN MID
Soluble	Analysis	300.0		5			20698	03/04/22 09:44	CH	XEN MID

Client Sample ID: BH 03 E Lab Sample ID: 880-11740-3

Date Collected: 02/24/22 15:15 Date Received: 02/25/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20669	03/04/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/04/22 14:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20937	03/04/22 16:35	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.00 g	10 mL	20369	02/25/22 17:26	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20378	02/27/22 03:41	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20513	02/28/22 13:31	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	20419	02/28/22 09:23	CH	XEN MID
Soluble	Analysis	300.0		5			20698	03/03/22 14:15	CH	XEN MID

Laboratory References:

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

Eurofins Midland

Matrix: Solid

Matrix: Solid

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

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	ay include analytes for v
the agency does not of	fer certification.			
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	

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Method Summary

 Client: WSP USA Inc.
 Job ID: 880-11740-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

Method **Method Description** Protocol Laboratory 8021B Volatile Organic Compounds (GC) SW846 XEN MID **Total BTEX Calculation** Total BTEX TAL SOP XEN MID TX 1005 Texas - Total Petroleum Hydrocarbon (GC) **TCEQ** XEN MID 300.0 Anions, Ion Chromatography **MCAWW XEN MID** 5035 Closed System Purge and Trap SW846 XEN MID Deionized Water Leaching Procedure XEN MID DI Leach **ASTM** TX_1005_S_Prep Extraction - Texas Total petroleum Hyrdocarbons TCEQ 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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

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

Eurofins Midland

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU D1 1 Job ID: 880-11740-1

SDG: 32.37988,-103.88687

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
880-11740-1	BH 03 A	Solid	02/24/22 14:30	02/25/22 14:58	2
880-11740-2	BH 03 C	Solid	02/24/22 14:33	02/25/22 14:58	4'
880-11740-3	BH 03 E	Solid	02/24/22 15:15	02/25/22 14:58	8'

Total 200.7 / 6010

200.8 / 6020:

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

Relinquished by: (Signature)

Radie Green

lotice: 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

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

Tampa, FL (813) 620-20 Houston, TX (281) 240 Hobbs, NM (575) 392 Midland, TX (432) 71

Work Order Comments ogram: UST/PST□ PRP□ Brownfield RRC□ State of Project: porting:Level □ Level □ PST/US□ TRR□ iverables: EDD □ ADaPT□ Other	ANALYSIS REQUEST Preservative Code	HNO3: HN	H2S04: H2	HCL: HL	None: NO	NaOH: Na		MeOH: Me	MeOH: Me Zn Acetate+ NaOH: Zn	MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day recevied the lab, if received by 4:30pn	Zn Acetate+ NaOH: Zn TAT starts the day recevied by 4:30pn Sample Comments	Zn Acetate+ NaOH: Zn TAT starts the day received by 4:30pn Sample Comments	Zn Acetate+ NaOH: Zn TAT starts the day recevied by 4:30pn Sample Comments	Zn Acetate+ NaOH: Zn TAT starts the day recevied by 4:30pn Sample Comments	Zn Acetate+ NaOH: Zn TAT starts the day recevied by 4:30pn Sample Comments
Work Order Com	Preservative Codes	HNO3: HN	H2S04: H2		HCL: HL	HCL: HL None: NO	HCL: HL None: NO NaOH: Na	HCL: HL None: NO NaOH: Na MeOH: Me	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day received by the lab, if received by 4:30pm	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day recevied by the lab, if received by 4:30pm Sample Comments	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day received by the lab, if received by 4:30pm Sample Comments	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day received by the lab, if received by 4:30pm Sample Comments	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day recevied by the lab, if received by 4:30pm Sample Comments	HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn TAT starts the day received by the lab, if received by 4:30pm Sample Comments

Project Name: Phone:

31403236.0201129 32.37988, -103.88687

JAN DT 1

City, State ZIP: Address:

337-257-8307 Midland TX-

Email:

Project Manager:

Company Name:

WSP P

USA

acomo

MOM sey

3300 NAST, Blog I, Swite 222 Address:

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Sampler's Name: Project Location Project Number:

Notros

Katock

Rush:

Routine:

Turn Around

Due Date: 5 Da

SAMPLE RECEIPT

Sample Custody Seals:

Yes

No

Total Containers:

Yes No

5 **F**(

Correction Factor:

Sample Identification

Matrix

Sampled Date

Sampled

Time

2-24-22 14:30

5:15

14:33

BH 03 E

BH 03 c

BH 03

Cooler Custody Seals:

Received Intact:

Temperature (°C):

798,4

N O

Temp Blank:

Yes No Wet Ice:

Thermometer ID

1631 / 245.1 / 7470 / 7471 : Hg

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 880-11740-1

SDG Number: 32.37988,-103.88687

List Source: Eurofins Midland

Login Number: 11740 List Number: 1 Creator: Teel, Brianna

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

Eurofins Midland

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-11741-1

Laboratory Sample Delivery Group: 32.37988,-103.88687

Client Project/Site: JRU D1 1

For:

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

Attn: Tacoma Morrissey

JURAMER

Authorized for release by: 3/4/2022 1:17:32 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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www.eurofinsus.com/Env

Released to Imaging: 3/22/2022 3:32:03 PM

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: JRU D1 1

Laboratory
SDG: 3

Laboratory Job ID: 880-11741-1 SDG: 32.37988,-103.88687

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

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

Detection Limit (DoD/DOE) DL

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

DLC Decision Level Concentration (Radiochemistry)

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) Most Probable Number MPN Method Quantitation Limit MQL

NC Not Calculated

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

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

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 880-11741-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

Job ID: 880-11741-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-11741-1

Receipt

The samples were received on 2/25/2022 2:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

GC VOA

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

GC Semi VOA

Method TX_1005: Surrogate recovery for the following samples were outside control limits: BH 01 (880-11741-1) and BH 01 C (880-11741-2). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Matrix: Solid

Lab Sample ID: 880-11741-1

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 01

Date Collected: 02/24/22 10:36 Date Received: 02/25/22 14:58

Sample Depth: 1'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:45	03/04/22 11:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:45	03/04/22 11:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:45	03/04/22 11:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 07:45	03/04/22 11:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 07:45	03/04/22 11:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 07:45	03/04/22 11:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				03/04/22 07:45	03/04/22 11:52	1
1,4-Difluorobenzene (Surr)	102		70 - 130				03/04/22 07:45	03/04/22 11:52	1

Method: Total BTEX - Total BTEX Calo	culation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/04/22 14:07	1
-									

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		02/26/22 10:55	02/26/22 23:56	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		02/26/22 10:55	02/26/22 23:56	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		02/26/22 10:55	02/26/22 23:56	1
Total Petroleum Hydrocarbons (C6-C35)	<49.9	U	49.9		mg/Kg			02/28/22 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	0	S1-	70 - 130	02/26/22 10:55	02/26/22 23:56	1
o-Terphenyl (Surr)	0	S1-	70 - 130	02/26/22 10:55	02/26/22 23:56	1

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3110	49.8	mg/Kg			03/03/22 14:41	10

Lab Sample ID: 880-11741-2 Client Sample ID: BH 01 C Date Collected: 02/24/22 10:50 Matrix: Solid

Date Received: 02/25/22 14:58 Sample Depth: 4'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 12:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 12:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 12:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/04/22 07:45	03/04/22 12:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 12:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/04/22 07:45	03/04/22 12:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				03/04/22 07:45	03/04/22 12:13	1
1,4-Difluorobenzene (Surr)	100		70 - 130				03/04/22 07:45	03/04/22 12:13	1

Matrix: Solid

Lab Sample ID: 880-11741-2

03/03/22 17:29

Client Sample Results

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 01 C

Date Collected: 02/24/22 10:50 Date Received: 02/25/22 14:58

Sample Depth: 4'

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/04/22 14:07	1
Method: TX 1005 - Texas - Total	Petroleum Hyd	rocarbon (C	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/27/22 00:16	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/27/22 00:16	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/27/22 00:16	1
Total Petroleum Hydrocarbons	<50.0	U	50.0		mg/Kg			02/28/22 15:00	1
(C6-C35)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)		S1-	70 - 130				02/26/22 10:55	02/27/22 00:16	1
o-Terphenyl (Surr)	0	S1-	70 - 130				02/26/22 10:55	02/27/22 00:16	1

4.97

mg/Kg

195

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recov
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11741-1	BH 01	109	102	
880-11741-1 MS	BH 01	105	102	
880-11741-1 MSD	BH 01	104	102	
880-11741-2	BH 01 C	103	100	
LCS 880-20668/1-A	Lab Control Sample	97	101	
LCSD 880-20668/2-A	Lab Control Sample Dup	99	102	
MB 880-20668/5-A	Method Blank	104	95	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO	ОТРН	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
-11739-A-2-C MS	Matrix Spike	82	74	
0-11739-A-2-D MSD	Matrix Spike Duplicate	81	72	
30-11741-1	BH 01	0 S1-	0 S1-	
0-11741-2	BH 01 C	0 S1-	0 S1-	
S 880-20381/2-A	Lab Control Sample	96	90	
CSD 880-20381/3-A	Lab Control Sample Dup	86	82	
3 880-20381/1-A	Method Blank	73	74	

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20668/5-A

Lab Sample ID: LCS 880-20668/1-A

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20668

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 07:45	03/04/22 11:31	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/04/22 07:45	03/04/22 11:31	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/04/22 07:45	03/04/22 11:31	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20668

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1062 mg/Kg 106 70 - 130 Toluene 0.100 0.1031 mg/Kg 103 70 - 130 0.100 0.09905 Ethylbenzene mg/Kg 99 70 - 130 0.200 0.2035 102 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09826 70 - 130 o-Xylene mg/Kg 98

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-20668/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 20854

Analysis Batch: 20854

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 20668

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1116		mg/Kg		112	70 - 130	5	35	
Toluene	0.100	0.1082		mg/Kg		108	70 - 130	5	35	
Ethylbenzene	0.100	0.1035		mg/Kg		104	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2121		mg/Kg		106	70 - 130	4	35	
o-Xylene	0.100	0.1025		mg/Kg		102	70 - 130	4	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1 4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-11741-1 MS

Released to Imaging: 3/22/2022 3:32:03 PM

Matrix: Solid

Analysis Batch: 20854

Client Sample ID: BH 01 Prep Type: Total/NA

Prep Batch: 20668

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0988	0.09517		mg/Kg		96	70 - 130	
Toluene	< 0.00199	U	0.0988	0.09286		mg/Kg		94	70 - 130	

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

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

Lab Sample ID: 880-11741-1 MS **Matrix: Solid**

Analysis Batch: 20854

Client Sample ID: BH 01 Prep Type: Total/NA

Prep Batch: 20668

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00199 U 0.0988 0.08880 90 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.198 0.1824 mg/Kg 92 70 - 130 <0.00199 U 0.0988 0.08865 o-Xylene 90 70 - 130 mg/Kg

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 105 70 - 130 1,4-Difluorobenzene (Surr) 102

Client Sample ID: BH 01

Prep Type: Total/NA

Prep Batch: 20668

Lab Sample ID: 880-11741-1 MSD **Matrix: Solid**

Analysis Batch: 20854

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.09169		mg/Kg		92	70 - 130	4	35
Toluene	<0.00199	U	0.100	0.08797		mg/Kg		87	70 - 130	5	35
Ethylbenzene	< 0.00199	U	0.100	0.08420		mg/Kg		84	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1735		mg/Kg		87	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.08423		mg/Kg		84	70 - 130	5	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-20381/1-A

Matrix: Solid

Analysis Batch: 20380

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

Prep Batch: 20381

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/26/22 21:46	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/26/22 21:46	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		02/26/22 10:55	02/26/22 21:46	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	73		70 - 130	02/26/22 10:55	02/26/22 21:46	1
o-Terphenyl (Surr)	74		70 - 130	02/26/22 10:55	02/26/22 21:46	1

Lab Sample ID: LCS 880-20381/2-A

Matrix: Solid

Analysis Batch: 20380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20381

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier U	Init I	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	1000	1132	m	ng/Kg		113	75 - 125	
>C12-C28 Range Hydrocarbons	1000	898.7	m	ng/Kg		90	75 - 125	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	96		70 - 130

Job ID: 880-11741-1 SDG: 32.37988,-103.88687

Client: WSP USA Inc. Project/Site: JRU D1 1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 880-20381/2-A **Matrix: Solid**

Lab Sample ID: LCSD 880-20381/3-A

Analysis Batch: 20380

Matrix: Solid

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 20381

LCS LCS

Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 90 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20381

Analysis Batch: 20380 LCSD LCSD Spike %Rec. RPD RPD Analyte Added Result Qualifier Unit %Rec Limits Limit C6-C12 Range Hydrocarbons 1000 1016 mg/Kg 102 75 - 125 11 25 >C12-C28 Range Hydrocarbons 1000 791 5 79 75 - 125 25 mg/Kg 13

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 86 70 - 130 82 70 - 130 o-Terphenyl (Surr)

Lab Sample ID: 880-11739-A-2-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 20380

Prep Type: Total/NA

Prep Batch: 20381

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 82 70 - 130 o-Terphenyl (Surr) 74 70 - 130

Lab Sample ID: 880-11739-A-2-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 20380

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20381

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane (Surr) 81 70 - 130 o-Terphenyl (Surr) 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20419/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 20698

Prep Type: Soluble

мв мв

Dil Fac Analyte Result Qualifier RL MDL Unit Prepared Analyzed 5.00 Chloride <5.00 U mg/Kg 03/03/22 11:44

Lab Sample ID: LCS 880-20419/2-A

Matrix: Solid

Analysis Batch: 20698

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	253.6		mg/Kg		101	90 - 110	

Eurofins Midland

Prep Type: Soluble

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-20419/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20698

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.5 mg/Kg 101 90 - 110 20

Lab Sample ID: 880-11733-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20698

Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits Chloride 17300 12500 29750 mg/Kg 100 90 - 110

Lab Sample ID: 880-11733-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20698

MSD MSD %Rec. RPD Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 17300 12500 30030 mg/Kg 102 90 - 110

Lab Sample ID: 880-11740-A-3-D MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20698

MS MS Sample Sample Spike %Rec. Analyte Qualifier Added Qualifier %Rec Result Result Unit Limits Chloride 450 1260 1793 106 90 - 110 mg/Kg

Lab Sample ID: 880-11740-A-3-E MSD

Matrix: Solid

Analysis Batch: 20698

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 1260 Chloride 450 1789 mg/Kg 106 90 - 110 0 20

Eurofins Midland

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11741-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

GC VOA

Prep Batch: 20668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Total/NA	Solid	5035	
880-11741-2	BH 01 C	Total/NA	Solid	5035	
MB 880-20668/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20668/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20668/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11741-1 MS	BH 01	Total/NA	Solid	5035	
880-11741-1 MSD	BH 01	Total/NA	Solid	5035	

Analysis Batch: 20854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Total/NA	Solid	8021B	20668
880-11741-2	BH 01 C	Total/NA	Solid	8021B	20668
MB 880-20668/5-A	Method Blank	Total/NA	Solid	8021B	20668
LCS 880-20668/1-A	Lab Control Sample	Total/NA	Solid	8021B	20668
LCSD 880-20668/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20668
880-11741-1 MS	BH 01	Total/NA	Solid	8021B	20668
880-11741-1 MSD	BH 01	Total/NA	Solid	8021B	20668

Analysis Batch: 20918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Total/NA	Solid	Total BTEX	
880-11741-2	BH 01 C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 20380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Total/NA	Solid	TX 1005	20381
880-11741-2	BH 01 C	Total/NA	Solid	TX 1005	20381
MB 880-20381/1-A	Method Blank	Total/NA	Solid	TX 1005	20381
LCS 880-20381/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	20381
LCSD 880-20381/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20381
880-11739-A-2-C MS	Matrix Spike	Total/NA	Solid	TX 1005	20381
880-11739-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	TX 1005	20381

Prep Batch: 20381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Total/NA	Solid	TX_1005_S_Pre	
				p	
880-11741-2	BH 01 C	Total/NA	Solid	TX_1005_S_Pre	
				p	
MB 880-20381/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCS 880-20381/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCSD 880-20381/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
				p	
880-11739-A-2-C MS	Matrix Spike	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11739-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	TX_1005_S_Pre	
				р	

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QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11741-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

GC Semi VOA

Analysis Batch: 20528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Total/NA	Solid	TX 1005	
880-11741-2	BH 01 C	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 20419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Soluble	Solid	DI Leach	
880-11741-2	BH 01 C	Soluble	Solid	DI Leach	
MB 880-20419/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20419/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20419/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11733-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11733-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-11740-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11740-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11741-1	BH 01	Soluble	Solid	300.0	20419
880-11741-2	BH 01 C	Soluble	Solid	300.0	20419
MB 880-20419/1-A	Method Blank	Soluble	Solid	300.0	20419
LCS 880-20419/2-A	Lab Control Sample	Soluble	Solid	300.0	20419
LCSD 880-20419/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20419
880-11733-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	20419
880-11733-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20419
880-11740-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	20419
880-11740-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20419

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Lab Chronicle

Client: WSP USA Inc. Job ID: 880-11741-1 Project/Site: JRU D1 1 SDG: 32.37988,-103.88687

Client Sample ID: BH 01

Date Received: 02/25/22 14:58

Lab Sample ID: 880-11741-1 Date Collected: 02/24/22 10:36

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/04/22 11:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20918	03/04/22 14:07	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10 mL	20381	02/26/22 10:55	AM	XEN MID
Total/NA	Analysis	TX 1005		1			20380	02/26/22 23:56	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20528	02/28/22 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20419	02/28/22 09:23	CH	XEN MID
Soluble	Analysis	300.0		10			20698	03/03/22 14:41	CH	XEN MID

Client Sample ID: BH 01 C Lab Sample ID: 880-11741-2

Date Collected: 02/24/22 10:50 Matrix: Solid

Date Received: 02/25/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/04/22 12:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20918	03/04/22 14:07	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.00 g	10 mL	20381	02/26/22 10:55	AM	XEN MID
Total/NA	Analysis	TX 1005		1			20380	02/27/22 00:16	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20528	02/28/22 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20419	02/28/22 09:23	CH	XEN MID
Soluble	Analysis	300.0		1			20698	03/03/22 17:29	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: 880-11741-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

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 fellow to a control	and the first of the first of the	1 (b. 1 b. 1 a b	. d. b (b	Contrate and the Co	
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	ly include analytes to	
the agency does not of	er certification.				
the agency does not of Analysis Method	er certification. Prep Method	Matrix	Analyte		

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Method Summary

 Client: WSP USA Inc.
 Job ID: 880-11741-1

 Project/Site: JRU D1 1
 SDG: 32.37988,-103.88687

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Method	Method Description	Protocol	Laboratory	
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID	
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID	
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XEN MID	
300.0	Anions, Ion Chromatography	MCAWW	XEN MID	
5035	Closed System Purge and Trap	SW846	XEN MID	
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID	
TX 1005 S Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	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

TCEQ = Texas Commission of Environmental Quality

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: JRU D1 1 Job ID: 880-11741-1

SDG: 32.37988,-103.88687

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-11741-1	BH 01	Solid	02/24/22 10:36	02/25/22 14:58	1'
880-11741-2	BH 01 C	Solid	02/24/22 10:50	02/25/22 14:58	4'

Total 200.7 / 6010

200.8 / 6020:

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

Relinquished by: (Signature)

adle

Green

of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75,00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

py: (Signature)

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

SSH

Revised Date101419 Rev 2019 1

lotice: 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

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

Chain of Custody

Work Ore

Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296

107 Em	Work Order Comments Program: UST/PST PRP Brownfield RRC Superfund State of Project: Reporting: Level PST/UST TRR Level Deliverables: EDD ADAPT Other: Deliverables: EDD ADAPT Preservative Codes
JRU DI 1 Turn Around ANALYSIS REQI	
Routine:	HNO3: HN
Rush:	H2S04: H2
serv	None: NO
	NaOH: Na
5551 Thermometer ID See see	MeOH: Me
ntair	Zn Acetate+ NaOH: Zn
Is: Yes No WA Correction Factor: 1 C X C SIS: Yes No WA Total Containers: 5 T (L)	TAT starts the day recevied by the lab, if received by 4:30pm
	Sample Comments
SL 2-24-22-10:36 1' 1 X X X	
C SL 2-24-22 10:50 4' 1 X X X	

Sampler's Name:

roject Location

SAMPLE RECEIPT

Received Intact:

emperature (°C):

ample Custody Seals:

Sample Identifica

BHO BHO! C

ooler Custody Seals:

Project Number:

Project Name:

Phone:

City, State ZIP

\ddress:

Project Manager:

ompany Name:

880-11741 Chain of Custody

1631 / 245.1 / 7470 / 7471 : Hg

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 880-11741-1

SDG Number: 32.37988,-103.88687

List Source: Eurofins Midland

Login Number: 11741 List Number: 1 Creator: Teel, Brianna

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

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-11795-1

Laboratory Sample Delivery Group: 32.37988, -103.88687

Client Project/Site: JRU DI 1

For:

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

Attn: Kalei Jennings

JURAMER

Authorized for release by: 3/7/2022 9:27:17 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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Released to Imaging: 3/22/2022 3:32:03 PM

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: JRU DI 1

Laboratory Job ID: 880-11795-1 SDG: 32.37988, -103.88687

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Definitions/Glossary

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

2

Qualifiers

GC VOA Qualifier

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

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.

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Job ID: 880-11795-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-11795-1

Receipt

The samples were received on 2/28/2022 4:34 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.5° C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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Job ID: 880-11795-1 Client: WSP USA Inc. Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Client Sample ID: BH 06

Sample Depth: 1'

Client Sample ID: BH 06	Lab Sample ID: 880-11795-1
Date Collected: 02/25/22 15:00	Matrix: Solid
Date Received: 02/28/22 16:34	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:20	03/07/22 00:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:20	03/07/22 00:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:20	03/07/22 00:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/06/22 11:20	03/07/22 00:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:20	03/07/22 00:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/06/22 11:20	03/07/22 00:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				03/06/22 11:20	03/07/22 00:59	1
1,4-Difluorobenzene (Surr)	104		70 - 130				03/06/22 11:20	03/07/22 00:59	1

Method: Total BTEX - Total BTEX C	alculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/07/22 10:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 15:26	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 15:26	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 15:26	1
Total Petroleum Hydrocarbons (C6-C35)	<50.0	U	50.0		mg/Kg			03/03/22 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prep	pared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	106		70 - 130	03/01/2	22 09:28	03/02/22 15:26	1
o-Terphenyl (Surr)	107		70 - 130	03/01/2	22 09:28	03/02/22 15:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	246		25.0		mg/Kg			03/03/22 19:16	5

Client Sample ID: BH 06C Lab Sample ID: 880-11795-2 Date Collected: 02/25/22 15:15 Matrix: Solid

Date Received: 02/28/22 16:34

Sample Depth: 4'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:20	03/07/22 01:20	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:20	03/07/22 01:20	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:20	03/07/22 01:20	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/06/22 11:20	03/07/22 01:20	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:20	03/07/22 01:20	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/06/22 11:20	03/07/22 01:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				03/06/22 11:20	03/07/22 01:20	1
1,4-Difluorobenzene (Surr)	99		70 ₋ 130				03/06/22 11:20	03/07/22 01:20	1

Matrix: Solid

Lab Sample ID: 880-11795-2

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Client Sample ID: BH 06C

Date Collected: 02/25/22 15:15 Date Received: 02/28/22 16:34

Sample Depth: 4'

Method: Total BTEX - Total BTEX Calculation										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/07/22 10:04	1	
- Method: TX 1005 - Texas - Total	Petroleum Hyd	rocarbon (G	C)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	

Method. IX 1005 - lexas - lotal i	etroleum myu		•)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		03/01/22 09:28	03/02/22 15:46	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		03/01/22 09:28	03/02/22 15:46	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		03/01/22 09:28	03/02/22 15:46	1
Total Petroleum Hydrocarbons (C6-C35)	<49.9	U	49.9		mg/Kg			03/03/22 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Pro	repared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	113		70 - 130	03/01	1/22 09:28	03/02/22 15:46	1
o-Terphenyl (Surr)	112		70 - 130	03/01	1/22 09:28	03/02/22 15:46	1

Method: 300.0 - Anions, Ion Chrom	atography - Solul	ble						
Analyte	Result Quali	ifier RL	MDL I	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110	4.99	1	mg/Kg			03/04/22 10:10	1

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Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acce
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11795-1	BH 06	112	104	
880-11795-2	BH 06C	108	99	
880-11797-A-1-L MSD	Matrix Spike Duplicate	105	103	
880-11797-A-1-N MS	Matrix Spike	102	87	
LCS 880-20688/1-A	Lab Control Sample	97	103	
LCSD 880-20688/2-A	Lab Control Sample Dup	99	101	
MB 880-20688/5-A	Method Blank	100	98	
MB 880-20897/5-A	Method Blank	95	98	
Surrogate Legend BFB = 4-Bromofluorobe				

DFBZ = 1,4-Difluorobenzene (Surr)

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limit
		1CO	ОТРН	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11733-A-2-C MS	Matrix Spike	114	104	
880-11733-A-2-D MSD	Matrix Spike Duplicate	116	106	
880-11795-1	BH 06	106	107	
880-11795-2	BH 06C	113	112	
LCS 880-20584/2-A	Lab Control Sample	118	111	
LCSD 880-20584/3-A	Lab Control Sample Dup	116	111	
MB 880-20584/1-A	Method Blank	106	112	

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11795-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20688/5-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20688

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/06/22 11:20	03/06/22 23:50	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/06/22 11:20	03/06/22 23:50	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/06/22 11:20	03/06/22 23:50	1

Lab Sample ID: LCS 880-20688/1-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20688

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1076		mg/Kg		108	70 - 130	
Toluene	0.100	0.1007		mg/Kg		101	70 - 130	
Ethylbenzene	0.100	0.09908		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.2300		mg/Kg		115	70 - 130	
o-Xylene	0.100	0.1125		mg/Kg		112	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-20688/2-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 20688

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1036		mg/Kg		104	70 - 130	4	35
Toluene	0.100	0.09620		mg/Kg		96	70 - 130	5	35
Ethylbenzene	0.100	0.09579		mg/Kg		96	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2221		mg/Kg		111	70 - 130	3	35
o-Xylene	0.100	0.1103		mg/Kg		110	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 880-11797-A-1-L MSD

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20688

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00198	U F2 F1	0.0992	0.08934	F2	mg/Kg		89	70 - 130	83	35
Toluene	<0.00198	U F2 F1	0.0992	0.08271	F2	mg/Kg		82	70 - 130	69	35

Eurofins Midland

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Lab Sample ID: 880-11797-A-1-L MSD

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11795-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

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

Matrix: Solid Prep Type: Total/NA Analysis Batch: 20859 Prep Batch: 20688 Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit D 0.0992 Ethylbenzene <0.00198 U F2 F1 0.08084 F2 81 70 - 130 35 mg/Kg 62 m-Xylene & p-Xylene <0.00397 U F2 F1 0.198 0.1874 F2 mg/Kg 94 70 - 130 66 35 0.0992 o-Xylene <0.00198 U F2 F1 0.09159 F2 92 70 - 130 mg/Kg 64

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 105 70 - 130 1,4-Difluorobenzene (Surr) 103

Lab Sample ID: 880-11797-A-1-N MS

Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 20859** Prep Batch: 20688

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U F2 F1	0.0990	0.03681	F1	mg/Kg		36	70 - 130	
Toluene	<0.00198	U F2 F1	0.0990	0.04011	F1	mg/Kg		39	70 - 130	
Ethylbenzene	<0.00198	U F2 F1	0.0990	0.04279	F1	mg/Kg		43	70 - 130	
m-Xylene & p-Xylene	<0.00397	U F2 F1	0.198	0.09448	F1	mg/Kg		48	70 - 130	
o-Xylene	<0.00198	U F2 F1	0.0990	0.04736	F1	mg/Kg		48	70 - 130	

MS MS Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 102 1,4-Difluorobenzene (Surr) 70 - 130 87

Lab Sample ID: MB 880-20897/5-A

Matrix: Solid

Client Sample ID: Method Blank Prep Type: Total/NA Analysis Batch: 20859 Prep Batch: 20897 MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:13	03/06/22 12:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:13	03/06/22 12:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:13	03/06/22 12:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 12:13	03/06/22 12:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:13	03/06/22 12:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 12:13	03/06/22 12:14	1
	MB	МВ							
	IVID	IVID							

	11.12	III D				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/04/22 12:13	03/06/22 12:14	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/04/22 12:13	03/06/22 12:14	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

MB MB

Matrix: Solid

Analysis Batch: 20651

Lab Sample ID: MB 880-20584/1-A

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 20584

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 09:06	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 09:06	1

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Page 9 of 19

QC Sample Results

Job ID: 880-11795-1 Client: WSP USA Inc. Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

MB MB

Lab Sample ID: MB 880-20584/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 20651 Prep Batch: 20584

Analyte	Result	Qualifier	RL	MDL	Unit	0)	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg			03/01/22 09:28	03/02/22 09:06	1
	MR	MR								

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	106		70 - 130	03/01/22 09:28	03/02/22 09:06	1
o-Terphenyl (Surr)	112		70 - 130	03/01/22 09:28	03/02/22 09:06	1

Lab Sample ID: LCS 880-20584/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 20651 Prep Batch: 20584

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	1000	930.5		mg/Kg		93	75 - 125	
>C12-C28 Range Hydrocarbons	1000	1069		mg/Kg		107	75 - 125	

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane (Surr)	118	70 - 130
o-Terphenyl (Surr)	111	70 - 130

Lab Sample ID: LCSD 880-20584/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Prep Batch: 20584

Analysis Batch: 20651

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C12 Range Hydrocarbons	1000	880.7		mg/Kg		88	75 - 125	6	25
>C12-C28 Range Hydrocarbons	1000	987.4		mg/Kg		99	75 ₋ 125	8	25

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	116		70 _ 130
o-Terphenyl (Surr)	111		70 - 130

104

Lab Sample ID: 880-11733-A-2-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA Analysis Batch: 20651 Prep Batch: 20584

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	<50.0	U	995	1082		mg/Kg		109	75 - 125	
>C12-C28 Range Hydrocarbons	<50.0	U	995	986.7		mg/Kg		99	75 ₋ 125	

>C12-C28 Range Hydrocarbons	<50.0	U	995	986.7	mg/Kg	99	75
	MS	MS					
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane (Surr)	114		70 130				

70 - 130

Lab Sample ID: 880-11733-A-2-D MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 20651 Prep Batch: 20584 Spike MSD MSD RPD Sample Sample %Rec.

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit C6-C12 Range Hydrocarbons <50.0 U 998 1178 mg/Kg 118 75 _ 125 9

Eurofins Midland

o-Terphenyl (Surr)

Job ID: 880-11795-1

SDG: 32.37988, -103.88687

Project/Site: JRU DI 1

Client: WSP USA Inc.

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued) Lab Sample ID: 880-11733-A-2-D MSD

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

Prep Batch: 20584

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Lab Control Sample Dup

Analysis Batch: 20651 Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit >C12-C28 Range Hydrocarbons <50.0 U 998 1018 102 75 - 125 mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	116		70 - 130
o-Terphenyl (Surr)	106		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20585/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20705

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/03/22 18:14	1

Lab Sample ID: LCS 880-20585/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 20705

	Spike	LCS LCS				%Rec.
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits
Chloride	250	258.2	mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-20585/3-A

Matrix: Solid

Analysis Batch: 20705

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	258.3		ma/Ka		103	90 - 110		20

Lab Sample ID: 880-11799-A-3-D MS

Matrix: Solid

Analysis Batch: 20705

•	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	1640		1250	3014		ma/Ka		110	90 _ 110

Lab Sample ID: 880-11799-A-3-E MSD

Matrix: Solid

Analysis Batch: 20705											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1640		1250	2994		ma/Ka		108	90 - 110		20

Eurofins Midland

Prep Type: Soluble

QC Association Summary

Client: WSP USA Inc. Job ID: 880-11795-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

GC VOA

Prep Batch: 20688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Total/NA	Solid	5035	
880-11795-2	BH 06C	Total/NA	Solid	5035	
MB 880-20688/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20688/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20688/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11797-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
880-11797-A-1-N MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 20859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Total/NA	Solid	8021B	20688
880-11795-2	BH 06C	Total/NA	Solid	8021B	20688
MB 880-20688/5-A	Method Blank	Total/NA	Solid	8021B	20688
MB 880-20897/5-A	Method Blank	Total/NA	Solid	8021B	20897
LCS 880-20688/1-A	Lab Control Sample	Total/NA	Solid	8021B	20688
LCSD 880-20688/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20688
880-11797-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20688
880-11797-A-1-N MS	Matrix Spike	Total/NA	Solid	8021B	20688

Prep Batch: 20897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20897/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 21020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Total/NA	Solid	Total BTEX	
880-11795-2	BH 06C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11795-2	BH 06C	Total/NA	Solid	TX_1005_S_Pre	
				p	
MB 880-20584/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
				p	
LCS 880-20584/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCSD 880-20584/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11733-A-2-C MS	Matrix Spike	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11733-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	TX_1005_S_Pre	
				р	

Analysis Batch: 20651

Lab Samp	le ID Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795	BH 06	Total/NA	Solid	TX 1005	20584
880-11795	6-2 BH 06C	Total/NA	Solid	TX 1005	20584
MB 880-20	0584/1-A Method Blank	Total/NA	Solid	TX 1005	20584
LCS 880-2	20584/2-A Lab Control Sample	Total/NA	Solid	TX 1005	20584

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

GC Semi VOA (Continued)

Analysis Batch: 20651 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-20584/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20584
880-11733-A-2-C MS	Matrix Spike	Total/NA	Solid	TX 1005	20584
880-11733-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	TX 1005	20584

Analysis Batch: 20753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Total/NA	Solid	TX 1005	
880-11795-2	BH 06C	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 20585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Soluble	Solid	DI Leach	
880-11795-2	BH 06C	Soluble	Solid	DI Leach	
MB 880-20585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11799-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11799-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11795-1	BH 06	Soluble	Solid	300.0	20585
880-11795-2	BH 06C	Soluble	Solid	300.0	20585
MB 880-20585/1-A	Method Blank	Soluble	Solid	300.0	20585
LCS 880-20585/2-A	Lab Control Sample	Soluble	Solid	300.0	20585
LCSD 880-20585/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20585
880-11799-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	20585
880-11799-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20585

Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Client Sample ID: BH 06

Date Collected: 02/25/22 15:00 Date Received: 02/28/22 16:34 Lab Sample ID: 880-11795-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	20688	03/06/22 11:20	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/07/22 00:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21020	03/07/22 10:04	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	20584	03/01/22 09:28	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20651	03/02/22 15:26	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20753	03/03/22 08:18	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20585	03/01/22 09:38	SC	XEN MID
Soluble	Analysis	300.0		5			20705	03/03/22 19:16	CH	XEN MID

Client Sample ID: BH 06C Date Collected: 02/25/22 15:15

Date Received: 02/28/22 16:34

Lab Sample ID: 880-11795-2

Matrix: Solid

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 20688 Total/NA Prep 4.95 g 5 mL 03/06/22 11:20 KL XEN MID 8021B Total/NA 5 mL 20859 03/07/22 01:20 XEN MID Analysis 5 mL KL Total/NA Total BTEX 21020 03/07/22 10:04 XEN MID Analysis 1 A.I Total/NA Prep TX_1005_S_Prep 10.02 g 10 mL 20584 03/01/22 09:28 DM XEN MID Total/NA Analysis TX 1005 20651 03/02/22 15:46 AJ XEN MID 1 Total/NA Analysis TX 1005 1 20753 03/03/22 08:18 ΑJ XEN MID Soluble 03/01/22 09:38 SC XEN MID Leach DI Leach 5.01 g 50 mL 20585 Soluble Analysis 300.0 20705 03/04/22 10:10 CH XEN MID

Laboratory References:

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

Released to Imaging: 3/22/2022 3:32:03 PM

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Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

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	ay include analytes for v	
the agency does not of	fer certification.				
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte		

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Method Summary

 Client: WSP USA Inc.
 Job ID: 880-11795-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

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

Eurofins Midland

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU DI 1 Job ID: 880-11795-1

SDG: 32.37988, -103.88687

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-11795-1	BH 06	Solid	02/25/22 15:00	02/28/22 16:34	1'
880-11795-2	BH 06C	Solid	02/25/22 15:15	02/28/22 16:34	4'

L'ABORATORIES

Chain of Custody 40-4200 Dallas TX (214) 902-0300 San Ar

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 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701 Atlanta GA (770) 449-8800

		6	5
		128/22 2 16:24 1	The Assert Telling
Date/Time	ature) Received by: (Signature)	Date/Time Relinquished by: (Signatu	Relinquished by: (Signature)
	igns standard terms and conditions to circumstances beyond the control dunless previously negotiated.	t company to Xenco, its affiliates and subcontractors. It assi- tes or expenses incurred by the client if such losses are du- ted to Xenco, but not analyzed. These terms will be enforce	of service. Xenco will be liable only for the cost of samples construints a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.
02 Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 Hg	^g SiC	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pt Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA
	Chain of Custody		
	880-11705		
		× × ×	BH 06C SL2-25-22-15:15 4'
		× ×	BH 06 SL 2-25-21 15:00 1' 1
Sample Comments	San	ВT	Sample Identification Matrix Sampled Sampled Depth
TAT starts the day recevied by the lab if received by 4 30pm	TAT stan	YH YEX LOF	s. Yes No NA Total Containers
Zn Acetate+ NaOH Zn	Zn Acetat	(10 (10 (11)	7
क ं	MeOH Me	10 F	S. C.S. Thermometer ID
a) (NaOH Na	≥ (2)	SAMPLE RECEIPT Temp Blank Yes (No / Wet Ice (Yes) No E
	None NO	(3)	Day Dale
12	H2S04 H2		3-
Ż	HNO3 HN		31403236: 020: 0129 Routine
Preservative Codes	ST	ANALYSIS REQUE	Turn Around
Other	ADaPT 🗀		Phone 337-257-8307 Email
TRRD Level (7	Reporting Level PST/USP TR		City State ZIP Midland, TX-79707 City State ZIP
RC Superfund	State of Project		()3
	Work Order Comments	A TO Francis	MODE USA
	www xelico colli i age	ı	Morries

Work Order No:

Revised Date101419 Rev 2019 1

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 880-11795-1

SDG Number: 32.37988, -103.88687

Login Number: 11795 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-11796-1

Laboratory Sample Delivery Group: 32.37988, -103.88687

Client Project/Site: JRU DI 1

For:

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

Attn: Kalei Jennings

J. KRAMER

Authorized for release by: 3/7/2022 9:18:25 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Have a Question?



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Released to Imaging: 3/22/2022 3:32:03 PM

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: JRU DI 1

Laboratory Job ID: 880-11796-1 SDG: 32.37988, -103.88687

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Definitions/Glossary

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

2

Qualifiers

GC VOA Qualifier

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Eurofins Midland

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Case Narrative

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Job ID: 880-11796-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-11796-1

Receipt

The samples were received on 2/28/2022 4:34 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.5°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-20669 and analytical batch 880-20859 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: WSP USA Inc. Job ID: 880-11796-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Client Sample ID: BH 05

Sample Depth: 1'

Client Sample ID: BH 05	Lab Sample ID: 880-11796-1
Date Collected: 02/25/22 14:27	Matrix: Solid
Date Received: 02/28/22 16:34	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 19:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 19:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 19:41	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/04/22 07:30	03/04/22 19:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:30	03/04/22 19:41	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/04/22 07:30	03/04/22 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				03/04/22 07:30	03/04/22 19:41	1
1,4-Difluorobenzene (Surr)	100		70 - 130				03/04/22 07:30	03/04/22 19:41	1
Method: Total BTEX - Total BT						_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 03/06/22 20:53	Dil Fac
Analyte Total BTEX	Result < 0.00404	U	0.00404	MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX Method: TX 1005 - Texas - Total	Result <0.00404	U	0.00404			<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total BTEX Method: TX 1005 - Texas - Tota Analyte	Result <0.00404	rocarbon (C	0.00404 GC)		mg/Kg		· · ·	03/06/22 20:53	1
Analyte Total BTEX Method: TX 1005 - Texas - Tota Analyte C6-C12 Range Hydrocarbons	Result <0.00404 Il Petroleum Hydi Result	rocarbon (G Qualifier	0.00404 GC)		mg/Kg		Prepared	03/06/22 20:53 Analyzed	1
Analyte	Result <0.00404	Cualifier U	0.00404 GC) RL 49.9		mg/Kg Unit mg/Kg		Prepared 03/01/22 09:28	03/06/22 20:53 Analyzed 03/02/22 16:07	Dil Fac
Analyte Total BTEX Method: TX 1005 - Texas - Total Analyte C6-C12 Range Hydrocarbons >C12-C28 Range Hydrocarbons >C28-C35 Range Hydrocarbons	Result <0.00404	rocarbon (C Qualifier U U	0.00404 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 03/01/22 09:28 03/01/22 09:28	03/06/22 20:53 Analyzed 03/02/22 16:07 03/02/22 16:07	Dil Fac
Analyte Total BTEX Method: TX 1005 - Texas - Tota Analyte C6-C12 Range Hydrocarbons >C12-C28 Range Hydrocarbons	Result <0.00404	rocarbon (C Qualifier U U	0.00404 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared 03/01/22 09:28 03/01/22 09:28	03/06/22 20:53 Analyzed 03/02/22 16:07 03/02/22 16:07	1 1
Analyte Total BTEX Method: TX 1005 - Texas - Total Analyte C6-C12 Range Hydrocarbons >C12-C28 Range Hydrocarbons >C28-C35 Range Hydrocarbons Total Petroleum Hydrocarbons	Result <0.00404	Oualifier U U U U U U U	0.00404 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared 03/01/22 09:28 03/01/22 09:28	03/06/22 20:53 Analyzed 03/02/22 16:07 03/02/22 16:07	1 Dil Fac 1 1 1 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	132	S1+	70 - 130	03/01/22 09:28	03/02/22 16:07	1
o-Terphenyl (Surr)	134	S1+	70 - 130	03/01/22 09:28	03/02/22 16:07	1

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		24.9		mg/Kg			03/03/22 19:33	5

Lab Sample ID: 880-11796-2 **Client Sample ID: BH 05C** Date Collected: 02/25/22 14:40 Matrix: Solid

Date Received: 02/28/22 16:34

Sample Depth: 4'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/04/22 07:30	03/04/22 20:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/04/22 07:30	03/04/22 20:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/04/22 07:30	03/04/22 20:01	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/04/22 07:30	03/04/22 20:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/04/22 07:30	03/04/22 20:01	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/04/22 07:30	03/04/22 20:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				03/04/22 07:30	03/04/22 20:01	1
1,4-Difluorobenzene (Surr)	103		70 ₋ 130				03/04/22 07:30	03/04/22 20:01	1

Matrix: Solid

Lab Sample ID: 880-11796-2

03/03/22 20:00

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Client Sample ID: BH 05C

Date Collected: 02/25/22 14:40 Date Received: 02/28/22 16:34

Sample Depth: 4'

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/06/22 20:53	1
Method: TX 1005 - Texas - Tota	I Petroleum Hyd	rocarbon (0	€C)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 16:28	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 16:28	1
C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 16:28	1
Total Petroleum Hydrocarbons	<50.0	U	50.0		mg/Kg			03/03/22 08:18	1
(C6-C35)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	121		70 - 130				03/01/22 09:28	03/02/22 16:28	1
o-Terphenyl (Surr)	121		70 - 130				03/01/22 09:28	03/02/22 16:28	1

25.0

mg/Kg

232

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Reco
		BFB1	DFBZ1	· ·
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-11740-A-1-I MS	Matrix Spike	80	101	
880-11740-A-1-J MSD	Matrix Spike Duplicate	105	100	
880-11796-1	BH 05	109	100	
880-11796-2	BH 05C	106	103	
LCS 880-20669/1-A	Lab Control Sample	94	100	
LCSD 880-20669/2-A	Lab Control Sample Dup	96	101	
MB 880-20669/5-A	Method Blank	97	100	
Surrogate Legend				
BFB = 4-Bromofluorobenz	ene (Surr)			
DFBZ = 1,4-Difluorobenze	ne (Surr)			

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid Prep Type: Total/NA

		1CO	ОТРН
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11733-A-2-C MS	Matrix Spike	114	104
880-11733-A-2-D MSD	Matrix Spike Duplicate	116	106
880-11796-1	BH 05	132 S1+	134 S1+
880-11796-2	BH 05C	121	121
LCS 880-20584/2-A	Lab Control Sample	118	111
LCSD 880-20584/3-A	Lab Control Sample Dup	116	111
MB 880-20584/1-A	Method Blank	106	112

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11796-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20669/5-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20669

1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	•
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 07:30	03/04/22 12:56	
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:30	03/04/22 12:56	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 07:30	03/04/22 12:56	

MB MB

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	03/04/22 07:30	03/04/22 12:56	1
1,4-Difluorobenzene (Surr)	100	70 - 130	03/04/22 07:30	03/04/22 12:56	1

Lab Sample ID: LCS 880-20669/1-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 20669

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1051 mg/Kg 105 70 - 130 Toluene 0.100 0.09641 mg/Kg 96 70 - 130 0.100 0.09532 Ethylbenzene mg/Kg 95 70 - 130 0.200 0.2204 70 - 130 m-Xylene & p-Xylene mg/Kg 110 0.100 o-Xylene 0.1072 mg/Kg 107 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-20669/2-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 20669

RPD LCSD LCSD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1089 mg/Kg 109 70 - 130 35 Toluene 0.100 0.09986 mg/Kg 100 70 - 130 35 Ethylbenzene 0.100 0.09805 mg/Kg 98 70 - 130 35 3 0.200 m-Xylene & p-Xylene 0.2269 mg/Kg 113 70 - 130 35 0.100 0.1112 o-Xylene mg/Kg 111 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-11740-A-1-I MS

Matrix: Solid

Analysis Batch: 20859

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

Prep Batch: 20669

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.07143		mg/Kg		71	70 - 130	
Toluene	<0.00199	U F2 F1	0.101	0.06327	F1	mg/Kg		62	70 - 130	

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QC Sample Results

Client: WSP USA Inc. Job ID: 880-11796-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

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

Lab Sample ID: 880-11740-A-1-I MS

Matrix: Solid

Analysis Batch: 20859

Prep Type: Total/NA

Prep Batch: 20669

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U F1	0.101	0.06285	F1	mg/Kg		62	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1445		mg/Kg		72	70 - 130	
o-Xylene	< 0.00199	U	0.101	0.07131		mg/Kg		71	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	80		70 - 130		
1,4-Difluorobenzene (Surr)	101		70 - 130		

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20669

Matrix: Solid

Lab Sample ID: 880-11740-A-1-J MSD

Analysis Batch: 20859

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.0998	0.1001		mg/Kg		100	70 - 130	33	35
Toluene	<0.00199	U F2 F1	0.0998	0.09162	F2	mg/Kg		91	70 - 130	37	35
Ethylbenzene	<0.00199	U F1	0.0998	0.08914		mg/Kg		89	70 - 130	35	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2065		mg/Kg		103	70 - 130	35	35
o-Xylene	<0.00199	U	0.0998	0.1009		mg/Kg		101	70 - 130	34	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-20584/1-A

Matrix: Solid

Analysis Batch: 20651

Client Sample I	ID: Method Blank	
Pre	en Tyne: Total/NA	

Prep Batch: 20584

	IVID	MID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 09:06	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 09:06	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 09:28	03/02/22 09:06	1

мв мв

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	106		70 - 130	03/01/22 09:28	03/02/22 09:06	1
o-Terphenyl (Surr)	112		70 - 130	03/01/22 09:28	03/02/22 09:06	1

Lab Sample ID: LCS 880-20584/2-A

Matrix: Solid

Analysis Batch: 20651

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20584

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	 1000	930.5		mg/Kg		93	75 - 125	_
>C12-C28 Range Hydrocarbons	1000	1069		mg/Kg		107	75 - 125	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	118		70 - 130

Client: WSP USA Inc. Job ID: 880-11796-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 880-20584/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 20651

Prep Type: Total/NA

Prep Batch: 20584

LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 111 70 - 130

Lab Sample ID: LCSD 880-20584/3-A

Matrix: Solid

Analysis Batch: 20651

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 20584

LCSD LCSD Spike %Rec. RPD RPD Analyte Added Result Qualifier Unit D %Rec Limits Limit C6-C12 Range Hydrocarbons 1000 880.7 mg/Kg 88 75 - 125 6 25 >C12-C28 Range Hydrocarbons 1000 987 4 99 75 - 125 8 25 mg/Kg

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	116		70 - 130
o-Terphenyl (Surr)	111		70 - 130

Lab Sample ID: 880-11733-A-2-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 20651

Prep Type: Total/NA

Prep Batch: 20584

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12 Range Hydrocarbons	<50.0	U	995	1082		mg/Kg		109	75 - 125	
>C12-C28 Range Hydrocarbons	<50.0	U	995	986.7		mg/Kg		99	75 - 125	
	MS	MS								

Limits %Recovery Qualifier Surrogate 1-Chlorooctane (Surr) 70 - 130 114 70 - 130 o-Terphenyl (Surr) 104

Lab Sample ID: 880-11733-A-2-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 20651

Prep Type: Total/NA

Prep Batch: 20584

MSD MSD RPD Sample Sample Spike %Rec. Limit Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD C6-C12 Range Hydrocarbons <50.0 U 998 1178 mg/Kg 118 75 - 125 9 25 >C12-C28 Range Hydrocarbons <50.0 U 998 1018 mg/Kg 102 75 - 125 3 25

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane (Surr) 116 70 - 130 o-Terphenyl (Surr) 106 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20585/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20705

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 03/03/22 18:14

QC Sample Results

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-20585/2-A

Client Sample ID: Lab Control Sample
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 20705

 Analyte
 Added Chloride
 Result 250
 Qualifier 250
 Unit 258
 MRec Limits 250
 Limits 258
 Chloride
 MRec Limits 250
 MRec Limits

Lab Sample ID: LCSD 880-20585/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 20705

Spike LCSD LCSD %Rec. RPD Added Result Qualifier Limit Analyte Unit D %Rec Limits RPD Chloride 250 258.3 mg/Kg 103 90 - 110 0

Lab Sample ID: 880-11799-A-3-D MS

Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble

Analysis Batch: 20705

MS MS %Rec. Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit Limits Chloride 1640 1250 3014 110 90 - 110 mg/Kg

Lab Sample ID: 880-11799-A-3-E MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 20705

Sample Sample MSD MSD RPD Spike %Rec. Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result Limits 1250 Chloride 1640 2994 108 90 - 110 20 mg/Kg

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Prep Type: Soluble

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

GC VOA

Prep Batch: 20669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Total/NA	Solid	5035	
880-11796-2	BH 05C	Total/NA	Solid	5035	
MB 880-20669/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20669/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20669/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11740-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-11740-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Total/NA	Solid	8021B	20669
880-11796-2	BH 05C	Total/NA	Solid	8021B	20669
MB 880-20669/5-A	Method Blank	Total/NA	Solid	8021B	20669
LCS 880-20669/1-A	Lab Control Sample	Total/NA	Solid	8021B	20669
LCSD 880-20669/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20669
880-11740-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	20669
880-11740-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20669

Analysis Batch: 20986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Total/NA	Solid	Total BTEX	
880-11796-2	BH 05C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11796-2	BH 05C	Total/NA	Solid	TX_1005_S_Pre	
				p	
MB 880-20584/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
				p	
LCS 880-20584/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCSD 880-20584/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11733-A-2-C MS	Matrix Spike	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11733-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	TX_1005_S_Pre	
				р	

Analysis Batch: 20651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Total/NA	Solid	TX 1005	20584
880-11796-2	BH 05C	Total/NA	Solid	TX 1005	20584
MB 880-20584/1-A	Method Blank	Total/NA	Solid	TX 1005	20584
LCS 880-20584/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	20584
LCSD 880-20584/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20584
880-11733-A-2-C MS	Matrix Spike	Total/NA	Solid	TX 1005	20584
880-11733-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	TX 1005	20584

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

GC Semi VOA

Analysis Batch: 20754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Total/NA	Solid	TX 1005	
880-11796-2	BH 05C	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 20585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Soluble	Solid	DI Leach	
880-11796-2	BH 05C	Soluble	Solid	DI Leach	
MB 880-20585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11799-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11799-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11796-1	BH 05	Soluble	Solid	300.0	20585
880-11796-2	BH 05C	Soluble	Solid	300.0	20585
MB 880-20585/1-A	Method Blank	Soluble	Solid	300.0	20585
LCS 880-20585/2-A	Lab Control Sample	Soluble	Solid	300.0	20585
LCSD 880-20585/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20585
880-11799-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	20585
880-11799-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20585

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Client: WSP USA Inc. Job ID: 880-11796-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Client Sample ID: BH 05

Lab Sample ID: 880-11796-1

Matrix: Solid

Date Collected: 02/25/22 14:27 Date Received: 02/28/22 16:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20669	03/04/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/04/22 19:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20986	03/06/22 20:53	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.02 g	10 mL	20584	03/01/22 09:28	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20651	03/02/22 16:07	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20754	03/03/22 08:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20585	03/01/22 09:38	SC	XEN MID
Soluble	Analysis	300.0		5			20705	03/03/22 19:33	CH	XEN MID

Client Sample ID: BH 05C Lab Sample ID: 880-11796-2

Date Collected: 02/25/22 14:40 Matrix: Solid

Date Received: 02/28/22 16:34

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20669	03/04/22 07:30	KL	XEN MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/04/22 20:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20986	03/06/22 20:53	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	20584	03/01/22 09:28	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20651	03/02/22 16:28	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20754	03/03/22 08:18	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20585	03/01/22 09:38	SC	XEN MID
Soluble	Analysis	300.0		5			20705	03/03/22 20:00	CH	XEN MI

Laboratory References:

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

Released to Imaging: 3/22/2022 3:32:03 PM

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

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 fellow to a control	and the first of the first of the	1 10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	. d. b (b	Contrate and the Co	
The following analytes are included in this re		it the laboratory is not certific	ed by the governing authority. This list ma	ly include analytes to	
the agency does not of	er certification.				
the agency does not of Analysis Method	er certification. Prep Method	Matrix	Analyte		

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Method Summary

 Client: WSP USA Inc.
 Job ID: 880-11796-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

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

Eurofins Midland

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU DI 1 Job ID: 880-11796-1

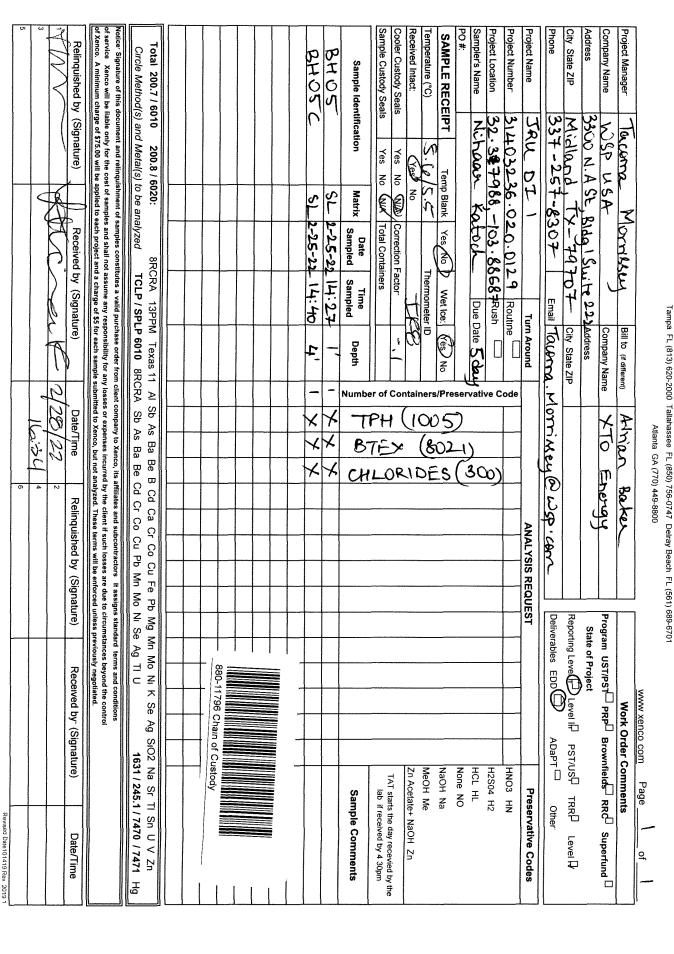
SDG: 32.37988, -103.88687

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-11796-1	BH 05	Solid	02/25/22 14:27	02/28/22 16:34	1'
880-11796-2	BH 05C	Solid	02/25/22 14:40	02/28/22 16:34	4'

Chain of Custody

Work Order No:

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334 Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296



3/7/2022

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 880-11796-1

SDG Number: 32.37988, -103.88687

List Source: Eurofins Midland Login Number: 11796

List Number: 1

Creator: Rodriguez, Leticia

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

Eurofins Midland Page 19 of 19



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-11797-1

Laboratory Sample Delivery Group: 32.37988, -103.88687

Client Project/Site: JRU DI 1

For:

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

Attn: Kalei Jennings

MAMER

Authorized for release by: 3/7/2022 9:27:37 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

····· Links ·····

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Released to Imaging: 3/22/2022 3:32:03 PM

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: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-11797-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Qualifiers

00	11	$\overline{}$	A
GC	v	u	А

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits S1+ Surrogate recovery exceeds control limits, high biased. U

GC Semi VOA

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

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report. Listed under the "D" column to designate that the result is reported on a dry weight basis

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

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

QC

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

Quality Control RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Job ID: 880-11797-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-11797-1

Receipt

The samples were received on 2/28/2022 4:34 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.5°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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Matrix: Solid

Lab Sample ID: 880-11797-1

Client Sample Results

Client: WSP USA Inc. Job ID: 880-11797-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Client Sample ID: BH 04

Date Collected: 02/25/22 13:53 Date Received: 02/28/22 16:34

Sample Depth: 1'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F2 F1	0.00198		mg/Kg		03/06/22 11:20	03/07/22 00:19	1
Toluene	<0.00198	U F2 F1	0.00198		mg/Kg		03/06/22 11:20	03/07/22 00:19	1
Ethylbenzene	<0.00198	U F2 F1	0.00198		mg/Kg		03/06/22 11:20	03/07/22 00:19	1
m-Xylene & p-Xylene	<0.00397	U F2 F1	0.00397		mg/Kg		03/06/22 11:20	03/07/22 00:19	1
o-Xylene	<0.00198	U F2 F1	0.00198		mg/Kg		03/06/22 11:20	03/07/22 00:19	1
Xylenes, Total	<0.00397	U F2 F1	0.00397		mg/Kg		03/06/22 11:20	03/07/22 00:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				03/06/22 11:20	03/07/22 00:19	1
1,4-Difluorobenzene (Surr)	100		70 - 130				03/06/22 11:20	03/07/22 00:19	1

Method: Total BTEX - Total BTEX Calculation											
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Total BTEX	<0.00397	U	0.00397		mg/Kg			03/07/22 10:04	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 11:03	03/02/22 19:43	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 11:03	03/02/22 19:43	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 11:03	03/02/22 19:43	1
Total Petroleum Hydrocarbons (C6-C35)	<50.0	U	50.0		mg/Kg			03/03/22 08:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	106		70 - 130	03/01/22 11:0	3 03/02/22 19:43	1
o-Terphenyl (Surr)	107		70 - 130	03/01/22 11:0	3 03/02/22 19:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	264	4.96	mg/Kg			03/04/22 10:19	1

Lab Sample ID: 880-11797-2 Client Sample ID: BH 04C Date Collected: 02/25/22 14:06 **Matrix: Solid**

Date Received: 02/28/22 16:34

Released to Imaging: 3/22/2022 3:32:03 PM

Sample Depth: 4'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/07/22 00:39	1
Toluene	0.00295		0.00200		mg/Kg		03/06/22 11:20	03/07/22 00:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/07/22 00:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/06/22 11:20	03/07/22 00:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/07/22 00:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/06/22 11:20	03/07/22 00:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	249	S1+	70 - 130				03/06/22 11:20	03/07/22 00:39	1
1,4-Difluorobenzene (Surr)	227	S1+	70 ₋ 130				03/06/22 11:20	03/07/22 00:39	1

Matrix: Solid

Lab Sample ID: 880-11797-2

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Client Sample ID: BH 04C

Date Collected: 02/25/22 14:06 Date Received: 02/28/22 16:34

Sample Depth: 4'

Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/07/22 10:04	1
- Method: TX 1005 - Texas - Total	Petroleum Hyd	rocarbon (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		03/01/22 11:03	03/02/22 20:44	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		03/01/22 11:03	03/02/22 20:44	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		03/01/22 11:03	03/02/22 20:44	1
Total Petroleum Hydrocarbons	<49.9	U	49.9		mg/Kg			03/03/22 08:28	1
(C6-C35)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)			70 - 130				03/01/22 11:03	03/02/22 20:44	1

o-Terphenyl (Surr)	112		70 - 130				03/01/22 11:03	03/02/22 20:44	1
Method: 300.0 - Anions, Ion Chror	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		5.02		mg/Kg			03/04/22 10:28	1

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Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limi
		BFB1	DFBZ1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
80-11797-1	BH 04	106	100	
80-11797-1 MS	BH 04	102	87	
380-11797-1 MSD	BH 04	105	103	
380-11797-2	BH 04C	249 S1+	227 S1+	
.CS 880-20688/1-A	Lab Control Sample	97	103	
CSD 880-20688/2-A	Lab Control Sample Dup	99	101	
IB 880-20688/5-A	Method Blank	100	98	
ИВ 880-20897/5-A	Method Blank	95	98	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid Prep Type: Total/NA

_			
		1CO	ОТРН
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11797-1	BH 04	106	107
880-11797-1 MS	BH 04	111	93
880-11797-1 MSD	BH 04	113	96
880-11797-2	BH 04C	114	112
LCS 880-20603/2-A	Lab Control Sample	120	101
LCSD 880-20603/3-A	Lab Control Sample Dup	114	97
MB 880-20603/1-A	Method Blank	126	128

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11797-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20688/5-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20688

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:20	03/06/22 23:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/06/22 11:20	03/06/22 23:50	1

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/06/22 11:20	03/06/22 23:50	1
1.4-Difluorobenzene (Surr)	98		70 - 130	03/06/22 11:20	03/06/22 23:50	1

Lab Sample ID: LCS 880-20688/1-A

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20688

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1076	-	mg/Kg		108	70 - 130	
Toluene	0.100	0.1007		mg/Kg		101	70 - 130	
Ethylbenzene	0.100	0.09908		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.2300		mg/Kg		115	70 - 130	
o-Xylene	0.100	0.1125		mg/Kg		112	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-20688/2-A

Matrix: Solid

Analysis Batch: 20859

Prep Type: Total/NA

Prep Batch: 20688

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1036		mg/Kg		104	70 - 130	4	35
Toluene	0.100	0.09620		mg/Kg		96	70 - 130	5	35
Ethylbenzene	0.100	0.09579		mg/Kg		96	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2221		mg/Kg		111	70 - 130	3	35
o-Xylene	0.100	0.1103		mg/Kg		110	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1 4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 880-11797-1 MS

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: BH 04 Prep Type: Total/NA

Prep Batch: 20688

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U F2 F1	0.0990	0.03681	F1	mg/Kg	_	36	70 - 130	
Toluene	<0.00198	U F2 F1	0.0990	0.04011	F1	mg/Kg		39	70 - 130	

Eurofins Midland

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QC Sample Results

Client: WSP USA Inc. Job ID: 880-11797-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

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

Lab Sample ID: 880-11797-1 MS

Matrix: Solid

Analysis Batch: 20859

Client Sample ID: BH 04 Prep Type: Total/NA

Prep Batch: 20688

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D Ethylbenzene <0.00198 U F2 F1 0.0990 0.04279 F1 43 70 - 130 mg/Kg m-Xylene & p-Xylene < 0.00397 U F2 F1 0.198 0.09448 F1 mg/Kg 48 70 - 130 0.0990 48 o-Xylene <0.00198 U F2 F1 0.04736 F1 70 - 130 mg/Kg

%Rec.

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Client Sample ID: BH 04

Prep Type: Total/NA

Prep Batch: 20688

Lab Sample ID: 880-11797-1 MSD **Matrix: Solid**

Analysis Batch: 20859

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00198	U F2 F1	0.0992	0.08934	F2	mg/Kg		89	70 - 130	83	35
Toluene	<0.00198	U F2 F1	0.0992	0.08271	F2	mg/Kg		82	70 - 130	69	35
Ethylbenzene	<0.00198	U F2 F1	0.0992	0.08084	F2	mg/Kg		81	70 - 130	62	35
m-Xylene & p-Xylene	<0.00397	U F2 F1	0.198	0.1874	F2	mg/Kg		94	70 - 130	66	35
o-Xylene	<0.00198	U F2 F1	0.0992	0.09159	F2	mg/Kg		92	70 - 130	64	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: MB 880-20897/5-A

Matrix: Solid

Xylenes, Total

Analysis Batch: 20859

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

Prep Batch: 20897

Result Qualifier MDL Unit Prepared Dil Fac Analyte RL Analyzed Benzene <0.00200 U 0.00200 mg/Kg 03/04/22 12:13 03/06/22 12:14 Toluene <0.00200 U 0.00200 mg/Kg 03/04/22 12:13 03/06/22 12:14 Ethylbenzene <0.00200 U 0.00200 mg/Kg 03/04/22 12:13 03/06/22 12:14 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 03/04/22 12:13 03/06/22 12:14 <0.00200 U 0.00200 03/04/22 12:13 03/06/22 12:14 o-Xylene mg/Kg

0.00400

mg/Kg

MB MB

<0.00400 U

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/04/22 12:13	03/06/22 12:14	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/04/22 12:13	03/06/22 12:14	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-20603/1-A

Matrix: Solid

Analysis Batch: 20653

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

03/06/22 12:14

03/04/22 12:13

Prep Batch: 20603

мв мв Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac <50.0 U 50.0 03/01/22 11:03 03/02/22 18:42 C6-C12 Range Hydrocarbons mg/Kg 50.0 03/01/22 11:03 03/02/22 18:42 >C12-C28 Range Hydrocarbons <50.0 U mg/Kg

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: MB 880-20603/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 20653

MB MB

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		03/01/22 11:03	03/02/22 18:42	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	126		70 - 130	03/01/22 11:03	03/02/22 18:42	1
o-Terphenyl (Surr)	128		70 - 130	03/01/22 11:03	03/02/22 18:42	1

Lab Sample ID: LCS 880-20603/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid
Analysis Batch: 20653

Prep Type: Total/NA
Prep Batch: 20603

Spike LCS LCS

**Pec

	Орікс		200			/ortec.	
Analyte	Added	Result	Qualifier I	Unit D	%Rec	Limits	
C6-C12 Range Hydrocarbons	1000	984.3		mg/Kg	98	75 - 125	
>C12-C28 Range Hydrocarbons	1000	1064	ı	mg/Kg	106	75 - 125	

	LCS LC	3
Surrogate	%Recovery Qua	alifier Limits
1-Chlorooctane (Surr)	120	70 - 130
o-Terphenyl (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-20603/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 20653 Prep Batch: 20603

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C12 Range Hydrocarbons	1000	953.4		mg/Kg		95	75 - 125	3	25
>C12-C28 Range Hydrocarbons	1000	1035		mg/Kg		103	75 ₋ 125	3	25

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	114		70 - 130
o-Terphenyl (Surr)	97		70 - 130

Lab Sample ID: 880-11797-1 MS Client Sample ID: BH 04

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 20653 Prep Batch: 20603

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
C6-C12 Range Hydrocarbons	<50.0	U	995	1037		mg/Kg		101	75 - 125		_
>C12-C28 Range Hydrocarbons	<50.0	U	995	1035		mg/Kg		101	75 ₋ 125		

- 012 020 Range Hydrocarbons	100.0	Ü	330	1000	mg/
	MS	MS			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane (Surr)			70 - 130		

93

Lab Sample ID: 880-11797-1 MSD Client Sample ID: BH 04

70 - 130

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 20653 Prep Batch: 20603

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit C6-C12 Range Hydrocarbons <50.0 U 998 1055 mg/Kg 102 75 _ 125 2

Eurofins Midland

o-Terphenyl (Surr)

Client: WSP USA Inc. Job ID: 880-11797-1 Project/Site: JRU DI 1

SDG: 32.37988, -103.88687

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: 880-11797-1 MSD Client Sample ID: BH 04 **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 20653**

Prep Batch: 20603

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit D >C12-C28 Range Hydrocarbons <50.0 U 998 1079 106 75 ₋ 125 25 mg/Kg

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane (Surr) 113 70 - 130 70 - 130 o-Terphenyl (Surr) 96

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20585/1-A Client Sample ID: Method Blank **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 20705

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 03/03/22 18:14 mg/Kg

Lab Sample ID: LCS 880-20585/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble**

Matrix: Solid **Analysis Batch: 20705**

Spike LCS LCS

%Rec. Analyte Added Result Qualifier Limits Unit D %Rec Chloride 250 103 258.2 mg/Kg 90 - 110

Lab Sample ID: LCSD 880-20585/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20705

RPD Spike LCSD LCSD %Rec. Result Qualifier Added Analyte Unit D %Rec Limits RPD Limit Chloride 250 258.3 mg/Kg 103 90 - 110 20

Lab Sample ID: 880-11799-A-3-D MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 20705

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit Chloride 1250 1640 3014 mg/Kg 90 - 110

Lab Sample ID: 880-11799-A-3-E MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 20705

Sample Sample Spike MSD MSD %Rec. RPD Qualifier Analyte Result Qualifier Added Result Unit %Rec Limits RPD Limit Chloride 1640 1250 2994 mg/Kg 108 90 - 110 20

QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

GC VOA

Prep Batch: 20688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Total/NA	Solid	5035	
880-11797-2	BH 04C	Total/NA	Solid	5035	
MB 880-20688/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20688/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20688/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11797-1 MS	BH 04	Total/NA	Solid	5035	
880-11797-1 MSD	BH 04	Total/NA	Solid	5035	

Analysis Batch: 20859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Total/NA	Solid	8021B	20688
880-11797-2	BH 04C	Total/NA	Solid	8021B	20688
MB 880-20688/5-A	Method Blank	Total/NA	Solid	8021B	20688
MB 880-20897/5-A	Method Blank	Total/NA	Solid	8021B	20897
LCS 880-20688/1-A	Lab Control Sample	Total/NA	Solid	8021B	20688
LCSD 880-20688/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20688
880-11797-1 MS	BH 04	Total/NA	Solid	8021B	20688
880-11797-1 MSD	BH 04	Total/NA	Solid	8021B	20688

Prep Batch: 20897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20897/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 21019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Total/NA	Solid	Total BTEX	
880-11797-2	BH 04C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Total/NA	Solid	TX_1005_S_Pre	
				p	
880-11797-2	BH 04C	Total/NA	Solid	TX_1005_S_Pre	
				p	
MB 880-20603/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre	
				p	
LCS 880-20603/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
				р	
LCSD 880-20603/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11797-1 MS	BH 04	Total/NA	Solid	TX_1005_S_Pre	
				р	
880-11797-1 MSD	BH 04	Total/NA	Solid	TX_1005_S_Pre	
				р	

Analysis Batch: 20653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Total/NA	Solid	TX 1005	20603
880-11797-2	BH 04C	Total/NA	Solid	TX 1005	20603
MB 880-20603/1-A	Method Blank	Total/NA	Solid	TX 1005	20603
LCS 880-20603/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	20603

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QC Association Summary

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

GC Semi VOA (Continued)

Analysis Batch: 20653 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-20603/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	20603
880-11797-1 MS	BH 04	Total/NA	Solid	TX 1005	20603
880-11797-1 MSD	BH 04	Total/NA	Solid	TX 1005	20603

Analysis Batch: 20765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Total/NA	Solid	TX 1005	
880-11797-2	BH 04C	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 20585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Soluble	Solid	DI Leach	
880-11797-2	BH 04C	Soluble	Solid	DI Leach	
MB 880-20585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11799-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11799-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11797-1	BH 04	Soluble	Solid	300.0	20585
880-11797-2	BH 04C	Soluble	Solid	300.0	20585
MB 880-20585/1-A	Method Blank	Soluble	Solid	300.0	20585
LCS 880-20585/2-A	Lab Control Sample	Soluble	Solid	300.0	20585
LCSD 880-20585/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20585
880-11799-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	20585
880-11799-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20585

Lab Chronicle

Client: WSP USA Inc. Job ID: 880-11797-1 Project/Site: JRU DI 1 SDG: 32.37988, -103.88687

Client Sample ID: BH 04

Date Collected: 02/25/22 13:53 Date Received: 02/28/22 16:34

Lab Sample ID: 880-11797-1

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20688	03/06/22 11:20	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20859	03/07/22 00:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21019	03/07/22 10:04	AJ	XEN MID
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	20603	03/01/22 11:03	DM	XEN MID
Total/NA	Analysis	TX 1005		1			20653	03/02/22 19:43	AJ	XEN MID
Total/NA	Analysis	TX 1005		1			20765	03/03/22 08:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20585	03/01/22 09:38	SC	XEN MID
Soluble	Analysis	300.0		1			20705	03/04/22 10:19	CH	XEN MID

Lab Sample ID: 880-11797-2 Client Sample ID: BH 04C Date Collected: 02/25/22 14:06

Date Received: 02/28/22 16:34

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 20688 Total/NA Prep 5.00 g 5 mL 03/06/22 11:20 KL XEN MID 8021B Total/NA 5 mL 20859 03/07/22 00:39 XEN MID Analysis 1 5 mL KL Total/NA Total BTEX 21019 03/07/22 10:04 XEN MID Analysis 1 A.I Total/NA Prep TX_1005_S_Prep 10.02 g 10 mL 20603 03/01/22 11:03 DM XEN MID Total/NA 03/02/22 20:44 Analysis TX 1005 20653 AJ XEN MID 1 Total/NA Analysis TX 1005 1 20765 03/03/22 08:28 ΑJ XEN MID Soluble 03/01/22 09:38 SC XEN MID Leach DI Leach 4.98 g 50 mL 20585 Soluble Analysis 300.0 20705 03/04/22 10:28 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: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Laboratory: Eurofins Midland

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

Authority	P	rogram	Identification Number	Expiration Date
Texas		IELAP	T104704400-21-22	06-30-22
The following analytes the agency does not of		out the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for whic
Analysis Method	Prep Method	Matrix	Analyte	

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Method Summary

 Client: WSP USA Inc.
 Job ID: 880-11797-1

 Project/Site: JRU DI 1
 SDG: 32.37988, -103.88687

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID
TX 1005 S Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

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

Eurofins Midland

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Sample Summary

Client: WSP USA Inc. Project/Site: JRU DI 1 Job ID: 880-11797-1

SDG: 32.37988, -103.88687

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Dep
880-11797-1	BH 04	Solid	02/25/22 13:53	02/28/22 16:34	1'
880-11797-2	BH 04C	Solid	02/25/22 14:06	02/28/22 16:34	4'

Project Manager

WSP Tacoma

MSA

Company Name Bill to (if different)

Energy baker

Program UST/PST PRP Brownfield RRC

Superfund []

www xenco com

Work Order Comments

State of Project

Adnas メーロ

Address Company Name

3300 N A St. Bldal Swite 222 Address

Chain of Custody

Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Deiray Beach FL (561) 689-6701 Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334 Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0900 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296 Atlanta GA (770) 449-8800

City, State ZIP	Hidland, TX-797-07	+0+124-	City State ZIP	ate ZIP				Reporting	Reporting Level IP PST/USP	TRRP Level A
	337-257-8307	8307	Email Touce	7.2	1022	Syeu	acoma Morrissey @ wsp. com	Deliverables	oles EDD 🛈 ADaPT 🗆	Other
Project Name	JRW DI	-	Turn Around	Z.	,		ANALYSIS REQUES	QUEST		Preservative Codes
er:	31403236.020.0129	20.0129	Routine						HNC	HNO3 HN
	32.37988 -	-103.88687 Rush	# Rush □	ve C)		H2S	H2S04 H2
	N	Katoch	Due Date 5	g- Vativ					HCL HCL	HCL HL
PO #:				L.V.		<u>)</u>			Non	None NO
SAMPLE RECEIPT	PT Temp Blank	Yes No	Wet Ice (Yes)	Z /Pre					Nac	NaOH Na
Temperature (°C)	5.2/21.5	The	Thermometer ID	ners.					MeC	МеОН Ме
Received Intact:	(Yes) No		RO	ıtaiı)5				Zn A	Zn Acetate+ NaOH Zn
Cooler Custody Seals	Yes No New	Correction Factor	or ·	Cor			< 11		ТА	TAT starts the day received by the
Sample Custody Seals	Ĺ		S	r of		<u>=></u>	_04			lab if received by 4 30pm
Sample Identification	fication Matrix	Date Sampled	Time Depth	∯ Numbe	TPH	BT:	<u>CHI</u>			Sample Comments
BH 04	51-	2-25-22 19	13:53 1'		-	X	^			
240 HB	75		4:06 4	,	X	メ				
						+				
									880-11797 Chain of Custody	
Total 200.7 / 6010	10 200.8 / 6020:	8RCRA	13PPM	Texas 11 Al Sb As	N Sb As	Ва Ве В	B Cd Ca Cr Co Cu Fe	B	Mg Mn Mo Ni K Se Ag SiO2 Na	Sr Tl Sn U V Zn
Circle Method(s,	Circle Method(s) and Metal(s) to be analyzed		LP / SPLP 6010	0 8RCR	A Sb A	s Ba B	TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	11	Ni Se Ag Ti U 1631/	1631 / 245.1 / 7470 / 7471 Hg
Notice Signature of this do of service. Xenco will be ila of Xenco. A minimum charge	cument and relinquishment only for the cost of sample only for the cost of sample of \$75.00 will be applied to	of samples constitute ples and shall not ass o each project and a c	s a valid purchase ord ume any responsibilit harge of \$5 for each:	der from clie ty for any lo: sample subi	nt company sses or expe	to Xenco, i	Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	assigns standard due to circumstan	terms and conditions nees beyond the control lously negotiated.	
Relinquished by (Signature)	(Signature)	Received by: (Signature)	(Signature)		Date/Time	Time	Relinquished by (Signatu	nature)	Received by (Signature)	Date/Time
1- Tage -	2 Z	Ath	Cost	1	Sede	122	N			
3) } 	127	4			
5							6			

Work Order No:

Revised Date101419 Rev 2019 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-11797-1

SDG Number: 32.37988, -103.88687

Login Number: 11797 List Source: Eurofins Midland
List Number: 1

Creator: Rodriguez, Leticia

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

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<6mm (1/4").

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 91314

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	91314
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created	Condition	Condition
Ву		Date
jnobui	Deferral Request Approved. Please implement 19.15.29.13 NMAC when completing P&A. For depth to groundwater determination, please use wells within 0.5 miles of site and <25 years old.	3/22/2022