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	nAPP2201862045
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Melodie Sanjari	Contact Telephone 575-988-8753
Contact email msanjari@marathonoil.com	Incident # (assigned by OCD)
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

Location of Release Source

			Locatio	11 01 1	cicase Source	
Latitude 32.5	5 <u>664978</u>		Longitude (NAD 83 in	decimal de	-103.7428894 egrees to 5 decimal places)	
Site Name: Q	UEENIE 15	FEDERAL #001	H		Site Type: Oil & Gas Fac	ility
Date Release	Discovered	: 1/18/2022			API# (if applicable) 30-025-40)230
Unit Letter	Section	Township	Range		County	
M	14	20S	32E	Lea		
Surface Owne	r: State	⊠ Federal □ 1		Ì	lume of Release)

Material	(s) Released (Select all that apply and attac	ch calculations or specific just	ification for the volumes provided below)	
Crude Oil	Volume Released (bbls)	V	olume Recovered (bbls)	
Produced Water	Volume Released (bbls) 30	V	Volume Recovered (bbls) 25	
	Is the concentration of dissolved produced water >10,000 mg/l?	chloride in the	Yes No	
Condensate	Volume Released (bbls)	7	olume Recovered (bbls)	
Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
Other (describe)	Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)	
Cause of Release				
			the earthen containment. The source was	
isolated, tanks pulled dow	n and all standing fluids were imm	nediately recovered.		
Tanks @ ~171bbl		13	-Jan	
Avg. 64 BPWD - 2x 300 bbl. equalized to		00 bbl. equalized tanl	(S	
	1x125 bbl. pull	14	-Jan	
	30 bbl. released	18	Jan	

Received by OCD: 3/25/2022 9:23:06 AM Form C-141 State of New Mexico Page 2 Oil Conservation Division

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Incident ID	nAPP2201862045
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Was this a major	If YES, for what reason(s) does the respon	nsible party consider this a major release?
release as defined by	Volume	
19.15.29.7(A) NMAC?		
⊠ Yes □ No		
	otice given to the OCD? By whom? To whe d with volume estimate 4/18/2022	om? When and by what means (phone, email, etc)?
	Initial R	esponse
The responsible	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.	
The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or contained via the use of the use o	ikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and	d managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain	why:
		•
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
I hereby certify that the info	rmation given above is true and complete to the	pest of my knowledge and understand that pursuant to OCD rules and
		fications 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
	f 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:Mel	odie Sanjari	Title: Environmental Professional
Signature: <u>Melod</u>	lío Caníarí	D-4 1/20/2022
Signature:Meada	<u>ue surgur i</u>	Date: 1/20/2022
email: msanjari@mara	thonoil.com	Telephone: <u>575-988-8753</u>
OCD Only		
Received by:		Date:

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	00 0	m 1-18	
TO: (NGC) T	B16 600	04 5	
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Tha		SUB TOTAL TAX TOTAL	
7	COST CENTER TO: () G) TO: (OTEPOGAL 8100 COST CENTER TO: () G () B I () O () ORIG DEATTERY O COMP BOTTOM: BILLING RO AT 9:40 PM FM FM FM FM FM FM FM FM FM	ORIG BATTERY O COMPLETION O BOTTOM: BILLING RATE STATE AT 9:00 Py FIN FIN FIN FIN TOTAL ME Thank You! TOTAL

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Incident ID	nAPP2201862045
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Site Assessment/Characterization

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

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

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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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: Melodie Sanjari	Title: Environmental Professional					
Signature: Melodie Sanjari	Date: 3/25/2022					
email: msanjari@marathonoil.com	Telephone: <u>575-988-8753</u>					
OCD Only						
Received by:	Date:					

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Incident ID	nAPP2201862045
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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 point □ Estimated volume of material to be remediated □ Closure criteria is to Table 1 specifications subject to 19.15.29.1 □ Proposed schedule for remediation (note if remediation plan times) 	2(C)(4) NMAC
<u>Deferral Requests Only</u> : Each of the following items must be con	firmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around predeconstruction.	oduction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
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 complet rules and regulations all operators are required to report and/or file complete which may endanger public health or the environment. The acceptability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local leads to the complete of t	ertain release notifications and perform corrective actions for releases ace of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name: Melodie Sanjari	Title: Environmental Professional
Signature: Melodie Sanjari	Date: 3/25/2022
email: msanjari@marathonoil.com	Telephone: 575-988-8753
OCD Only	
Received by:	Date:
☐ Approved ☐ Approved with Attached Conditions of	Approval Denied Deferral Approved
Signature: Jennifer Nobui	Date: 05/03/2022

wsp

WSP USA

508 West Stevens Street Carlsbad, NM 88220 575.887.0101

March 23, 2022

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

RE: Deferral Request

Queenie 15 Federal #001H

Incident Number nAPP2201862045

Lea County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of Marathon Oil Permian, LLC. (Marathon), is pleased to present the following Deferral Request detailing site assessment and soil sampling activities at the Queenie 15 Federal #001H (Site) located in Unit M, Section 14, Township 20 South, Range 32 East, in Lea County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to address impacts to soil following a release of produced water at the Site. Based on field observations, delineation activities, and analytical results of soil samples, Marathon is submitting this Deferral Request, describing delineation activities that have occurred and requesting deferral of final remediation of Incident Number nAPP2201862045 until the equipment in the affected area is removed during major Site reconstruction operations, or when the well or facility is plugged or abandoned, whichever comes first.

RELEASE BACKGROUND

On January 18, 2022, a sensor-field gauge failure resulted in the produced water tanks to overflow into the earthen containment. The overflow released approximately 30 barrels (bbls) of produced water into the earthen containment. Approximately 25 bbls of produced water were recovered via vacuum truck. Marathon reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on January 20, 2022 and was assigned Incident Number nAPP2201862045.

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) through a desktop search of potential sensitive receptors as well as referencing an NMOCD approved site characterization of the Site that was associated with Incident Number NDHR1921342505. The Deferral Request Report dated October 18, 2019, and characterization associated with Incident Number NDHR1921342505 was subsequently approved by NMOCD on



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September 17, 2020. Based on the uploaded NMOCD record and groundwater information referenced in the Eddy Lea Energy Alliance (ELEA) submission of the Final Detailed Siting Report (https://www.nrc.gov/docs/ML1024/ML102440738.pdf), depth to protectable groundwater is greater than 100 feet bgs. The ELEA report states shallow groundwater is found at approximately 35 feet bgs; however, the shallow groundwater quality exceeded 10,000 parts per million (ppm) Total Dissolved Solids (TDS), therefore the shallow groundwater in the vicinity of the Site is not considered protectable. Protectable groundwater has been observed between 300 feet to 400 feet bgs. It should be noted that the same groundwater quality and depth to protectable groundwater evaluation was approved by NMOCD on August 10, 2021, for Incident Number nAPP2110325623

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 3,707 feet east 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, and church. 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 located in a low-potential karst area. Potential receptors identified during Site Characterization are displayed in Figure 1.

CLOSURE CRITERIA

Based on the results of the Site Characterization and approved NMOCD groundwater determination of the Site referenced in the 2019 Deferral Request Report, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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

SITE ASSESSMENT AND LINER INSPECTION

On January 31, 2022, WSP personnel visited the Site to conduct site assessment activities and evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP reviewed and verified the Form C-141 incident description (release source and release location) with visual soil impacts and confirmed that the release impacted areas within the earthen containment, and a portion outside containment to the north. Based on the site assessment and visual observations, delineation activities appeared to be warranted to investigate potential soil impacts related to the produced water release. Photographic documentation of the release is provided in Attachment 1.



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INITIAL DELINEATION ACTIVITIES

On February 8,2022, WSP personnel conducted horizontal and vertical delineation activities within and outside the earthen containment to confirm the presence or absence of impacted soils as a result of the overflow release. Utilizing a hand auger and gas-powered Shaw Tool, Ltd Portable Core Drill, WSP conducted four delineation soil samples within the earthen containment area (BH01-BH04). WSP conducted soil samples outside the earthen containment in the four cardinal directions (BH05-BH08), and one within the release extent that extended outside the earthen containment (BH09). Delineation activities were directed by field screening soil samples for volatile aromatic hydrocarbons using a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

A total of two soil samples were collected from each of the borehole/core hole locations: the sample with the highest observed field screening concentrations (approximately 1-foot bgs) and the greatest depth (ranging from 2 feet to 3 feet bgs). The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler initials, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C), under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-DRO, TPH-GRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. The delineation sample locations were mapped utilizing a handheld global positioning system (GPS) unit and are presented on Figure 2. Field screening results and observations for the boreholes were recorded on lithologic/soil sampling logs and are presented in Attachment 2.

CONTINUED DELINEATION ACTIVITIES

On March 9, 2021, WSP personnel returned to the site to oversee additional delineation activities associated with BH03 to fully delineation chloride/TPH impacts vertically to below NMOCD closure criteria. Delineation activities were directed by field screening soil samples for volatile aromatic hydrocarbons and chloride One soil sample was collected from BH03 location to a total depth of 3 feet bgs. The delineation sample locations were mapped utilizing a handheld GPS unit and is presented on Figure 2.

The delineation soil samples were collected, handled, and analyzed as previously described.

LABORATORY ANALYTICAL RESULTS

Based on laboratory analytical results, the vertical extent of impacted soil is less than 3 feet bgs inside the containment and 1-foot bgs in the area outside the containment. Laboratory analytical results indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in all terminus samples within the release extent and below the strictest Closure



District II Page 4

Criteria in lateral delineation samples. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are provided in Attachment 3.

DEFERRAL REQUEST

An estimated 260 cubic yards of impacted soil remain in place in the earthen containment based on a laboratory analytical data of borehole samples BH01 through BH04 at 3 feet bgs. All deferral areas are located on the well pad. The release is delineated laterally to the north by Borehole BH06, to the east by Borehole BH05, to the south by Borehole BH08, and to the west by Borehole BH07. The deferral request area is shown on Figure 2.

Marathon requests to complete remediation of residual soil impacts during any major future well pad construction/alteration or final plugging and abandonment, whichever occurs first. WSP and Marathon do not believe deferment will result in imminent risk to human health, the environment, or groundwater. Based on the additional data collected as described in this report, impacts have been fully delineated, and no soil removal can occur safely at this time. Marathon requests deferral of final remediation for Incident Number nAPP2201862045.

If you have any questions or comments, please do not hesitate to contact Mr. Daniel Moir at (303) 887-2946.

Sincerely,

WSP USA Inc.

Travis Casey

Consultant, Environmental Scientist

Daniel R. Moir, P.G.

Sr. Lead Consultant, Geologist

cc: Melodie Sanjari, Marathon



WSP USA

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

Attachments:

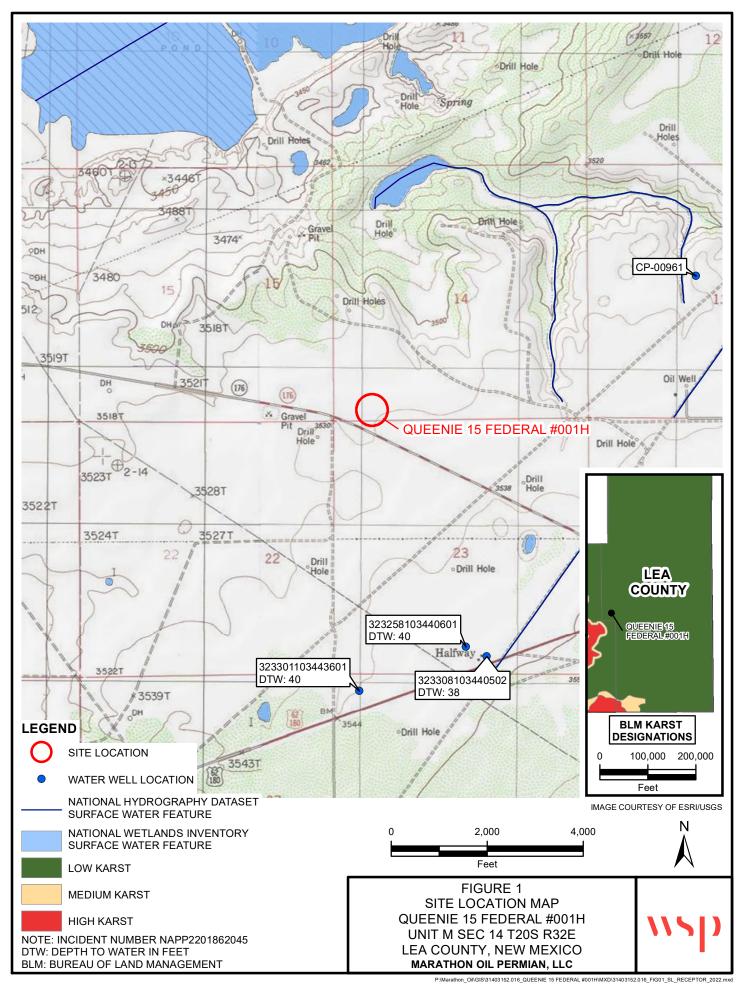
Figure 1 Site Location Map

Figure 2 Delineation/Deferral Soil Sample
Table 1 Locations Soil Analytical Results

Attachment 1 Photographic Log

Attachment 2 Lithologic/Sampling Log

Attachment 3 Laboratory Analytical Reports



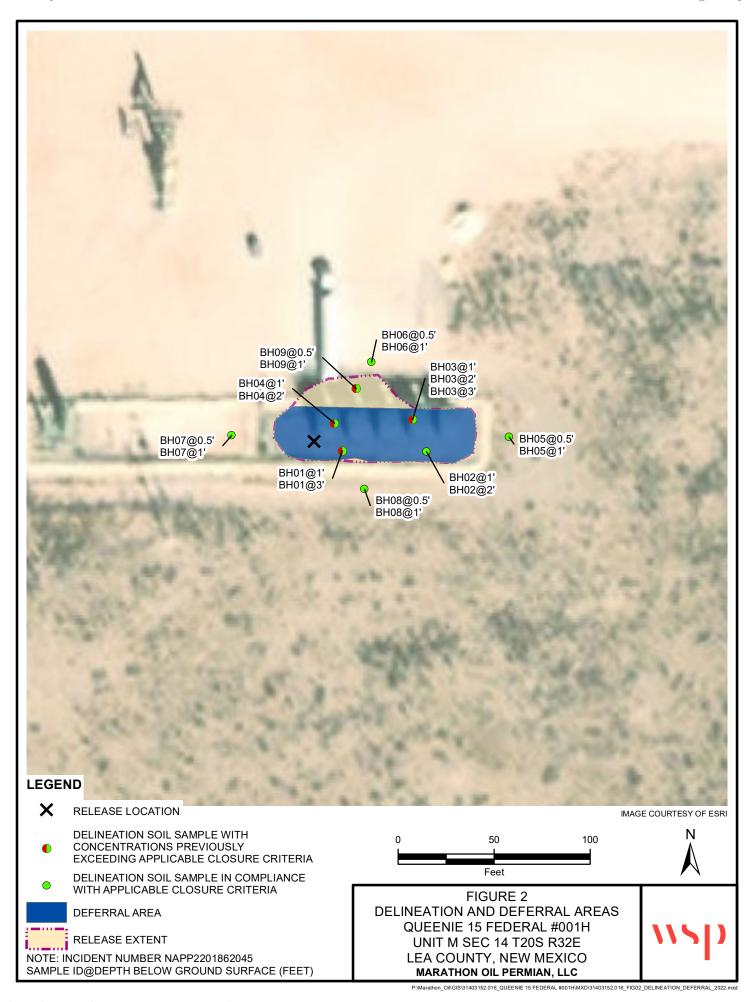


Table 1

Soil Analytical Results Queenie 15 Federal #001H Incident Number nAPP2201862045 Marathon Oil Permian, LLC Lea 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 (NMAC 19.15.29)		10	50	NE	NE	NE	1,000	2,500	20,000	
Delineation Samples	Delineation Samples									
BH01	2/8/2022	1	0.233	11.1	2,430	966	<50.0	3,396	3,400	6,820
BH01	2/8/2022	3	< 0.0401	3.35	1,410	196	<49.8	1,606	1,610	2,320
BH02	2/8/2022	1	< 0.0399	< 0.0798	280	<49.9	<49.9	280	280	9,160
BH02	2/8/2022	2	< 0.0402	< 0.0805	233	< 50.0	<50.0	233	233	8,270
BH03	2/8/2022	1	0.198	11.2	5,870	592	<250	6,462	6,460	5,000
BH03	2/8/2022	2	0.779	7.14	1,140	<49.9	<49.9	1,140	1140	12,300
BH03	3/9/2022	3	< 0.00199	< 0.00398	214	<49.9	<49.9	214	214	5,150
BH04	2/8/2022	1	< 0.0400	< 0.0800	1190	<50.0	<50.0	1,190	1,190	4,020
BH04	2/8/2022	2	0.222	1.44	162	< 50.0	<50.0	162	162	3,840
BH05	2/8/2022	0.5	< 0.00200	< 0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	15.5
BH05	02/08/2022	1	< 0.00200	< 0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	18.9
BH06	02/08/2022	0.5	< 0.00200	< 0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	20.8
BH06	02/08/2022	1	< 0.00199	< 0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	26.1

Table 1

Soil Analytical Results Queenie 15 Federal #001H Incident Number nAPP2201862045 Marathon Oil Permian, LLC Lea 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 (NMAC 19.15.29)		10	50	NE	NE	NE	1,000	2,500	20,000	
BH07	2/9/2022	0.5	< 0.00199	< 0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	129
BH07	2/9/2022	1	< 0.00200	< 0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	176
BH08	2/8/2022	0.5	< 0.00201	< 0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	112
BH08	2/8/2022	1	< 0.00200	< 0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	66.7
BH09	2/8/2022	0.5	0.215	1.42	<49.9	<49.9	<49.9	<49.9	<49.9	3,590
BH09	2/8/2022	1	< 0.0399	< 0.0798	<49.9	<49.9	<49.9	<49.9	<49.9	592

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 standard

Greyed data represents samples that were excavated



PHOTOGRAPHIC LOG					
Marathon Oil Permian, Queenie 15 Federal #001H 31403152.016					
LLC.	Lea County, New Mexico				

Photo No.	Date	
1	February 8, 2022	
	3H01	

Date
February 8, 202
BH02



PHOTOGRAPHIC LOG					
Marathon Oil Permian, Queenie 15 Federal #001H 31403152.016					
LLC.	Lea County, New Mexico				

Photo No.	Date
3	February 8, 2022
Е	BH03

o No.	Date
	ebruary 8, 2022
ВН04	



PHOTOGRAPHIC LOG						
Marathon Oil Permian,	Queenie 15 Federal #001H	31403152.016				
LLC.	Lea County, New Mexico					

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	BH05					

Photo No.	Date
6	February 8, 2022
В	BH06



PHOTOGRAPHIC LOG									
Marathon Oil Permian,	Queenie 15 Federal #001H	31403152.016							
LLC.	Lea County, New Mexico								

noto No. Date	
7 February 8, 2022	
BH07	



PHOTOGRAPHIC LOG									
Marathon Oil Permian,	Queenie 15 Federal #001H	31403152.016							
LLC.	Lea County, New Mexico								

oto No.	Date	The state of the s	
8	February 8, 2022		
E	BH09		

Lat/Lo		LITH	Co	WS 508 Wes Carlsbad, N Impliance · E GIC / SOI	ngineering	Street co 88220 Remedi LING Lo	Site Name: O2-O8-2022 Site Name: Queenic 15 Fed #001 H RP or Incident Number: LTE Job Number: Logged By: Method: Hand According Total Depth: Total Depth:						
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)			Lithology/Remarks				
M	5.0 ¹⁴ 5,868	783.6	γ	B401			G pK#	moisi Caliche Brown	floorly graded of Staining / Stai	Giles Tong	odor/Color relaith Callehe and		
19	7.6	754.3	y	Brola	2\ -		CIP/CIF	moist Sand Bion-	Stains / mod s	gree	related Buth		

1	15	LITH	Со	WS 508 Wes Carlsbad, N mpliance · E	ngineering	Street o 88220 · Remedi	Site Name: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date:	
Lat/Lo	ing:				Field Scree	ning:	Hole Diameter: Total Depth:	
Comm	ients:				Chloride, F	PID	3 2	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
139	5.6 7.380.8			BH02	/_	0	GPJE11	moist/postly graded growd with caliche and sand 1staining with strong to mad ador/ Lolor is Dark Brown sample had stick on top in San
M	4.8	5.2	y	B402A	21 -		CHICH	moist/poorly graded gravel with calliche and sand Staining / mod odor / color Dark almost Black Blown
					-			

LavLo		LITH	Со	WSi 508 Wes Carlsbad, N Impliance · E	lew Mexic	Street co 88220 Remedi LING Lo	BH or PH Name: Date: 2-08-2022 Site Name: Queenie 15 Fed # 00/17 RP or Incident Number: LTE Job Number: Logged By: Method: Hold August Hole Diameter: Total Depth:	
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)		Lithology/Remarks
ı	2)			J.1403	, \ - - - -	-	1	moist from hy graded gravel with culiche and sweet staining with most odde Dork Brown estor
	6.0	206-3	γ	B 1403 A	2		Czeke II	Moist/payly gladed given low to culiche exact send! Staining mad odor (color Durk almost Black Brown.

Moisture Comm	nents:	Vapor (ppm)	OLO		ngineering	Street co 88220 · Remedi LING LO ening: PID	BH or PH Name: BHO4 Site Name: Queene 15 Feel 2001 H RP or Incident Number: LTE Job Number: Logged By: Method: Heard August Hole Diameter: Total Depth: 2 - 08 - 2202 Method: Hole Diameter: Total Depth:	
m	3,4	415.7	y	340\$	- - - - - '	0	USCS/Rock Symbol	moist/poorly graded gravel with Caliche and Sund Istaining I mod ador / Durk Brown Sumple Joer had Slick
W	2.4/2	116.3	y	3 H04 A	2' -		GPICH	moist/poorly graded gravel with Caliche and Send /Staining / How most odor / Derk Blown color

Lat/Lo		LITH	Co		ngineering	Street to 88220 Remedia	BH or PH Name: Site Name: Quenie RP or Incident Number: LTE Job Number: Logged By: Hole Diameter:	Date: 22-28-2022 15 Feel #OU! H Method: Hand Ages Total Depth:					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lithology/Remarks				
	2.4	2.1		BHOSA	0.5^\ =			Pryspool ador la	ly located graves (ly laceted graves no Staining)	is the Sand and SITTING is the Sand and SITTING light Brown color			

WSP USA Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation									BH or PH Name: BHG Site Name: QGEEN RP or Incident Number: LTE Job Number:	z 15 i	Date: 2 - 08 - 2022 Fed It and It
		LITH	OLO	GIC / SOII	L SAMPI	LING LO	OG		Logged By:		Method: Hard dex
Lat/Lo	Lat/Long: Field Screening: Chloride, PID								Hole Diameter:		Method: Hand Aug V
Comm	nents:				Chioride, F	1D					
-			Т	·		r	Г				
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgs)			Li	ithology/R	Remarks
7	3.0	1.0	N	J1104	0.5 ⁻ \-	l					with Calieta, Sandjews 5 light Terricolof
0	1.6	1.5	N	BH 9614	, \ _ -	-	CIP/Gwn Clt	Diylpo ands	orly graded go itt / stight odor	(1 NO	with Caliche, Servel Staining / Tun, light

Lat/Lo		LITH	Со	WSI 508 Wes Carlsbad, N mpliance · E	lew Mexic	Street co 88220 · Remedia LING LO	BH or PH Name: Site Name: A Jean of Color of Co	Date: 2-08-2022 5 Fad # col # Method: /fad Advant Total Depth: 2	
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgs)	USCS/Rock Symbol	Lithology/	Remarks
D	H.B. 8	09	N	\$407				Drylpodly Grandal grand v NO Staining 129 ador,	
D .	3.9	o. 3	V	DH07A	21		Capleyor	test of Catiche 1005.	the send and silt and facining from adall

Lat/Lc	ong:	LITH	Co.	WSI 508 West Carlsbad, N mpliance · Et GIC / SOII	ew Mexic	Street to 88220 · Remedia LING LO	BH or PH Name: Date: Those services and services are services and services are services and services are services are services and services are se	
Comm	ients:				Cilionae, F	ID .		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	2-6	4.6	N	31168	0.5 - -	0	GP/Evil	pry/poorly gradual staval with culiches and silt /NO staining / Odor / Frowish color
D	1.2/2/8	3.2	N	BH9 8A		- - -	4 <i>pl4m</i> 64	Dry /porly graded gravel with Caliche, sorelsened Silt/co Staining / Slight odol / Brownish Color
					-	- - -		
					- - - -	- - -		
					- - -	- - -		
					- - - -	- - -		
					-	- - -		
					+	- - -		
					-	-		

Lat/Lo		LITH	Со		ngineering	Street co 88220 r · Remedi LING LO	BH or PH Name: Date: 2 - 08 - 20 2 2 Site Name: Quelous 15 Fast 2001 H RP or Incident Number: LTE Job Number: Logged By: Method: Method: Method May 10 Hole Diameter: Total Depth:	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
P	7.41	1.0	у	31457	O-5"_		Go Krun	Ply locally greated greated with confictive and send, 5, 1+ / Slight context / Straining Brownish Color
D.	40	0.7					SAG	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1924-1

Laboratory Sample Delivery Group: 31403152.016 Client Project/Site: Queenie 15 Federal #001H

For:

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

Attn: Joseph Hernandez

MAMER

Authorized for release by: 2/21/2022 7:03:04 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: 5/3/2022 11:56:55 AM

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

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

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Client: WSP USA Inc.

Laboratory Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

SDG:

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

Qualifiers

GC	VOA
Qual	lifier

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

Qualifier Description

GC Semi VOA

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

HPLC/IC

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

Glossary

EDL

LOD

LOQ

MCL MDA

MDC

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)

MDL Method Detection Limit MI 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)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level"

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

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

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

Job ID: 890-1924-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1924-1

Receipt

The samples were received on 2/9/2022 8:38 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: The following samples were diluted due to the nature of the sample matrix: BH01 (890-1924-1), BH01A (890-1924-2), BH02 (890-1924-3), BH02A (890-1924-4), BH03 (890-1924-5), BH03A (890-1924-6), BH04 (890-1924-7), BH04A (890-1924-8), BH09 (890-1924-9) and BH09A (890-1924-10) at 20.0, 20.0, 20.0, 20.0, 20.0, 20.0, 20.0, 20.0 and 20.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18968 and analytical batch 880-19027 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH02A (890-1924-4), (MB 880-19049/1-A), (890-1924-A-9-C MS) and (890-1924-A-9-D MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-19415 and analytical batch 880-19574 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-19422 and analytical batch 880-19575 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Matrix: Solid

Lab Sample ID: 890-1924-1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH01

Date Collected: 02/08/22 08:35 Date Received: 02/09/22 08:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.233		0.0396	mg/Kg		02/10/22 08:33	02/10/22 18:37	20
Toluene	0.309		0.0396	mg/Kg		02/10/22 08:33	02/10/22 18:37	20
Ethylbenzene	2.58		0.0396	mg/Kg		02/10/22 08:33	02/10/22 18:37	20
m-Xylene & p-Xylene	6.06		0.0792	mg/Kg		02/10/22 08:33	02/10/22 18:37	20
o-Xylene	1.90		0.0396	mg/Kg		02/10/22 08:33	02/10/22 18:37	20
Xylenes, Total	7.96		0.0792	mg/Kg		02/10/22 08:33	02/10/22 18:37	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	334	S1+	70 - 130			02/10/22 08:33	02/10/22 18:37	20
1,4-Difluorobenzene (Surr)	122		70 - 130			02/10/22 08:33	02/10/22 18:37	20
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	11.1		0.0792	mg/Kg			02/14/22 08:53	1
Method: 8015 NM - Diesel Range	Organics (DD	o) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3400		50.0	mg/Kg			02/17/22 15:47	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	966		50.0	mg/Kg		02/10/22 13:35	02/12/22 00:59	1
Diesel Range Organics (Over C10-C28)	2430		50.0	mg/Kg		02/10/22 13:35	02/12/22 00:59	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 00:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			02/10/22 13:35	02/12/22 00:59	1
o-Terphenyl	83		70 - 130			02/10/22 13:35	02/12/22 00:59	1
		Soluble						
Method: 300.0 - Anions, Ion Chro	omatograpny -	Joiuble						
Method: 300.0 - Anions, Ion Chro Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH01A

Date Collected: 02/08/22 14:00

Date Received: 02/09/22 08:38

Sample Depth: 3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U	0.0401	mg/Kg		02/10/22 08:33	02/10/22 19:05	20
Toluene	1.04		0.0401	mg/Kg		02/10/22 08:33	02/10/22 19:05	20
Ethylbenzene	0.825		0.0401	mg/Kg		02/10/22 08:33	02/10/22 19:05	20
m-Xylene & p-Xylene	0.744		0.0802	mg/Kg		02/10/22 08:33	02/10/22 19:05	20
o-Xylene	0.741		0.0401	mg/Kg		02/10/22 08:33	02/10/22 19:05	20
Xylenes, Total	1.49		0.0802	mg/Kg		02/10/22 08:33	02/10/22 19:05	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			02/10/22 08:33	02/10/22 19:05	20

Eurofins Carlsbad

Lab Sample ID: 890-1924-2

Matrix: Solid

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

Matrix: Solid

Lab Sample ID: 890-1924-2

Client Sample ID: BH01A

Date Collected: 02/08/22 14:00 Date Received: 02/09/22 08:38

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
Method. 002 1D - Volatile Organic Compounds	(OO) (Oolillillided)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93		70 - 130	02/10/22 08:33	02/10/22 19:05	20

ı						
ı	Mothod:	Total	RTFY.	- Total	RTFY	Calculation
ı	mictilou.	lotai	DIEK.	lotai	DILA	Galculation

Analyte	Result Qualif		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	3.35	0.0802	mg/Kg			02/14/22 08:53	1

POV (CC	· (DD	Organics	Pango	Diceol	5 NIM	2015	Mothod:	
ı	\$ (D	Organics	Range	- Diesel	5 NM	8015	Method:	

Analyte	Result Qualifi	ier RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1610	49.8	mg/Kg			02/17/22 15:47	1

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

Analyte	Result C	Qualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	196	49.8	mg/Kg		02/10/22 13:35	02/12/22 01:20	1
Diesel Range Organics (Over C10-C28)	1410	49.8	mg/Kg		02/10/22 13:35	02/12/22 01:20	1
Oll Range Organics (Over C28-C36)	<49.8 L	J 49.8	mg/Kg		02/10/22 13:35	02/12/22 01:20	1
	~-						

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86	70 - 130	02/10/22 13:35	02/12/22 01:20	1
o-Terphenyl	78	70 - 130	02/10/22 13:35	02/12/22 01:20	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2320		24.9	mg/Kg			02/16/22 12:25	5

Client Sample ID: BH02

Date Collected: 02/08/22 09:40

Lab Sample ID: 890-1924-3

Matrix: Solid

Date Collected: 02/08/22 09:40 Date Received: 02/09/22 08:38

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 19:32	20
Toluene	<0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 19:32	20
Ethylbenzene	<0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 19:32	20
m-Xylene & p-Xylene	<0.0798	U	0.0798	mg/Kg		02/10/22 08:33	02/10/22 19:32	20
o-Xylene	<0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 19:32	20
Xylenes, Total	<0.0798	U	0.0798	mg/Kg		02/10/22 08:33	02/10/22 19:32	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			02/10/22 08:33	02/10/22 19:32	20
1,4-Difluorobenzene (Surr)	118		70 - 130			02/10/22 08:33	02/10/22 19:32	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0798	U	0.0798	mg/Kg			02/14/22 08:53	1

	Method: 8015 NM - Diesel	Range Organics (DRO	D) (GC)	١
ı	Michiga. 00 to Min - Diese	i italige Organics (Ditt		,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	280		49.9	mg/Kg		_	02/17/22 15:47	1

Eurofins Carlsbad

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Matrix: Solid

Lab Sample ID: 890-1924-3

Client: WSP USA Inc.

Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH02

Date Collected: 02/08/22 09:40 Date Received: 02/09/22 08:38

Sample Depth: 1

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 01:41	1
Diesel Range Organics (Over C10-C28)	280		49.9	mg/Kg		02/10/22 13:35	02/12/22 01:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 01:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130			02/10/22 13:35	02/12/22 01:41	1
o-Terphenyl	78		70 - 130			02/10/22 13:35	02/12/22 01:41	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9160		99.4	ma/Ka			02/16/22 12:52	20

Client Sample ID: BH02A Lab Sample ID: 890-1924-4 Date Collected: 02/08/22 09:46 Matrix: Solid

Date Received: 02/09/22 08:38

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		02/10/22 08:33	02/10/22 19:59	20
Toluene	<0.0402	U	0.0402	mg/Kg		02/10/22 08:33	02/10/22 19:59	20
Ethylbenzene	<0.0402	U	0.0402	mg/Kg		02/10/22 08:33	02/10/22 19:59	20
m-Xylene & p-Xylene	<0.0805	U	0.0805	mg/Kg		02/10/22 08:33	02/10/22 19:59	20
o-Xylene	<0.0402	U	0.0402	mg/Kg		02/10/22 08:33	02/10/22 19:59	20
Xylenes, Total	<0.0805	U	0.0805	mg/Kg		02/10/22 08:33	02/10/22 19:59	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			02/10/22 08:33	02/10/22 19:59	20
1,4-Difluorobenzene (Surr)	108		70 - 130			02/10/22 08:33	02/10/22 19:59	20
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0805	U	0.0805	mg/Kg			02/14/22 08:53	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	233		50.0	mg/Kg			02/17/22 15:47	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 02:03	1
Diesel Range Organics (Over C10-C28)	233		50.0	mg/Kg		02/10/22 13:35	02/12/22 02:03	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 02:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	52	S1-	70 - 130			02/10/22 13:35	02/12/22 02:03	1
o-Terphenyl		S1-	70 - 130			02/10/22 13:35	02/12/22 02:03	1

Client Sample Results

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

Client Sample ID: BH02A

Date Collected: 02/08/22 09:46 Date Received: 02/09/22 08:38

Sample Depth: 2

Lab Sample ID: 890-1924-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	8270	99.8	mg/Kg			02/16/22 13:01	20	
Client Sample ID: BH03					Lab Sa	mple ID: 890-	1924-5	
Date Collected: 02/08/22 09:54						Matr	x: Solid	
Date Received: 02/09/22 08:38								
Sample Depth: 1								

Method: 8021B - Volatile Organic Compounds (GC) D Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 0.198 0.0398 02/10/22 08:33 02/10/22 20:27 **Benzene** mg/Kg 20 Toluene 0.0398 02/10/22 08:33 02/10/22 20:27 20 3.21 mg/Kg Ethylbenzene 3.51 0.0398 mg/Kg 02/10/22 08:33 02/10/22 20:27 20 m-Xylene & p-Xylene 2.03 0.0797 mg/Kg 02/10/22 08:33 02/10/22 20:27 20 0.0398 02/10/22 08:33 02/10/22 20:27 20 o-Xylene 2.27 mg/Kg 02/10/22 20:27 **Xylenes, Total** 4.30 0.0797 mg/Kg 02/10/22 08:33 20 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 278 S1+ 70 - 130 02/10/22 08:33 02/10/22 20:27 4-Bromofluorobenzene (Surr) 70 130 02/10/22 08:33 02/10/22 20:27

1,4-Difluorobenzene (Surr)	80		70 - 130			02/10/22 08:33	02/10/22 20:27	20
Method: Total BTEX - Total BTE)	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	11.2		0.0797	mg/Kg			02/14/22 08:53	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6460		250	mg/Kg			02/17/22 15:47	1
Method: 8015B NM - Diesel Rang	ge Organics (DI	RO) (GC)						
-								
Method: 8015B NM - Diesel Rang Analyte	Result	RO) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	• • •	, , ,	RL	Unit mg/Kg	<u>D</u>	Prepared 02/10/22 13:35	Analyzed 02/12/22 02:26	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result	, , ,			<u>D</u>	<u>.</u>		5
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 592	, , ,	250	mg/Kg	<u>D</u>	02/10/22 13:35	02/12/22 02:26	5
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 592	Qualifier	250	mg/Kg	<u>D</u>	02/10/22 13:35	02/12/22 02:26	5
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 592 5870	Qualifier U	250 250	mg/Kg	<u> </u>	02/10/22 13:35	02/12/22 02:26	5 5 5
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 592 5870 <250	Qualifier U	250 250 250	mg/Kg	<u>D</u>	02/10/22 13:35 02/10/22 13:35 02/10/22 13:35	02/12/22 02:26 02/12/22 02:26 02/12/22 02:26	

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	5000		50.0	mg/Kg			02/16/22 13:09	10	

Matrix: Solid

Lab Sample ID: 890-1924-6

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH03A

Date Collected: 02/08/22 10:05 Date Received: 02/09/22 08:38

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.779		0.0396	mg/Kg		02/10/22 08:33	02/10/22 20:54	20
Toluene	1.26		0.0396	mg/Kg		02/10/22 08:33	02/10/22 20:54	20
Ethylbenzene	2.50		0.0396	mg/Kg		02/10/22 08:33	02/10/22 20:54	20
m-Xylene & p-Xylene	0.742		0.0792	mg/Kg		02/10/22 08:33	02/10/22 20:54	20
o-Xylene	1.86		0.0396	mg/Kg		02/10/22 08:33	02/10/22 20:54	20
Xylenes, Total	2.60		0.0792	mg/Kg		02/10/22 08:33	02/10/22 20:54	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	152	S1+	70 - 130			02/10/22 08:33	02/10/22 20:54	20
1,4-Difluorobenzene (Surr)	130		70 - 130			02/10/22 08:33	02/10/22 20:54	20
Method: Total BTEX - Total BTE	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	7.14		0.0792	mg/Kg			02/14/22 08:53	
Analyte Total TPH	1140	Qualifier	49.9	mg/Kg	D	Prepared	Analyzed 02/17/22 15:47	Dil Fa
Total TPH	1140		49.9	mg/Kg			02/17/22 15:47	1
Method: 8015B NM - Diesel Rang								
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 02:48	•
Diesel Range Organics (Over C10-C28)	1140		49.9	mg/Kg		02/10/22 13:35	02/12/22 02:48	,
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 02:48	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	77		70 - 130			02/10/22 13:35	02/12/22 02:48	
o-Terphenyl	74		70 - 130			02/10/22 13:35	02/12/22 02:48	1
Method: 300.0 - Anions, Ion Chro								
							A I	B.: E
Analyte	Result	Qualifier	RL 100	Unit mg/Kg	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH04 Lab Sample ID: 890-1924-7

Date Collected: 02/08/22 10:18 Date Received: 02/09/22 08:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400	mg/Kg		02/10/22 08:33	02/10/22 21:21	20
Toluene	<0.0400	U	0.0400	mg/Kg		02/10/22 08:33	02/10/22 21:21	20
Ethylbenzene	<0.0400	U	0.0400	mg/Kg		02/10/22 08:33	02/10/22 21:21	20
m-Xylene & p-Xylene	<0.0800	U	0.080.0	mg/Kg		02/10/22 08:33	02/10/22 21:21	20
o-Xylene	<0.0400	U	0.0400	mg/Kg		02/10/22 08:33	02/10/22 21:21	20
Xylenes, Total	<0.0800	U	0.0800	mg/Kg		02/10/22 08:33	02/10/22 21:21	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			02/10/22 08:33	02/10/22 21:21	20

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Matrix: Solid

Released to Imaging: 5/3/2022 11:56:55 AM

Client Sample Results

Client: WSP USA Inc.

Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH04 Lab Sample ID: 890-1924-7

Date Collected: 02/08/22 10:18 Matrix: Solid Date Received: 02/09/22 08:38

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds	(GC)	(Continued)
michiod. 002 ID - Volatile Organic Compounds	1001	(Oditiliaca)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	119		70 - 130	02/10/22 08:33	02/10/22 21:21	20

Method:	Total	BTEX	- Total	BTEX	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0800	U	0.0800	mg/Kg			02/14/22 08:53	1

Method: 8015 NM - Diesel Range C	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	_ D	Prepared	Analyzed	Dil Fac

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1190		50.0	mg/Kg			02/17/22 15:47	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 03:10	1
Diesel Range Organics (Over C10-C28)	1190		50.0	mg/Kg		02/10/22 13:35	02/12/22 03:10	1
Oll Range Organics (Over C28-C36)	<50.0	11	50.0	ma/Ka		02/10/22 13:35	02/12/22 03:10	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80	70 - 130	02/10/22 13:35	02/12/22 03:10	1
o-Terphenyl	76	70 - 130	02/10/22 13:35	02/12/22 03:10	1

Method: 300.0 - Anions, Ion C	Chromatography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Chloride 49.5 Client Sample ID: BH04A Lab Sample ID: 890-1924-8

mg/Kg

Date Collected: 02/08/22 10:26 Date Received: 02/09/22 08:38

Sample Depth: 2

Mothod: 9021D	Volatile Organie	Compounds (GC)
Melliou. Ouz ID -	voiatile Organic	Compounds (GC)

4020

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.222		0.0403	mg/Kg		02/10/22 08:33	02/10/22 22:42	20
Toluene	0.287		0.0403	mg/Kg		02/10/22 08:33	02/10/22 22:42	20
Ethylbenzene	0.331		0.0403	mg/Kg		02/10/22 08:33	02/10/22 22:42	20
m-Xylene & p-Xylene	0.352		0.0806	mg/Kg		02/10/22 08:33	02/10/22 22:42	20
o-Xylene	0.251		0.0403	mg/Kg		02/10/22 08:33	02/10/22 22:42	20
Xylenes, Total	0.603		0.0806	mg/Kg		02/10/22 08:33	02/10/22 22:42	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			02/10/22 08:33	02/10/22 22:42	20
4.4.5%								

Garrogate	7011CCOVCI y	Quantite	Liiiii	rrepared	Analyzea	Diriac
4-Bromofluorobenzene (Surr)	103		70 - 130	02/10/22 08:33	02/10/22 22:42	20
1,4-Difluorobenzene (Surr)	83	7	70 - 130	02/10/22 08:33	02/10/22 22:42	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.44		0.0806	mg/Kg		_	02/14/22 08:53	1

Method: 8015 NM - Diese	Range Organics	(DRO) (GC)
Method. 0013 MM - Diese	i Kange Organics	(DICO) (GG)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	162	50.0	mg/Kg			02/17/22 15:56	1

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02/16/22 13:27

Matrix: Solid

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

Client Sample ID: BH04A

Date Collected: 02/08/22 10:26 Date Received: 02/09/22 08:38

Sample Depth: 2

Lab Sample ID: 890-1924-8

Matrix: Solid

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		02/10/22 13:35	02/12/22 03:31	1
Diesel Range Organics (Over C10-C28)	162		50.0	mg/Kg		02/10/22 13:35	02/12/22 03:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 03:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			02/10/22 13:35	02/12/22 03:31	1
o-Terphenyl	82		70 - 130			02/10/22 13:35	02/12/22 03:31	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3840		49.7	mg/Kg			02/16/22 13:36	10

Lab Sample ID: 890-1924-9 **Client Sample ID: BH09 Matrix: Solid**

Date Collected: 02/08/22 14:20 Date Received: 02/09/22 08:38

Sample Depth: 0.3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.215		0.0398	mg/Kg		02/10/22 08:33	02/10/22 23:10	20
Toluene	0.218		0.0398	mg/Kg		02/10/22 08:33	02/10/22 23:10	20
Ethylbenzene	0.133		0.0398	mg/Kg		02/10/22 08:33	02/10/22 23:10	20
m-Xylene & p-Xylene	0.474		0.0795	mg/Kg		02/10/22 08:33	02/10/22 23:10	2
o-Xylene	0.376		0.0398	mg/Kg		02/10/22 08:33	02/10/22 23:10	2
Xylenes, Total	0.850		0.0795	mg/Kg		02/10/22 08:33	02/10/22 23:10	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130			02/10/22 08:33	02/10/22 23:10	20
1,4-Difluorobenzene (Surr)	96		70 - 130			02/10/22 08:33	02/10/22 23:10	2
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL 0.0795	Unit ma/Ka	<u>D</u>	Prepared	Analyzed	Dil Fac
	Result 1.42		RL 0.0795	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 02/14/22 08:53	Dil Fac
Analyte Total BTEX	Result 1.42 ge Organics (DR				<u>D</u>	Prepared Prepared		,
Analyte Total BTEX Method: 8015 NM - Diesel Ran	Result 1.42 ge Organics (DR	O) (GC) Qualifier	0.0795	mg/Kg			02/14/22 08:53	
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte	Result 1.42 ge Organics (DR Result <49.9	O) (GC) Qualifier	0.0795	mg/Kg			02/14/22 08:53 Analyzed	,
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH	ge Organics (DR Result Result <49.9 Inge Organics (D	O) (GC) Qualifier	0.0795	mg/Kg			02/14/22 08:53 Analyzed	Dil Fa
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH Method: 8015B NM - Diesel Ra	ge Organics (DR Result Result <49.9 Inge Organics (D	O) (GC) Qualifier U RO) (GC) Qualifier	0.0795 RL 49.9	mg/Kg Unit mg/Kg	<u>D</u>	Prepared	02/14/22 08:53 Analyzed 02/17/22 15:56	Dil Fac
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH Method: 8015B NM - Diesel Ra Analyte Gasoline Range Organics	ge Organics (DR Result Result <a hre<="" td=""><td>O) (GC) Qualifier U RO) (GC) Qualifier U</td><td>0.0795 RL 49.9</td><td>mg/Kg Unit mg/Kg Unit</td><td> <u>D</u></td><td>Prepared Prepared</td><td>02/14/22 08:53 Analyzed 02/17/22 15:56 Analyzed</td><td>Dil Fac</td>	O) (GC) Qualifier U RO) (GC) Qualifier U	0.0795 RL 49.9	mg/Kg Unit mg/Kg Unit	<u>D</u>	Prepared Prepared	02/14/22 08:53 Analyzed 02/17/22 15:56 Analyzed	Dil Fac

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Analyzed

02/11/22 23:53

02/11/22 23:53

Prepared

02/10/22 13:35

02/10/22 13:35

Limits

70 - 130

70 - 130

%Recovery Qualifier

80

84

Surrogate

o-Terphenyl

1-Chlorooctane

Dil Fac

Client Sample Results

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

Client Sample ID: BH09

Date Collected: 02/08/22 14:20 Date Received: 02/09/22 08:38

Lab Sample ID: 890-1924-9

Matrix: Solid

Sample Depth: 0.3

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3590		50.2	mg/Kg			02/16/22 13:45	10

Client Sample ID: BH09A Lab Sample ID: 890-1924-10 Matrix: Solid

Date Collected: 02/08/22 14:28

Date Received: 02/09/22 08:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 23:37	20
Toluene	< 0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 23:37	20
Ethylbenzene	< 0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 23:37	20
m-Xylene & p-Xylene	<0.0798	U	0.0798	mg/Kg		02/10/22 08:33	02/10/22 23:37	20
o-Xylene	< 0.0399	U	0.0399	mg/Kg		02/10/22 08:33	02/10/22 23:37	20
Xylenes, Total	<0.0798	U	0.0798	mg/Kg		02/10/22 08:33	02/10/22 23:37	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			02/10/22 08:33	02/10/22 23:37	20
1,4-Difluorobenzene (Surr)	132	S1+	70 - 130			02/10/22 08:33	02/10/22 23:37	20
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0798	U	0.0798	mg/Kg			02/14/22 08:53	1
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 02/17/22 15:56	Dil Fac
			49.9	mg/rtg			02/11/22 10.00	'
Method: 8015B NM - Diesel Rang	-							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 03:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 03:52	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/10/22 13:35	02/12/22 03:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130			02/10/22 13:35	02/12/22 03:52	1
o-Terphenyl	71		70 - 130			02/10/22 13:35	02/12/22 03:52	1
Method: 300.0 - Anions, Ion Chro								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	592	F1	5.00	mg/Kg			02/19/22 08:58	1

Matrix: Solid

Lab Sample ID: 890-1924-11

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH05

Date Collected: 02/08/22 11:50 Date Received: 02/09/22 08:38

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 01:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 01:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 01:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/11/22 11:13	02/12/22 01:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 01:19	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/11/22 11:13	02/12/22 01:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			02/11/22 11:13	02/12/22 01:19	1
1,4-Difluorobenzene (Surr)	81		70 - 130			02/11/22 11:13	02/12/22 01:19	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
• •				mg/Kg				
Method: 8015 NM - Diesel Range	•							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/17/22 15:56	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 04:35	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 04:35	1
C10-C28) OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 04:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/10/22 13:35	02/12/22 04:35	1
o-Terphenyl	72		70 - 130			02/10/22 13:35	02/12/22 04:35	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Method: 300.0 - Anions, Ion Chro Analyte	•	Soluble Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH05A Lab Sample ID: 890-1924-12

Date Collected: 02/08/22 11:55 Date Received: 02/09/22 08:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 00:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 00:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 00:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/11/22 11:13	02/12/22 00:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 00:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/11/22 11:13	02/12/22 00:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			02/11/22 11:13	02/12/22 00:38	1

Eurofins Carlsbad

Matrix: Solid

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

Client Sample ID: BH05A

Date Collected: 02/08/22 11:55 Date Received: 02/09/22 08:38

Sample Depth: 1

Lab Sample ID: 890-1924-12

Matrix: Solid

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

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Factor

 1,4-Diffluorobenzene (Surr)
 104
 70 - 130
 02/11/22 11:13
 02/12/22 00:38
 11

Method: Total BTEX - Total BTEX Calculation

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00399</td>
 U
 0.00399
 mg/Kg
 02/14/22 09:43
 1

_

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

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total TPH
 <49.9</td>
 U
 49.9
 mg/Kg
 02/17/22 15:56
 1

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

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac <49.9 U 02/10/22 13:35 Gasoline Range Organics 49.9 mg/Kg 02/12/22 04:57 (GRO)-C6-C10 <49.9 U 49.9 mg/Kg 02/10/22 13:35 02/12/22 04:57 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) <49.9 U 49.9 mg/Kg 02/10/22 13:35 02/12/22 04:57

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 74 70 - 130 02/10/22 13:35 02/12/22 04:57 o-Terphenyl 75 70 - 130 02/10/22 13:35 02/12/22 04:57

Method: 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 18.9
 4.98
 mg/Kg
 02/19/22 09:34
 1

Client Sample ID: BH06 Lab Sample ID: 890-1924-13

Date Collected: 02/08/22 11:37 Date Received: 02/09/22 08:38

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 02/11/22 11:13 02/12/22 00:59 Toluene <0.00200 U 0.00200 02/11/22 11:13 02/12/22 00:59 mg/Kg Ethylbenzene <0.00200 U 0.00200 02/11/22 11:13 02/12/22 00:59 mg/Kg 02/11/22 11:13 02/12/22 00:59 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg o-Xylene <0.00200 U 0.00200 mg/Kg 02/11/22 11:13 02/12/22 00:59 Xylenes, Total <0.00400 U 0.00400 mg/Kg 02/11/22 11:13 02/12/22 00:59

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 70 - 130 02/11/22 11:13 4-Bromofluorobenzene (Surr) 102 02/12/22 00:59 1,4-Difluorobenzene (Surr) 87 70 - 130 02/11/22 11:13 02/12/22 00:59

Method: Total BTEX - Total BTEX Calculation

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00400</td>
 U
 0.00400
 mg/Kg
 02/14/22 09:43
 1

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

 Analyte
 Result Total TPH
 Qualifier Qualifier Solution
 RL Very Solution
 Unit Mark
 D Verpared Discrete
 Analyzed O2/17/22 15:56
 Dil Fac Discrete

Eurofins Carlsbad

2

3

5

7

9

10

12

13

Matrix: Solid

Client Sample Results

Client: WSP USA Inc.

Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH06 Lab Sample ID: 890-1924-13

Date Collected: 02/08/22 11:37 Matrix: Solid Date Received: 02/09/22 08:38

Sample Depth: 0.5

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		02/10/22 13:35	02/12/22 05:18	•
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 05:18	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 05:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/10/22 13:35	02/12/22 05:18	1
o-Terphenyl	74		70 - 130			02/10/22 13:35	02/12/22 05:18	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.8		5.00	mg/Kg			02/19/22 09:42	1

Client Sample ID: BH06A Lab Sample ID: 890-1924-14 Date Collected: 02/08/22 11:40 Matrix: Solid

Date Received: 02/09/22 08:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/11/22 11:13	02/12/22 01:40	1
Toluene	< 0.00199	U	0.00199	mg/Kg		02/11/22 11:13	02/12/22 01:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/11/22 11:13	02/12/22 01:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/11/22 11:13	02/12/22 01:40	1
o-Xylene	0.00205		0.00199	mg/Kg		02/11/22 11:13	02/12/22 01:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/11/22 11:13	02/12/22 01:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			02/11/22 11:13	02/12/22 01:40	1
1,4-Difluorobenzene (Surr)	94		70 - 130			02/11/22 11:13	02/12/22 01:40	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/14/22 09:43	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			02/17/22 15:56	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		02/10/22 13:35	02/12/22 05:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 05:41	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 05:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130			02/10/22 13:35	02/12/22 05:41	1
o-Terphenyl	75		70 - 130			02/10/22 13:35	02/12/22 05:41	1

Client Sample Results

Client: WSP USA Inc.

Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Client Sample ID: BH06A Lab Sample ID: 890-1924-14 Matrix: Solid

Date Collected: 02/08/22 11:40 Date Received: 02/09/22 08:38

Sample Depth: 1

	Method: 300.0 - Anions, Ion Chrom	atography -	Soluble						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	26.1		4.95	mg/Kg			02/19/22 09:51	1

Client Sample ID: BH08 Lab Sample ID: 890-1924-15 Matrix: Solid

Date Collected: 02/08/22 10:29 Date Received: 02/09/22 08:38

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201	mg/Kg		02/11/22 11:13	02/12/22 03:02	
Toluene	<0.00201	U	0.00201	mg/Kg		02/11/22 11:13	02/12/22 03:02	
Ethylbenzene	< 0.00201	U	0.00201	mg/Kg		02/11/22 11:13	02/12/22 03:02	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/11/22 11:13	02/12/22 03:02	
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/11/22 11:13	02/12/22 03:02	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/11/22 11:13	02/12/22 03:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		70 - 130			02/11/22 11:13	02/12/22 03:02	
1,4-Difluorobenzene (Surr)	104		70 - 130			02/11/22 11:13	02/12/22 03:02	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402	mg/Kg			02/14/22 09:43	
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			02/17/22 15:56	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		02/10/22 13:35	02/12/22 06:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 06:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/12/22 06:02	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130			02/10/22 13:35	02/12/22 06:02	1
o-Terphenyl	80		70 - 130			02/10/22 13:35	02/12/22 06:02	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Matrix: Solid

Lab Sample ID: 890-1924-16

Client Sample Results

Client: WSP USA Inc.

Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

Client Sample ID: BH08A

Date Collected: 02/08/22 10:30 Date Received: 02/09/22 08:38

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 03:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 03:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 03:23	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/11/22 11:13	02/12/22 03:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/12/22 03:23	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/11/22 11:13	02/12/22 03:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			02/11/22 11:13	02/12/22 03:23	1
1,4-Difluorobenzene (Surr)	108		70 - 130			02/11/22 11:13	02/12/22 03:23	1
- Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
· •								
Method: 8015 NM - Diesel Range	•				_			
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/17/22 15:56	1
Method: 8015B NM - Diesel Rang	ne Organics (D	PO) (GC)						
	,	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	•	Qualifier	RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared 02/10/22 13:35	Analyzed 02/12/22 06:22	
Gasoline Range Organics	Result	Qualifier U			<u>D</u>	<u>.</u>		1
5 5 ·	Result <49.9	Qualifier U	49.9	mg/Kg	<u> </u>	02/10/22 13:35	02/12/22 06:22	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>D</u>	02/10/22 13:35 02/10/22 13:35	02/12/22 06:22	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>D</u>	02/10/22 13:35 02/10/22 13:35 02/10/22 13:35	02/12/22 06:22 02/12/22 06:22 02/12/22 06:22	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 <49.9 <49.9 <49.9 <49.9 %Recovery	Qualifier U U U	49.9 49.9 49.9 <i>Limits</i>	mg/Kg	<u> </u>	02/10/22 13:35 02/10/22 13:35 02/10/22 13:35 Prepared	02/12/22 06:22 02/12/22 06:22 02/12/22 06:22 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>D</u>	02/10/22 13:35 02/10/22 13:35 02/10/22 13:35 Prepared 02/10/22 13:35	02/12/22 06:22 02/12/22 06:22 02/12/22 06:22 Analyzed 02/12/22 06:22	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>	02/10/22 13:35 02/10/22 13:35 02/10/22 13:35 Prepared 02/10/22 13:35	02/12/22 06:22 02/12/22 06:22 02/12/22 06:22 Analyzed 02/12/22 06:22	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Surrogate Summary

Job ID: 890-1924-1 Client: WSP USA Inc. Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent S	Surrogate Red
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-11137-A-2-C MS	Matrix Spike	86	122		
880-11137-A-2-D MSD	Matrix Spike Duplicate	83	117		
890-1924-1	BH01	334 S1+	122		
890-1924-2	BH01A	86	93		
890-1924-3	BH02	96	118		
890-1924-4	BH02A	93	108		
890-1924-5	BH03	278 S1+	80		
890-1924-6	BH03A	152 S1+	130		
890-1924-7	BH04	98	119		
890-1924-8	BH04A	103	83		
890-1924-9	BH09	137 S1+	96		
890-1924-10	BH09A	109	132 S1+		
890-1924-11	BH05	108	81		
890-1924-12	BH05A	114	104		
890-1924-13	BH06	102	87		
890-1924-14	BH06A	109	94		
890-1924-15	BH08	100	104		
890-1924-16	BH08A	108	108		
890-1931-A-1-B MSD	Matrix Spike Duplicate	118	84		
890-1931-A-1-E MS	Matrix Spike	117	96		
LCS 880-18968/1-A	Lab Control Sample	82	115		
LCS 880-19035/1-A	Lab Control Sample	107	114		
LCSD 880-18968/2-A	Lab Control Sample Dup	77	122		
LCSD 880-19035/2-A	Lab Control Sample Dup	102	101		
MB 880-18968/5-A	Method Blank	68 S1-	101		
MB 880-19035/5-A	Method Blank	89	100		
Surrogate Legend					

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits
		1CO1	OTPH1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-1924-1	BH01	103	83	
390-1924-2	BH01A	86	78	
390-1924-3	BH02	78	78	
390-1924-4	BH02A	52 S1-	53 S1-	
90-1924-5	BH03	106	83	
390-1924-6	вноза	77	74	
90-1924-7	BH04	80	76	
390-1924-8	BH04A	80	82	
90-1924-9	BH09	80	84	
90-1924-9 MS	BH09	75	68 S1-	
390-1924-9 MSD	BH09	77	68 S1-	
390-1924-10	BH09A	71	71	
390-1924-11	BH05	73	72	

Surrogate Summary

 Client: WSP USA Inc.
 Job ID: 890-1924-1

 Project/Site: Queenie 15 Federal #001H
 SDG: 31403152.016

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1924-12	BH05A	74	75	
890-1924-13	BH06	73	74	
890-1924-14	BH06A	74	75	
890-1924-15	BH08	79	80	
890-1924-16	BH08A	77	80	
LCS 880-19049/2-A	Lab Control Sample	99	93	
LCSD 880-19049/3-A	Lab Control Sample Dup	99	93	
MB 880-19049/1-A	Method Blank	65 S1-	69 S1-	
Surrogate Legend				
Surrogate Legend 1CO = 1-Chlorooctane				

OTPH = o-Terphenyl

Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18968/5-A

Lab Sample ID: LCS 880-18968/1-A

Matrix: Solid Analysis Batch: 19027 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18968

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:33	02/10/22 16:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:33	02/10/22 16:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:33	02/10/22 16:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/10/22 08:33	02/10/22 16:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:33	02/10/22 16:22	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/10/22 08:33	02/10/22 16:22	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	02/10/22 08:33	02/10/22 16:22	1
1,4-Difluorobenzene (Surr)	101		70 - 130	02/10/22 08:33	02/10/22 16:22	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18968

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.07944 mg/Kg 79 70 - 130 Toluene 0.100 0.08308 mg/Kg 83 70 - 130 0.100 76 Ethylbenzene 0.07625 mg/Kg 70 - 130 0.200 85 70 - 130 m-Xylene & p-Xylene 0.1694 mg/Kg 0.100 0.09615 70 - 130 o-Xylene mg/Kg 96

LCS LCS

Surrogate	%Recovery Qu	alifier Limits
4-Bromofluorobenzene (Surr)	82	70 - 130
1,4-Difluorobenzene (Surr)	115	70 - 130

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Matrix: Solid

Analysis Batch: 19027

Analysis Batch: 19027

Lab Sample ID: LCSD 880-18968/2-A

Prep Type: Total/NA Prep Batch: 18968

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07778		mg/Kg		78	70 - 130	2	35
Toluene	0.100	0.07780		mg/Kg		78	70 - 130	7	35
Ethylbenzene	0.100	0.07782		mg/Kg		78	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1636		mg/Kg		82	70 - 130	3	35
o-Xylene	0.100	0.08495		mg/Kg		85	70 - 130	12	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	77	70 - 130
1,4-Difluorobenzene (Surr)	122	70 - 130

Lab Sample ID: 880-11137-A-2-C MS

Matrix: Solid

Analysis Batch: 19027

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

Prep Batch: 18968

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U F1	0.100	0.06799	F1	mg/Kg	_	68	70 - 130	
Toluene	<0.00198	U F1	0.100	0.06973	F1	mg/Kg		69	70 - 130	

1,4-Difluorobenzene (Surr)

QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1924-1

Project/Site: Quagnic 15 Endors #001H

Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

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

Lab Sample ID: 880-11137-A-2-C MS

Client Sample ID: Matrix Spike

Matrix: Solid
Analysis Batch: 19027

Sample Sample Spike MS MS
Prep Type: Total/NA
Prep Batch: 18968

Rec.

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00198	U F1	0.100	0.06940	F1	mg/Kg		69	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.1450		mg/Kg		72	70 - 130
o-Xylene	<0.00198	U	0.100	0.07478		mg/Kg		74	70 - 130

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 86
 70 - 130

122

Lab Sample ID: 880-11137-A-2-D MSD

Client Sample ID: Matrix Spike Duplicate

70 - 130

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 19027 Prep Batch: 18968

MSD MSD Sample Sample Spike %Rec. RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00198 UF1 0.06313 F1 mg/Kg 63 70 - 130 7 35 0.06855 F1 Toluene <0.00198 UF1 0.100 mg/Kg 69 70 - 130 2 35 Ethylbenzene <0.00198 UF1 0.100 0.06414 F1 64 70 - 130 8 35 mg/Kg 0.200 70 - 130 35 m-Xylene & p-Xylene <0.00396 U F1 0.1322 F1 mg/Kg 66 9 <0.00198 U 0.100 0.07000 70 70 - 130 o-Xylene mg/Kg

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 83
 70 - 130

 1,4-Difluorobenzene (Surr)
 117
 70 - 130

Lab Sample ID: MB 880-19035/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 19116

MB MB

Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/11/22 22:14	1
<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/11/22 22:14	1
<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/11/22 22:14	1
<0.00400	U	0.00400	mg/Kg		02/11/22 11:13	02/11/22 22:14	1
<0.00200	U	0.00200	mg/Kg		02/11/22 11:13	02/11/22 22:14	1
<0.00400	U	0.00400	mg/Kg		02/11/22 11:13	02/11/22 22:14	1
	<0.00200 <0.00200 <0.00200 <0.00400 <0.00200	Result Qualifier U	<0.00200 U 0.00200 <0.00200 U 0.00200 <0.00200 U 0.00200 <0.00400 U 0.00400 <0.00200 U 0.00200	<0.00200	<0.00200	<0.00200	<0.00200

	2					
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	02/11/22 11:13	02/11/22 22:14	1
1,4-Difluorobenzene (Surr)	100		70 - 130	02/11/22 11:13	02/11/22 22:14	1

Lab Sample ID: LCS 880-19035/1-A Client Sample ID: Lab Control Sample

MR MR

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 19116 Prep Batch: 19035

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1024		mg/Kg		102	70 - 130	
Toluene	0.100	0.09663		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.1024		mg/Kg		102	70 - 130	
m-Xylene & p-Xylene	0.200	0.2128		mg/Kg		106	70 - 130	

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Prep Batch: 19035

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Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

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

Lab Sample ID: LCS 880-19035/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 19035 **Analysis Batch: 19116**

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits D 0.100 0.1063 mg/Kg 106 70 - 130 o-Xylene

LCS LCS %Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 107 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 114

Lab Sample ID: LCSD 880-19035/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 19116** Prep Batch: 19035

LCSD LCSD RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit D Benzene 0.100 0.09526 mg/Kg 95 70 - 130 35 Toluene 0.100 0.09416 mg/Kg 94 70 - 130 35 3 Ethylbenzene 0.100 0.09640 mg/Kg 96 70 - 130 6 35 m-Xylene & p-Xylene 0.200 0.1966 mg/Kg 98 70 - 130 8 35 0.100 0.09795 98 70 - 130 35 o-Xylene mg/Kg

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 102 70 - 130 101 70 - 130 1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-1931-A-1-B MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Analysis Batch: 19116

Prep Batch: 19035 MSD MSD Sample Sample Spike %Rec. RPD Limit Result Qualifier babbA Result Qualifier %Rec RPD Analyte Unit D Limits Benzene <0.00200 U 0.100 0.02959 F1 F2 mg/Kg 30 70 - 130 70 35 Toluene < 0.00200 U 0.100 0.03306 F1 F2 mg/Kg 33 70 - 130 69 35 Ethylbenzene <0.00200 U 0.100 0.03756 F1 F2 mg/Kg 38 70 - 130 64 35 m-Xylene & p-Xylene < 0.00399 U 0.200 0.08065 F1 F2 mg/Kg 40 70 - 130 62 35 o-Xylene <0.00200 U 0.100 0.04342 F1 F2 mg/Kg 43 70 - 130 60 35

MSD MSD %Recovery Surrogate Qualifier Limits 4-Bromofluorobenzene (Surr) 118 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 84

Lab Sample ID: 890-1931-A-1-E MS Client Sample ID: Matrix Spike

Matrix: Solid Analysis Batch: 19116

Prep Batch: 19035 Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec Benzene <0.00200 U 0.100 0.06170 F1 mg/Kg 61 70 - 130 0.100 Toluene <0.00200 U 0.06770 F1 67 70 - 130mg/Kg Ethylbenzene <0.00200 U 0.100 0.07320 mg/Kg 73 70 - 130 m-Xylene & p-Xylene U 0.201 < 0.00399 0.1536 mg/Kg 76 70 - 130o-Xylene <0.00200 U 0.100 0.08076 mg/Kg 80 70 - 130

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Prep Type: Total/NA

Prep Type: Total/NA

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

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

Lab Sample ID: 890-1931-A-1-E MS

Matrix: Solid

Analysis Batch: 19116

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 19035

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 117 70 - 130 1,4-Difluorobenzene (Surr) 96 70 - 130

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

Lab Sample ID: MB 880-19049/1-A

Matrix: Solid

Analysis Batch: 19105

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19049

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/11/22 22:47	1
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/11/22 22:47	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:35	02/11/22 22:47	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	02/10/22 13:35	02/11/22 22:47	1
o-Terphenyl	69	S1-	70 - 130	02/10/22 13:35	02/11/22 22:47	1

Lab Sample ID: LCS 880-19049/2-A

Matrix: Solid

Analysis Batch: 19105

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

Prep Batch: 19049

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	956.4		mg/Kg		96	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	965.5		mg/Kg		97	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	99	70 - 130
o-Terphenyl	93	70 - 130

Lab Sample ID: LCSD 880-19049/3-A

Matrix: Solid Analysis Batch: 19105 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19049

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	894.9		mg/Kg		89	70 - 130	7	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	899.1		mg/Kg		90	70 - 130	7	20
C10 C28)									

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	99	70 - 130
o-Terphenyl	93	70 - 130

Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

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

Lab Sample ID: 890-1924-9 MS **Client Sample ID: BH09** Matrix: Solid Prep Type: Total/NA **Analysis Batch: 19105** Prep Batch: 19049

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	1000	966.1		mg/Kg		94	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	1000	886.7		mg/Kg		85	70 - 130	

C10-C28)

C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	68	S1-	70 - 130

Lab Sample ID: 890-1924-9 MSD Client Sample ID: BH09 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 19105

Prep Batch: 19049 Spike MSD MSD %Rec. RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit 998 989.0 97 70 - 130 2 Gasoline Range Organics <49.9 U mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 998 917.3 mg/Kg 89 70 - 130 3 20

MSD MSD Surrogate %Recovery Qualifier Limits

1-Chlorooctane 77 70 - 130 o-Terphenyl 68 S1-70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19415/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19574

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			02/16/22 09:19	1

Lab Sample ID: LCS 880-19415/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19574

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

Chloride 250 254.9 102 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-19415/3-A

Matrix: Solid Analysis Batch: 19574

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 256.2 102 mg/Kg 90 _ 110 20

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Prep Type: Soluble

Client Sample ID: Lab Control Sample Dup

Client: WSP USA Inc. Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-11145-A-7-E MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19574

Sample Sample Spike MS MS %Rec. Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chloride 10700 F1 4990 16330 F1 mg/Kg 112 90 - 110

Lab Sample ID: 880-11145-A-7-F MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19574

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	10700	F1	4990	16250	F1	mg/Kg		111	90 - 110	0	20

Lab Sample ID: 880-11146-A-3-D MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19574

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1050	F1	1250	2479	F1	mg/Kg	_	114	90 - 110	

Lab Sample ID: 880-11146-A-3-E MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19574

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1050	F1	1250	2453	F1	mg/Kg		112	90 - 110	1	20

Lab Sample ID: MB 880-19422/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			02/19/22 08:32	1

Lab Sample ID: LCS 880-19422/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19575

	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	237.4		ma/Ka		95	90 - 110		_

Lab Sample ID: LCSD 880-19422/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 19575

, and the second	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	 250	237.5		ma/Ka		95	90 - 110		20	

Lab Sample ID: 890-1924-10 MS Client Sample ID: BH09A **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

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Analysis Batom 10010										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	592	F1	250	797.0	F1	mg/Kg		82	90 - 110	

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1924-10 MSD Client Sample ID: BH09A **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	592	F1	250	800.1	F1	mg/Kg		83	90 - 110	0	20

Client: WSP USA Inc.
Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

GC VOA

Prep Batch: 18968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-1	BH01	Total/NA	Solid	5035	
890-1924-2	BH01A	Total/NA	Solid	5035	
890-1924-3	BH02	Total/NA	Solid	5035	
890-1924-4	BH02A	Total/NA	Solid	5035	
890-1924-5	BH03	Total/NA	Solid	5035	
890-1924-6	BH03A	Total/NA	Solid	5035	
890-1924-7	BH04	Total/NA	Solid	5035	
890-1924-8	BH04A	Total/NA	Solid	5035	
890-1924-9	BH09	Total/NA	Solid	5035	
890-1924-10	BH09A	Total/NA	Solid	5035	
MB 880-18968/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18968/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18968/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11137-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-11137-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-1	BH01	Total/NA	Solid	8021B	18968
890-1924-2	BH01A	Total/NA	Solid	8021B	18968
890-1924-3	BH02	Total/NA	Solid	8021B	18968
890-1924-4	BH02A	Total/NA	Solid	8021B	18968
890-1924-5	BH03	Total/NA	Solid	8021B	18968
890-1924-6	BH03A	Total/NA	Solid	8021B	18968
890-1924-7	BH04	Total/NA	Solid	8021B	18968
890-1924-8	BH04A	Total/NA	Solid	8021B	18968
890-1924-9	BH09	Total/NA	Solid	8021B	18968
890-1924-10	BH09A	Total/NA	Solid	8021B	18968
MB 880-18968/5-A	Method Blank	Total/NA	Solid	8021B	18968
LCS 880-18968/1-A	Lab Control Sample	Total/NA	Solid	8021B	18968
LCSD 880-18968/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18968
880-11137-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	18968
880-11137-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18968

Prep Batch: 19035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1924-11	BH05	Total/NA	Solid	5035	
890-1924-12	BH05A	Total/NA	Solid	5035	
890-1924-13	BH06	Total/NA	Solid	5035	
890-1924-14	BH06A	Total/NA	Solid	5035	
890-1924-15	BH08	Total/NA	Solid	5035	
890-1924-16	BH08A	Total/NA	Solid	5035	
MB 880-19035/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19035/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19035/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1931-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1931-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 19116

- Datem 19110					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-11	BH05	Total/NA	Solid	8021B	19035

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Client: WSP USA Inc.

Job ID: 890-1924-1

Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

GC VOA (Continued)

Analysis Batch: 19116 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-12	BH05A	Total/NA	Solid	8021B	19035
890-1924-13	BH06	Total/NA	Solid	8021B	19035
890-1924-14	BH06A	Total/NA	Solid	8021B	19035
890-1924-15	BH08	Total/NA	Solid	8021B	19035
890-1924-16	BH08A	Total/NA	Solid	8021B	19035
MB 880-19035/5-A	Method Blank	Total/NA	Solid	8021B	19035
LCS 880-19035/1-A	Lab Control Sample	Total/NA	Solid	8021B	19035
LCSD 880-19035/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19035
890-1931-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19035
890-1931-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	19035

Analysis Batch: 19290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-1	BH01	Total/NA	Solid	Total BTEX	
890-1924-2	BH01A	Total/NA	Solid	Total BTEX	
890-1924-3	BH02	Total/NA	Solid	Total BTEX	
890-1924-4	BH02A	Total/NA	Solid	Total BTEX	
890-1924-5	BH03	Total/NA	Solid	Total BTEX	
890-1924-6	BH03A	Total/NA	Solid	Total BTEX	
890-1924-7	BH04	Total/NA	Solid	Total BTEX	
890-1924-8	BH04A	Total/NA	Solid	Total BTEX	
890-1924-9	BH09	Total/NA	Solid	Total BTEX	
890-1924-10	ВН09А	Total/NA	Solid	Total BTEX	

Analysis Batch: 19350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-12	BH05A	Total/NA	Solid	Total BTEX	
890-1924-13	ВН06	Total/NA	Solid	Total BTEX	
890-1924-14	BH06A	Total/NA	Solid	Total BTEX	
890-1924-15	BH08	Total/NA	Solid	Total BTEX	
890-1924-16	BH08A	Total/NA	Solid	Total BTEX	

Analysis Batch: 19367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-11	BH05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 19049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1924-1	BH01	Total/NA	Solid	8015NM Prep	
890-1924-2	BH01A	Total/NA	Solid	8015NM Prep	
890-1924-3	BH02	Total/NA	Solid	8015NM Prep	
890-1924-4	BH02A	Total/NA	Solid	8015NM Prep	
890-1924-5	BH03	Total/NA	Solid	8015NM Prep	
890-1924-6	ВН03А	Total/NA	Solid	8015NM Prep	
890-1924-7	BH04	Total/NA	Solid	8015NM Prep	
890-1924-8	BH04A	Total/NA	Solid	8015NM Prep	
890-1924-9	BH09	Total/NA	Solid	8015NM Prep	
890-1924-10	ВН09А	Total/NA	Solid	8015NM Prep	
890-1924-11	BH05	Total/NA	Solid	8015NM Prep	

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Client: WSP USA Inc.

Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

GC Semi VOA (Continued)

Prep Batch: 19049 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-12	BH05A	Total/NA	Solid	8015NM Prep	
890-1924-13	BH06	Total/NA	Solid	8015NM Prep	
890-1924-14	BH06A	Total/NA	Solid	8015NM Prep	
890-1924-15	BH08	Total/NA	Solid	8015NM Prep	
890-1924-16	BH08A	Total/NA	Solid	8015NM Prep	
MB 880-19049/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19049/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1924-9 MS	BH09	Total/NA	Solid	8015NM Prep	
890-1924-9 MSD	BH09	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-1	BH01	Total/NA	Solid	8015B NM	19049
890-1924-2	BH01A	Total/NA	Solid	8015B NM	19049
890-1924-3	BH02	Total/NA	Solid	8015B NM	19049
890-1924-4	BH02A	Total/NA	Solid	8015B NM	19049
890-1924-5	BH03	Total/NA	Solid	8015B NM	19049
890-1924-6	BH03A	Total/NA	Solid	8015B NM	19049
890-1924-7	BH04	Total/NA	Solid	8015B NM	19049
890-1924-8	BH04A	Total/NA	Solid	8015B NM	19049
890-1924-9	BH09	Total/NA	Solid	8015B NM	19049
890-1924-10	ВН09А	Total/NA	Solid	8015B NM	19049
890-1924-11	BH05	Total/NA	Solid	8015B NM	19049
890-1924-12	BH05A	Total/NA	Solid	8015B NM	19049
890-1924-13	BH06	Total/NA	Solid	8015B NM	19049
890-1924-14	BH06A	Total/NA	Solid	8015B NM	19049
890-1924-15	BH08	Total/NA	Solid	8015B NM	19049
890-1924-16	BH08A	Total/NA	Solid	8015B NM	19049
MB 880-19049/1-A	Method Blank	Total/NA	Solid	8015B NM	19049
LCS 880-19049/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19049
LCSD 880-19049/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19049
890-1924-9 MS	BH09	Total/NA	Solid	8015B NM	19049
890-1924-9 MSD	BH09	Total/NA	Solid	8015B NM	19049

Analysis Batch: 19741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1924-1	BH01	Total/NA	Solid	8015 NM	
890-1924-2	BH01A	Total/NA	Solid	8015 NM	
890-1924-3	BH02	Total/NA	Solid	8015 NM	
890-1924-4	BH02A	Total/NA	Solid	8015 NM	
890-1924-5	BH03	Total/NA	Solid	8015 NM	
890-1924-6	BH03A	Total/NA	Solid	8015 NM	
890-1924-7	BH04	Total/NA	Solid	8015 NM	
890-1924-8	BH04A	Total/NA	Solid	8015 NM	
890-1924-9	ВН09	Total/NA	Solid	8015 NM	
890-1924-10	BH09A	Total/NA	Solid	8015 NM	
890-1924-11	BH05	Total/NA	Solid	8015 NM	
890-1924-12	BH05A	Total/NA	Solid	8015 NM	
890-1924-13	BH06	Total/NA	Solid	8015 NM	
890-1924-14	BH06A	Total/NA	Solid	8015 NM	

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

GC Semi VOA (Continued)

Analysis Batch: 19741 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-15	BH08	Total/NA	Solid	8015 NM	
890-1924-16	BH08A	Total/NA	Solid	8015 NM	

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Leach Batch: 19415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1924-1	BH01	Soluble	Solid	DI Leach	_
890-1924-2	BH01A	Soluble	Solid	DI Leach	
890-1924-3	BH02	Soluble	Solid	DI Leach	
890-1924-4	BH02A	Soluble	Solid	DI Leach	
890-1924-5	BH03	Soluble	Solid	DI Leach	
890-1924-6	BH03A	Soluble	Solid	DI Leach	
890-1924-7	BH04	Soluble	Solid	DI Leach	
890-1924-8	BH04A	Soluble	Solid	DI Leach	
890-1924-9	BH09	Soluble	Solid	DI Leach	
MB 880-19415/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19415/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19415/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11145-A-7-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11145-A-7-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-11146-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11146-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 19422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-10	ВН09А	Soluble	Solid	DI Leach	
890-1924-11	BH05	Soluble	Solid	DI Leach	
890-1924-12	BH05A	Soluble	Solid	DI Leach	
890-1924-13	BH06	Soluble	Solid	DI Leach	
890-1924-14	BH06A	Soluble	Solid	DI Leach	
890-1924-15	BH08	Soluble	Solid	DI Leach	
890-1924-16	BH08A	Soluble	Solid	DI Leach	
MB 880-19422/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19422/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19422/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1924-10 MS	BH09A	Soluble	Solid	DI Leach	
890-1924-10 MSD	BH09A	Soluble	Solid	DI Leach	

Analysis Batch: 19574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-1	BH01	Soluble	Solid	300.0	19415
890-1924-2	BH01A	Soluble	Solid	300.0	19415
890-1924-3	BH02	Soluble	Solid	300.0	19415
890-1924-4	BH02A	Soluble	Solid	300.0	19415
890-1924-5	BH03	Soluble	Solid	300.0	19415
890-1924-6	ВН03А	Soluble	Solid	300.0	19415
890-1924-7	BH04	Soluble	Solid	300.0	19415
890-1924-8	BH04A	Soluble	Solid	300.0	19415
890-1924-9	BH09	Soluble	Solid	300.0	19415
MB 880-19415/1-A	Method Blank	Soluble	Solid	300.0	19415

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Client: WSP USA Inc. Job ID: 890-1924-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.016

HPLC/IC (Continued)

Analysis Batch: 19574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-19415/2-A	Lab Control Sample	Soluble	Solid	300.0	19415
LCSD 880-19415/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19415
880-11145-A-7-E MS	Matrix Spike	Soluble	Solid	300.0	19415
880-11145-A-7-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19415
880-11146-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	19415
880-11146-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19415

Analysis Batch: 19575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1924-10	ВН09А	Soluble	Solid	300.0	19422
890-1924-11	BH05	Soluble	Solid	300.0	19422
890-1924-12	BH05A	Soluble	Solid	300.0	19422
890-1924-13	BH06	Soluble	Solid	300.0	19422
890-1924-14	BH06A	Soluble	Solid	300.0	19422
890-1924-15	BH08	Soluble	Solid	300.0	19422
890-1924-16	BH08A	Soluble	Solid	300.0	19422
MB 880-19422/1-A	Method Blank	Soluble	Solid	300.0	19422
LCS 880-19422/2-A	Lab Control Sample	Soluble	Solid	300.0	19422
LCSD 880-19422/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19422
890-1924-10 MS	BH09A	Soluble	Solid	300.0	19422
890-1924-10 MSD	BH09A	Soluble	Solid	300.0	19422

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

Client Sample ID: BH01

Date Collected: 02/08/22 08:35 Date Received: 02/09/22 08:38

Lab Sample ID: 890-1924-1

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			5.05 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 18:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 00:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		10			19574	02/16/22 12:16	CH	XEN MID

Client Sample ID: BH01A Lab Sample ID: 890-1924-2

Date Collected: 02/08/22 14:00 Date Received: 02/09/22 08:38

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 4.99 g 5 mL 18968 02/10/22 08:33 KL XEN MID Total/NA 8021B 5 mL 02/10/22 19:05 KLXEN MID Analysis 20 5 mL 19027 Total/NA Total BTEX 19290 02/14/22 08:53 MR XEN MID Analysis 1 Total/NA Analysis 8015 NM 19741 02/17/22 15:47 AJ XEN MID Total/NA XEN MID Prep 8015NM Prep 10.04 g 19049 02/10/22 13:35 DM 10 mL Total/NA Analysis 8015B NM 19105 02/12/22 01:20 AJ XEN MID Soluble 02/14/22 13:08 SC XEN MID Leach DI Leach 5.02 g 50 mL 19415 Soluble Analysis 300.0 5 19574 02/16/22 12:25 CH XEN MID

Lab Sample ID: 890-1924-3 Client Sample ID: BH02

Date Collected: 02/08/22 09:40 Date Received: 02/09/22 08:38

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			5.01 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 19:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 01:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		20			19574	02/16/22 12:52	CH	XEN MID

Client Sample ID: BH02A Lab Sample ID: 890-1924-4 Date Collected: 02/08/22 09:46

Date Received: 02/09/22 08:38

Γ	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 19:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID

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Matrix: Solid

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

Lab Sample ID: 890-1924-4

Matrix: Solid

Client Sample ID: BH02A Date Collected: 02/08/22 09:46 Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 02:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		20			19574	02/16/22 13:01	CH	XEN MID

Client Sample ID: BH03 Lab Sample ID: 890-1924-5 **Matrix: Solid**

Date Collected: 02/08/22 09:54 Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 20:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		5			19105	02/12/22 02:26	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		10			19574	02/16/22 13:09	CH	XEN MID

Lab Sample ID: 890-1924-6 Client Sample ID: BH03A Date Collected: 02/08/22 10:05 **Matrix: Solid**

Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 20:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 02:48	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		20			19574	02/16/22 13:18	CH	XEN MID

Client Sample ID: BH04 Lab Sample ID: 890-1924-7

Date Collected: 02/08/22 10:18 Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 21:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:47	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	19049 19105	02/10/22 13:35 02/12/22 03:10	DM AJ	XEN MID XEN MID

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Matrix: Solid

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Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1 SDG: 31403152.016

Client Sample ID: BH04

Date Collected: 02/08/22 10:18 Date Received: 02/09/22 08:38 Lab Sample ID: 890-1924-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		10			19574	02/16/22 13:27	CH	XEN MID

Client Sample ID: BH04A Lab Sample ID: 890-1924-8

Date Collected: 02/08/22 10:26 **Matrix: Solid**

Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 22:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 03:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		10	0 mL	1.0 mL	19574	02/16/22 13:36	CH	XEN MID

Lab Sample ID: 890-1924-9 Client Sample ID: BH09

Date Collected: 02/08/22 14:20 Date Received: 02/09/22 08:38

•	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	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 23:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/11/22 23:53	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	19415	02/14/22 13:08	SC	XEN MID
Soluble	Analysis	300.0		10	0 mL	1.0 mL	19574	02/16/22 13:45	CH	XEN MID

Client Sample ID: BH09A Lab Sample ID: 890-1924-10

Date Collected: 02/08/22 14:28 Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18968	02/10/22 08:33	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	19027	02/10/22 23:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19290	02/14/22 08:53	MR	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 03:52	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 08:58	CH	XEN MID

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Released to Imaging: 5/3/2022 11:56:55 AM

Matrix: Solid

Matrix: Solid

Project/Site: Queenie 15 Federal #001H

Client: WSP USA Inc.

Matrix: Solid

Date Collected: 02/08/22 11:50 Date Received: 02/09/22 08:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	19035	02/11/22 11:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 01:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19367	02/14/22 10:01	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 04:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 09:25	CH	XEN MID

Client Sample ID: BH05A Lab Sample ID: 890-1924-12 Date Collected: 02/08/22 11:55

Matrix: Solid

Date Received: 02/09/22 08:38

	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	19035	02/11/22 11:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 00:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 04:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 09:34	CH	XEN MID

Client Sample ID: BH06 Lab Sample ID: 890-1924-13

Date Collected: 02/08/22 11:37 Date Received: 02/09/22 08:38 **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			5.00 g	5 mL	19035	02/11/22 11:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 00:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 05:18	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 09:42	CH	XEN MID

Client Sample ID: BH06A Lab Sample ID: 890-1924-14

Date Received: 02/09/22 08:38

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			5.03 g	5 mL	19035	02/11/22 11:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 01:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID

Eurofins Carlsbad

Date Collected: 02/08/22 11:40

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

Client Sample ID: BH06A

Date Collected: 02/08/22 11:40 Date Received: 02/09/22 08:38 Lab Sample ID: 890-1924-14

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 05:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 09:51	CH	XEN MID

Client Sample ID: BH08 Lab Sample ID: 890-1924-15

Date Collected: 02/08/22 10:29 Date Received: 02/09/22 08:38 **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			4.98 g	5 mL	19035	02/11/22 11:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 03:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 06:02	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 10:18	CH	XEN MID

Client Sample ID: BH08A Lab Sample ID: 890-1924-16

Date Collected: 02/08/22 10:30 Date Received: 02/09/22 08:38 **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			4.99 g	5 mL	19035	02/11/22 11:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 03:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19049	02/10/22 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19105	02/12/22 06:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 10:27	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: 890-1924-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.016

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date 06-30-22	
		ELAP	T104704400-21-22		
The following analytes the agency does not of	' '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		

Method Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

000 ID. 000 TOZ T T	
SDG: 31403152.016	

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

Released to Imaging: 5/3/2022 11:56:55 AM

Sample Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-1924-1

SDG: 31403152.016

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1924-1	BH01	Solid	02/08/22 08:35	02/09/22 08:38	1
890-1924-2	BH01A	Solid	02/08/22 14:00	02/09/22 08:38	3
890-1924-3	BH02	Solid	02/08/22 09:40	02/09/22 08:38	1
890-1924-4	BH02A	Solid	02/08/22 09:46	02/09/22 08:38	2
890-1924-5	BH03	Solid	02/08/22 09:54	02/09/22 08:38	1
890-1924-6	BH03A	Solid	02/08/22 10:05	02/09/22 08:38	2
890-1924-7	BH04	Solid	02/08/22 10:18	02/09/22 08:38	1
890-1924-8	BH04A	Solid	02/08/22 10:26	02/09/22 08:38	2
890-1924-9	BH09	Solid	02/08/22 14:20	02/09/22 08:38	0.3
890-1924-10	ВН09А	Solid	02/08/22 14:28	02/09/22 08:38	1
890-1924-11	BH05	Solid	02/08/22 11:50	02/09/22 08:38	0.5
890-1924-12	BH05A	Solid	02/08/22 11:55	02/09/22 08:38	1
890-1924-13	BH06	Solid	02/08/22 11:37	02/09/22 08:38	0.5
890-1924-14	BH06A	Solid	02/08/22 11:40	02/09/22 08:38	1
890-1924-15	BH08	Solid	02/08/22 10:29	02/09/22 08:38	0.5
890-1924-16	BH08A	Solid	02/08/22 10:30	02/09/22 08:38	1

Project Manager: Joesph Hernandez BORATORIES

Address:

Company Name:

WSP USA Inc., Permian office

3300 North A St. Bldg 1, Unit 222

Address:

Program: UST/PST State of Project: NM Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334

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

Bill to: (if different)

Company Name:

Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296

Chain of Custody

Revised Date 051418 Rev. 2018 1			-								
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Date/Time	Received by: (Signature)	Relinquished by: (Signature)		Date/Time	Da	ıre)	Received by: (Signature	Received		(Signature)	Relinquished by: (Signature)
	beyond the control ly negotiated.	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 it 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.	ot analyzed. T	penses incu	sses or exp mitted to X	or each sample sub	a charge of \$5 f	s and shall not a ach project and	st of sample applied to e	rge of \$75.00 will be	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 supported by the client if such losses are supported by the control of the cost of sample submitted to Xenco, but not analyzed. These terms will be entered to Xenco, but not analyzed. These terms will be entered to Xenco, but not analyzed. These terms will be entered to Xenco, but not analyzed. These terms will be entered to Xenco, but not analyzed. These terms will be entered to Xenco.
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1631 / 245.1 / 7470 / 7471 : Hg	TI U	Cd Cr Co Cu Pb Mn Mo Ni Se Ag	Be Cd Cr	Sb As Ba	ll .	TCLP / SPLP 6010: 8RCRA	TCLP / SPI	alyzed	to be an	Circle Method(s) and Metal(s) to be analyzed	Circle Method
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Composite			×	×	- ×	2	10:26	2/8/2022	S	A	ВН04А
Composite			×	×	 ×	_	10:18	2/8/2022	တ	-42	ВН04
Composite			×	×	 ×	2	10:05	2/8/2022	S	Þ	ВНОЗА
Composite			×	×	-1 ×	1	9:54	2/8/2022	တ	ω	ВНОЗ
Composite			×	×	×	2	9:46	2/8/2022	S	A	ВН02А
Composite			×	×	×	1	9:40	2/8/2022	S	2	BH02
Composite			×	×	×	ω	14:00	2/8/2022	S	A	BH01A
Composite			×	×	 ×	_	8:35	2/8/2022	S		BH01
Sample Comments 0	Sa		Chlorid	BTEX (Number	Depth	Time Sampled	Date Sampled	Matrix	tification	Sample Identification
lab, if received by 4:30pm	iab		e (E				Total Containers:	Tota	NIA	s: Yes No	Sample Custody Seals:
the	TAI sta		PA 3	_	_	2.0-	Correction Factor:	Corre	NIA		Cooler Custody Seals:
	Custody	890-1924 Chain of Custody	00.0	-			CMY - BC	1	No	(Yes)	Received Intact:
))		iners	ō	Thermometer ID		1.4	1.6/1	Temperature (°C):
					3	Yes) No	Wet ice:	Yes No	Temp Blank:		SAMPLE RECEIPT
						Date:	Due Date			Travis Casey	Sampler's Name:
WBS: C1.22.0041	I I I I WBS						Rush:	910		31403 152.	P.O. Number:
IN: nAPP2201862045	IN: nAP					ne 🗴	Routine	如大	140315 2.02	5H03	Project Number:
Work Order Notes	W	ANALYSIS REQUEST				Turn Around	T _L	Queenie 15 Federal #001H	e 15 Fed	Queeni	Project Name:
Other:	Deliverables: EDD ADaPT	Email: travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@ws	nnings@v	n, kalei.je	wsp.com	travis.casey@v	Email:		"	(432) 704-5178	Phone:
		To Committee	1, 88220	Carisbad NM, 88220	Ca	City, State ZIP:			705	Midland, TX 79705	City, State ZIP:
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Work Order No:

www.xenco.com

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Work Order Comments

Brownfields RRC

Superfund

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Company Name: W/SD IS	WSD LISA Inc. Permian office	office		Company Name	,						<u> </u>	Program: UST/PST	PRP	PRP Brownfields RR	RRC	Superfund
	3300 North A St. Bldg 1, Unit 222	Unit 222		Address:								State of Project:				
e ZIP:	Midland, TX 79705		 	City, State ZIP:		Carlsb	Carlsbad NM, 88220	88220			교	Reporting:Level II	Լevel III	III PST/UST	ABBI	Lewel IV
Phone: (432) 704-5178	4-5178		Email: t	Email: travis.casey@wsp.com,	wsp.c		alei.je	nings	@wsp.com,	kalei.jennings@wsp.com, dan.moir@ws		Deliverables: EDD	þ	ADaPT	ပ္ခ	Other:
Project Name:	Queenie 15 Federal #001H	al #001H	Tur	Turn Around					AN	ANALYSIS REQUEST	NES1	Т			Work	Work Order Notes
ř.	-31/103162.02	DE 17	Routine	e «										Ī <u>Z</u>	APP2	IN: nAPP2201862045
P.O. Number:	31463152,016	016	Rush:											WBS	8: Cl.2:	WBS: CI.22.00191
Sampler's Name: Travis Casey	asey		Due Date:	ate:												
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No				_								
Temperature (°C):		Th.	Thermometer ID	D	iners))								
Received Intact:		A			nta	5)	21)	300.			-					
Sample Custody Seals:	Yes No N/A	Total C	Total Containers:		of C	A 801	PA 80	(EPA						IA.	lab, if re	lab, if received by 4:30pm
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Numbe	TPH (EF	BTEX (E	Chloride							Samp	Sample Comments
BH05	S	2/8/2022	11:50	0.5	1	×	×	×			-					Composite
ВН05А	S	2/8/2022	11:55		_	×	×	×					-			Composite
8H06	S	2/8/2022	11:37	0.5	_	×	×	×			-					Composite
ВН06А	S	2/8/2022	11:40	_	_	×	×	×		_	_		igdash	 -		Composite
ВН08	S	2/8/2022	10:29	0.5	1	×	×	×		-	-					Composite
BH08A	S	2/8/2022	10:30	_	1	×	×	×								Composite
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020: Metal(s) to be ana	- 8 1	8RCRA 13PPM TCLP/SPLP6	RCRA 13PPM Texas 11 A		Sb As Sb As	Ba Ba	Be B Be Cd	Be B Cd Ca Cr Co Cu Be Cd Cr Co Cu Pb M	1 = - 1	Z. ₹	I Fe Pb Mg Mn Mo Ni K Se In Mo Ni Se Ag Tl U	Se Ag	SiO2	TI Sn 45.1/	Na Sr TI Sn U V Zn 1631/245.1/7470/7471:Hg
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors, 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 for 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 er	nd relinquishment of so or the cost of samples 30 will be applied to ea	amples constitute and shall not ass ch project and a	es a valid purci sume any respi charge of \$5 to	hase order from consibility for any reach sample su	lient col losses c	npany to to Xenc	o Xenco, ses incu o, but no	its affilia red by t t analyza	ates and subcor he client if such ed. These terms	ntractors. It assignosses are due to will be enforced	ns stand circum unless p	It assigns standard terms and conditions re due to circumstances beyond the control norced unless previously negotiated.	ntrol			
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Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-1924-1 SDG Number: 31403152.016

List Source: Eurofins Carlsbad

Login Number: 1924 List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1924-1 SDG Number: 31403152.016

List Source: Eurofins Midland

List Creation: 02/10/22 12:21 PM

Login Number: 1924 List Number: 2

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

Eurofins Carlsbad

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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: 890-1926-1

Laboratory Sample Delivery Group: 31403152.016 Client Project/Site: Queenie 15 Federal #001h

For:

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

Attn: Joseph Hernandez

JURAMER

Authorized for release by: 2/21/2022 7:02:52 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: 5/3/2022 11:56:55 AM

7

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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12

Client: WSP USA Inc. Laboratory Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h SDG: 31403152.016

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h

SDG: 31403152.016

Qualifiers

GC VOA Qualifier

Qualifier Description F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

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

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

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

Glossary

%R

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

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

Percent Recovery **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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

Presumptive **PRES** QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

Job ID: 890-1926-1 SDG: 31403152.016

Job ID: 890-1926-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1926-1

Receipt

The samples were received on 2/9/2022 12:49 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19048 and analytical batch 880-18980 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1919-A-1-C). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-19422 and analytical batch 880-19575 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Matrix: Solid

Lab Sample ID: 890-1926-1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1926-1

Project/Site: Queenie 15 Federal #001h SDG: 31403152.016

Client Sample ID: BH07

Date Collected: 02/09/22 11:10 Date Received: 02/09/22 12:49

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/10/22 08:26	02/11/22 08:54	1
Toluene	< 0.00199	U	0.00199	mg/Kg		02/10/22 08:26	02/11/22 08:54	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/10/22 08:26	02/11/22 08:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/10/22 08:26	02/11/22 08:54	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		02/10/22 08:26	02/11/22 08:54	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/10/22 08:26	02/11/22 08:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			02/10/22 08:26	02/11/22 08:54	1
1,4-Difluorobenzene (Surr)	81		70 - 130			02/10/22 08:26	02/11/22 08:54	1
- Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/14/22 10:01	1
Analyte Total TPH		Qualifier	RL	Unit	D	Prepared	Analyzed	
<u> </u>			KL	Unit	U	Prepared	Anaivzeo	
IUIAI IFII	<49.9	U	49.9	mg/Kg			02/17/22 15:56	Dil Fac
ΙΟΙΔΙ ΙΓΙΙ - -	<49.9	U	49.9	mg/Kg				
· ''' -			49.9	mg/Kg				
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D		49.9	mg/Kg Unit	D	Prepared		1
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier			<u>D</u>	Prepared 02/10/22 13:28	02/17/22 15:56	1 Dil Fac
Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC) Qualifier	RL	Unit	<u>D</u>	<u>·</u>	02/17/22 15:56 Analyzed	Dil Fac
Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	02/10/22 13:28	02/17/22 15:56 Analyzed 02/11/22 02:04	Dil Fac
Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	Unit mg/Kg mg/Kg	<u>D</u>	02/10/22 13:28	02/17/22 15:56 Analyzed 02/11/22 02:04 02/11/22 02:04	Dil Fac
Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	Unit mg/Kg mg/Kg	<u>D</u>	02/10/22 13:28 02/10/22 13:28 02/10/22 13:28	02/17/22 15:56 Analyzed 02/11/22 02:04 02/11/22 02:04	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	Unit mg/Kg mg/Kg	<u>D</u>	02/10/22 13:28 02/10/22 13:28 02/10/22 13:28 Prepared	02/17/22 15:56 Analyzed 02/11/22 02:04 02/11/22 02:04 02/11/22 02:04 Analyzed	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 111 116	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	02/10/22 13:28 02/10/22 13:28 02/10/22 13:28 02/10/22 13:28 Prepared 02/10/22 13:28	02/17/22 15:56 Analyzed 02/11/22 02:04 02/11/22 02:04 Analyzed 02/11/22 02:04	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 111 116 **comatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	02/10/22 13:28 02/10/22 13:28 02/10/22 13:28 02/10/22 13:28 Prepared 02/10/22 13:28	02/17/22 15:56 Analyzed 02/11/22 02:04 02/11/22 02:04 Analyzed 02/11/22 02:04	

Client Sample ID: BH07A Lab Sample ID: 890-1926-2 Matrix: Solid

Date Collected: 02/09/22 11:15 Date Received: 02/09/22 12:49

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 09:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 09:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 09:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/10/22 08:26	02/11/22 09:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 09:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/10/22 08:26	02/11/22 09:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			02/10/22 08:26	02/11/22 09:15	

Client Sample Results

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

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Job ID: 890-1926-1 SDG: 31403152.016

SDG: 31403152.016

Lab Sample ID: 890-1926-2

02/19/22 10:44

Matrix: Solid

Client Sample ID: BH07A Date Collected: 02/09/22 11:15

Date Received: 02/09/22 12:49

Sample Depth: 1

Chloride

1,4-Difluorobenzene (Surr) Method: Total BTEX - Total BTEX Analyte	79		70 - 130					
			10 - 130			02/10/22 08:26	02/11/22 09:15	1
	Calculation							
		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			02/14/22 10:01	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/17/22 15:56	1
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Range	e Organics (D	RO) (GC)						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/10/22 13:28	02/11/22 02:26	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		02/10/22 13:28	02/11/22 02:26	1
C10-C28)				99				
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:28	02/11/22 02:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			02/10/22 13:28	02/11/22 02:26	1
o-Terphenyl	98		70 - 130			02/10/22 13:28	02/11/22 02:26	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						

5.04

mg/Kg

2

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8

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12

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Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h SDG: 31403152.016

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)	
880-10981-A-1-E MS	Matrix Spike	126	90	
880-10981-A-1-F MSD	Matrix Spike Duplicate	141 S1+	106	
890-1926-1	BH07	109	81	
890-1926-2	BH07A	119	79	
LCS 880-18967/1-A	Lab Control Sample	108	86	
LCSD 880-18967/2-A	Lab Control Sample Dup	122	106	
MB 880-18967/5-A	Method Blank	126	96	
MB 880-19012/8	Method Blank	138 S1+	94	
Surrogate Legend				
BFB = 4-Bromofluorobenzer	ne (Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1919-A-1-D MS	Matrix Spike	123	82
890-1919-A-1-E MSD	Matrix Spike Duplicate	120	85
890-1926-1	BH07	111	116
890-1926-2	BH07A	91	98

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO2	OTPH2	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCS 880-19048/2-A	Lab Control Sample	91	101	
LCSD 880-19048/3-A	Lab Control Sample Dup	100	112	
MB 880-19048/1-A	Method Blank	94	99	
Surrogate Legend				
1CO = 1-Chlorooctane				

OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h SDG: 31403152.016

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18967/5-A

Matrix: Solid Analysis Batch: 19012 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18967

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 01:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 01:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 01:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/10/22 08:26	02/11/22 01:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/10/22 08:26	02/11/22 01:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/10/22 08:26	02/11/22 01:00	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	02/10/22 08:26	02/11/22 01:00	1
1,4-Difluorobenzene (Surr)	96		70 - 130	02/10/22 08:26	02/11/22 01:00	1

Lab Sample ID: LCS 880-18967/1-A

Matrix: Solid

Analysis Batch: 19012

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 18967

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.07786 mg/Kg 78 70 - 130 Toluene 0.100 0.08344 mg/Kg 83 70 - 130 0.100 91 Ethylbenzene 0.09126 mg/Kg 70 - 130 0.200 0.1772 89 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09153 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Lab Sample ID: LCSD 880-18967/2-A

Matrix: Solid

Analysis Batch: 19012

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18967

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09303		mg/Kg		93	70 - 130	18	35
Toluene	0.100	0.09686		mg/Kg		97	70 - 130	15	35
Ethylbenzene	0.100	0.1027		mg/Kg		103	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1956		mg/Kg		98	70 - 130	10	35
o-Xylene	0.100	0.09594		mg/Kg		96	70 - 130	5	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1.4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-10981-A-1-E MS

Matrix: Solid

Analysis Batch: 19012

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

Prep Batch: 18967

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1 F2	0.0996	0.02863	F1	mg/Kg		29	70 - 130	
Toluene	<0.00200	U F1 F2	0.0996	0.03494	F1	mg/Kg		35	70 - 130	

Client: WSP USA Inc. Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h

SDG: 31403152.016

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

Lab Sample ID: 880-10981-A-1-E MS **Matrix: Solid**

Analysis Batch: 19012

o-Xylene

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

Prep Batch: 18967

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U F1 F2 0.0996 0.03651 F1 37 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00401 U F1 F2 0.199 0.07573 F1 mg/Kg 38 70 - 130 0.0996

0.03926 F1

mg/Kg

<0.00200 U F1 F2 MS MS

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	126	70 - 130
1,4-Difluorobenzene (Surr)	90	70 - 130

Client Sample ID: Matrix Spike Duplicate

70 - 130

Prep Type: Total/NA

Prep Batch: 18967

Lab Sample ID: 880-10981-A-1-F MSD **Matrix: Solid**

Analysis Batch: 19012

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1 F2	0.0998	0.06334	F1 F2	mg/Kg		63	70 - 130	75	35
Toluene	<0.00200	U F1 F2	0.0998	0.07214	F2	mg/Kg		72	70 - 130	69	35
Ethylbenzene	<0.00200	U F1 F2	0.0998	0.07209	F2	mg/Kg		72	70 - 130	66	35
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.200	0.1443	F2	mg/Kg		72	70 - 130	62	35
o-Xylene	<0.00200	U F1 F2	0.0998	0.07133	F2	mg/Kg		71	70 - 130	58	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-19012/8 Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 19012

MB MB

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	J	0.00200	mg/Kg			02/10/22 13:24	1
Toluene	<0.00200 L	J	0.00200	mg/Kg			02/10/22 13:24	1
Ethylbenzene	<0.00200 L	J	0.00200	mg/Kg			02/10/22 13:24	1
m-Xylene & p-Xylene	<0.00400 L	J	0.00400	mg/Kg			02/10/22 13:24	1
o-Xylene	<0.00200 L	J	0.00200	mg/Kg			02/10/22 13:24	1
Xylenes, Total	<0.00400 L	J	0.00400	mg/Kg			02/10/22 13:24	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130		02/10/22 13:24	1
1,4-Difluorobenzene (Surr)	94		70 - 130		02/10/22 13:24	1

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

Lab Sample ID: MB 880-19048/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 18980

мв мв Result Qualifier RL Unit Prepared Gasoline Range Organics <50.0 U 50.0 mg/Kg 02/10/22 13:28 02/10/22 20:24

(GRO)-C6-C10

Eurofins Carlsbad

Prep Batch: 19048

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

Job ID: 890-1926-1

SDG: 31403152.016

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

Lab Sample ID: MB 880-19048/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 18980

Prep Batch: 19048

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/10/22 13:28	02/10/22 20:24	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/10/22 13:28	02/10/22 20:24	1
	MR	MR						

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	02/10/22 13:28	02/10/22 20:24	1
o-Terphenyl	99		70 - 130	02/10/22 13:28	02/10/22 20:24	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-19048/2-A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 18980 Prep Batch: 19048

LCS LCS Spike Added Result Qualifier Unit %Rec Limits 1000 960.7 96 70 - 130 mg/Kg 1000 94 70 - 130

944.6 Diesel Range Organics (Over mg/Kg C10-C28)

(GRO)-C6-C10

Analyte

Gasoline Range Organics

Qualifier Limits Surrogate %Recovery 1-Chlorooctane 70 - 130 91 o-Terphenyl 101 70 - 130

LCS LCS

Lab Sample ID: LCSD 880-19048/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Analysis Batch: 18980 Prep Type: Total/NA Prep Batch: 19048

Spike LCSD LCSD %Rec. **RPD** Analyte Added Result Qualifier %Rec Limits RPD Limit Unit D Gasoline Range Organics 1000 1022 mg/Kg 102 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1026 mg/Kg 103 70 - 130 8 20 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 100 70 - 130 o-Terphenyl 112 70 - 130

Lab Sample ID: 890-1919-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 18980

Prep Type: Total/NA Prep Batch: 19048

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	532		1000	1613		mg/Kg		108	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	2800	F1	1000	3100	F1	mg/Kg		30	70 _ 130	
C10-C28)										

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	82		70 - 130

Client: WSP USA Inc. Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h

SDG: 31403152.016

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

Lab Sample ID: 890-1919-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 18980

Prep Type: Total/NA

Prep Batch: 19048

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	532		998	1549		mg/Kg		102	70 - 130	4	20
(GRO)-C6-C10											
Diesel Range Organics (Over	2800	F1	998	3065	F1	mg/Kg		26	70 - 130	1	20
C10-C28)											

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	85		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19422/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			02/19/22 08:32	1

Lab Sample ID: LCS 880-19422/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

		Spike	LCS	LCS				%Rec.		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	 	250	237.4	-	mg/Kg		95	90 - 110		_

Lab Sample ID: LCSD 880-19422/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	237.5		mg/Kg		95	90 - 110	0	20	

Lab Sample ID: 890-1924-A-10-D MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 19575

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	592	F1	250	797 0	F1	ma/Ka		82	90 110	

Lab Sample ID: 890-1924-A-10-E MSD

Matrix: Solid

Analysis Batch: 19575

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	592	F1	250	800.1	F1	mg/Kg		83	90 - 110	0	20

Eurofins Carlsbad

Prep Type: Soluble

Client Sample ID: Matrix Spike Duplicate

QC Association Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

Job ID: 890-1926-1 SDG: 31403152.016

GC VOA

Prep Batch: 18967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Total/NA	Solid	5035	
890-1926-2	BH07A	Total/NA	Solid	5035	
MB 880-18967/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18967/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18967/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10981-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-10981-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Total/NA	Solid	8021B	18967
890-1926-2	BH07A	Total/NA	Solid	8021B	18967
MB 880-18967/5-A	Method Blank	Total/NA	Solid	8021B	18967
MB 880-19012/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-18967/1-A	Lab Control Sample	Total/NA	Solid	8021B	18967
LCSD 880-18967/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18967
880-10981-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	18967
880-10981-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18967

Analysis Batch: 19367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Total/NA	Solid	Total BTEX	
890-1926-2	ВН07А	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Total/NA	Solid	8015B NM	19048
890-1926-2	BH07A	Total/NA	Solid	8015B NM	19048
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015B NM	19048
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19048
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19048
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	19048
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19048

Prep Batch: 19048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Total/NA	Solid	8015NM Prep	
890-1926-2	BH07A	Total/NA	Solid	8015NM Prep	
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19741

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Total/NA	Solid	8015 NM	
890-1926-2	BH07A	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

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QC Association Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

Job ID: 890-1926-1 SDG: 31403152.016

HPLC/IC

Leach Batch: 19422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Soluble	Solid	DI Leach	
890-1926-2	BH07A	Soluble	Solid	DI Leach	
MB 880-19422/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19422/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19422/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1924-A-10-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1924-A-10-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1926-1	BH07	Soluble	Solid	300.0	19422
890-1926-2	BH07A	Soluble	Solid	300.0	19422
MB 880-19422/1-A	Method Blank	Soluble	Solid	300.0	19422
LCS 880-19422/2-A	Lab Control Sample	Soluble	Solid	300.0	19422
LCSD 880-19422/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19422
890-1924-A-10-D MS	Matrix Spike	Soluble	Solid	300.0	19422
890-1924-A-10-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19422

Eurofins Carlsbad

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Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

Job ID: 890-1926-1

SDG: 31403152.016

Client Sample ID: BH07

Date Collected: 02/09/22 11:10 Date Received: 02/09/22 12:49

Lab Sample ID: 890-1926-1

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			5.02 g	5 mL	18967	02/10/22 08:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19012	02/11/22 08:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19367	02/14/22 10:01	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19048	02/10/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18980	02/11/22 02:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			19575	02/19/22 10:36	CH	XEN MID

Client Sample ID: BH07A

Date Collected: 02/09/22 11:15

Date Received: 02/09/22 12:49

Lab Sample ID: 890-1926-2

02/14/22 13:40

02/19/22 10:44

SC

CH

Matrix: Solid

XEN MID

XEN MID

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 5.00 g 5 mL 18967 02/10/22 08:26 KL XEN MID 8021B Total/NA 5 mL 02/11/22 09:15 KLXEN MID Analysis 1 5 mL 19012 Total/NA Total BTEX 19367 02/14/22 10:01 Analysis 1 ΚI XEN MID Total/NA Analysis 8015 NM 19741 02/17/22 15:56 XEN MID XEN MID Total/NA Prep 8015NM Prep 10.00 g 19048 02/10/22 13:28 DM 10 mL Total/NA Analysis 8015B NM 18980 02/11/22 02:26 ΑJ XEN MID

4.96 g

50 mL

19422

19575

Laboratory References:

Leach

Analysis

Soluble

Soluble

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

DI Leach

300.0

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1926-1 Project/Site: Queenie 15 Federal #001h SDG: 31403152.016

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 the agency does not of		It the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method 8015 NM		Matrix Solid	Analyte Total TPH	

Method Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001h

Job ID: 890-1926-1

SDG: 31403152.016

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: Queenie 15 Federal #001h

Job ID: 890-1926-1

SDG: 31403152.016

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Dep
890-1926-1	BH07	Solid	02/09/22 11:10	02/09/22 12:49	0.5
890-1926-2	BH07A	Solid	02/09/22 11:15	02/09/22 12:49	1

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Project Manager: Joseph I Company Name: WSP US Address: 3300 No City, State ZIP: Midland, Phone: 432.704. Project Name: 432.704. Project Number: P.O. Number: Alexis C Sampler's Name: Alexis C Sampler's Name: Alexis C Sample Custody Seals: Y Sample Custody Seals: Y Sample Custody Seals: Y Sample Custody Seals: Y BH07A BH07A	Seph Seph Seph Seph Seph Seph Seph Seph	Hernandez Hernandez SA Inc., Permian office orth A St. Bldg 1, Unit 222 t, TX 79705 t, 5178 Queenie 15 Federal #001H 31403152.016 Temp Blank: Yes No (Yes No MATRIX Sampled S 02/09/202: S 02/09/202:	Hobbs, NM office Unit 222 Unit 222 Vee No Ther Total Correctic Total Correctic Sampled S 02/09/2022 02/09/2022	Houston, TX (28 Midland, TX (4) Midland, TX (4) Midland, TX (4) Midland, TX (4) Bill t Com Com City, Email: Aley Add City, Email: Aley Add City, Email: Aley Add City, Email: Aley Add Correction Factor: And Correction Factor: And Time led Sampled Containers: Time 1110 2022 1110 2022 1115	Houston, Tx (281) 240-4200 Dallas, Tx (214) 992-3000 San Antonio, Tx (210) 509-3334 Midland, Tx (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296 Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa, FL (813-620-2000) Bill to: (# differen:) Bill to: (# differen:) Company Name: Company Name: Company Name: Colly, State ZIP: Carlsbad, NM 88220 City, State ZIP: Carlsbad, NM 88220 Command Routine Carlsbad, NM 88220 Command Routine Carlsbad, NM 88220 Command Routine Carlsbad, NM 88220 Command Correction Factor: Carlsbad, NM 88220 Carlsbad, NM 882	Number of Containers Number of Containers	X X TPH (EPA 8015)	× × BTEX (EPA 0=8021) X × BTEX (EPA 0=8021) X X X X X X X X X	x X TPH (EPA 8015) TPH (EPA 8015) X X BTEX (EPA 0=8021) X X Chloride (EPA 300.0)	Dallas, TX (214) 902-0300 San Antonio. EL Paso, TX (915)585-3443 Lubbock, TYPH (EPA 8015) X X BTEX (EPA 0=8021) X X Chloride (EPA 300.0) AN	Nio, TX (210) k, TX (806)7 8800) Tam 8800) Tam	794-1296 794-1296 mpa.FL (813-520. Dan.Moi De Dan.Moi Pr	Chain Chain	3-620-2000) Program: UST/PST State of Project: Reporting:Level II [Deliverables: EDD Chain of Custody	Ody Ody Ody Ody Ody		PRP PRP S	WORK Order NO: Work Order Comments Work Order Comments TAT starts lab, if r	T UST Somm	Work Order NO. Work Order Comments PRP Brownfields RRC ADAPT Oth NO: nAF INC: nAF Iab, if rec Sample	RRP Le Other: nAPP22C 3S: C1.22	Page of) mments elds _RRC _Superfund STRRPLevel V Other: Work Order Notes INC: nAPP2201862045 WBS: C1.22.00191 FAT starts the day-recevied-by-the lab, if received by 4:30pm Sample Comments	Bogo 18 of 20
		403152.016		Routine Rush:	E														7	VC: nA WBS:	,PP22(C1.22)18620 .00191	45
Sampler's Name:				Due Da																			
SAMPLE RECEIPT		/ ~	\vdash	Wet Ice:	Yes	rs								=									
Temperature (°C):	1.2/		. i e	mometer ID		taine		21)	0.0)		∞ <u>—</u>	90-1926	Chain	of Cust									
Cooler Custody Seals	Yes No		Correction	on Factor:	2.0	Con	015)	0=80	PA 30		- !		- 1	1	- 1.				Ĭ,	starts th	e day re	eevied t	y the
Sample Custody Seals:	Yes	(N/A	Total C	ontainers:		er of	PA 8	EPA	ie (El											ab, if re	ceived t	y 4:30pr	4
Sample Iden				Time ampled	Depth	Numb	TPH (E	BTEX	Chloric											Samp	le Con	nment:	
вно:	7)9/2022	1110	0.5	_	×	×	×				-		╁				1				
BH07	A)9/2022	1115			×	×	×			$\vdash \vdash$	\vdash										\prod
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Total 200.7 / 6010 Circle Method(s) a	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed)20: o be analyz	8RC	CRA 13PPM Texa	Texas 11 AI 6010: 8RCRA	11 (6.11	b As Sb As	As Ba Be As Ba Be	e B Cd Be Cd (Sb As Ba Be B Cd Ca Cr Co C Sb As Ba Be Cd Cr Co Cu Pb			Pb Mg	Mg Mn Mo Ni Ni Se Ag Tl ∪	∏ Ni	к Se	Ąg	SiO2 I	Na Sr 631 / 24	2 Na Sr Tl Sn U \ 1631 / 245.1 / 7470		/ Zn / 7471 :	Hg
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	document and relinquiliable only for the cos	shment of sam t of samples an applied to each	ples constitute d shall not ass project and a	s a valid purc sume any resp charge of \$5 fo	hase order from onsibility for an or each sample	client c y losses submitte	ompany or expe	to Xeni enses in nco, but	o, Its affi curred by not analy	lates and si the client if zed. These	ubcontrac such loss terms will	tors. It as ses are du be enforc	signs st	tandard umstanc ss previo	terms ar es beyo susiy ne	nd condi nd the c gotlated	itions :ontrol						
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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1926-1
SDG Number: 31403152.016

List Source: Eurofins Carlsbad

Login Number: 1926 List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1926-1 SDG Number: 31403152.016

List Source: Eurofins Midland

List Creation: 02/10/22 12:21 PM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 1926

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: 890-2058-1

Laboratory Sample Delivery Group: 31403152.0169 Client Project/Site: Queenie 15 Federal #001H

For:

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

Attn: Joseph Hernandez

WRAMER

Authorized for release by: 3/11/2022 9:37:07 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

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Released to Imaging: 5/3/2022 11:56:55 AM

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

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

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Client: WSP USA Inc.
Project/Site: Queenie 15 Federal #001H

Laboratory Job ID: 890-2058-1 SDG: 31403152.0169

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2058-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.0169

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

Duplicate Error Ratio (normalized absolute difference) DER

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: 890-2058-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.0169

Job ID: 890-2058-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2058-1

Receipt

The sample was received on 3/9/2022 10:41 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

GC VOA

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

GC Semi VOA

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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-21235 and analytical batch 880-21319 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Matrix: Solid

Lab Sample ID: 890-2058-1

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-2058-1

 Project/Site: Queenie 15 Federal #001H
 SDG: 31403152.0169

Client Sample ID: BH03

Date Collected: 03/09/22 09:30 Date Received: 03/09/22 10:41

Sample Depth: 3

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/10/22 07:30	03/10/22 14:28	1
Toluene	< 0.00199	U	0.00199	mg/Kg		03/10/22 07:30	03/10/22 14:28	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		03/10/22 07:30	03/10/22 14:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/10/22 07:30	03/10/22 14:28	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		03/10/22 07:30	03/10/22 14:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/10/22 07:30	03/10/22 14:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			03/10/22 07:30	03/10/22 14:28	1
1,4-Difluorobenzene (Surr)	98		70 - 130			03/10/22 07:30	03/10/22 14:28	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			03/10/22 16:29	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)						
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
_			RL 49.9	Unit mg/Kg	D	Prepared	Analyzed 03/11/22 10:24	Dil Fac
Analyte	Result 214	Qualifier			<u>D</u>	Prepared		Dil Fac
Analyte Total TPH	Result 214 ge Organics (D	Qualifier			<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result 214 ge Organics (D	Qualifier RO) (GC) Qualifier	49.9	mg/Kg	_ =	<u> </u>	03/11/22 10:24	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 214 ge Organics (D	Qualifier RO) (GC) Qualifier	49.9	mg/Kg	_ =	Prepared	03/11/22 10:24 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result 214 ge Organics (Di Result							

50.4

mg/Kg

5150

Eurofins Carlsbad

03/10/22 18:17

Surrogate Summary

Job ID: 890-2058-1 Client: WSP USA Inc. Project/Site: Queenie 15 Federal #001H

SDG: 31403152.0169

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Rec
		BFB1	DFBZ1	Ū
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-12215-A-1-D MS	Matrix Spike	104	99	
880-12215-A-1-E MSD	Matrix Spike Duplicate	99	97	
890-2058-1	BH03	105	98	
LCS 880-21140/1-A	Lab Control Sample	103	101	
LCSD 880-21140/2-A	Lab Control Sample Dup	101	99	
MB 880-21140/5-A	Method Blank	102	95	
Surrogate Legend				
BFB = 4-Bromofluorobei	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2058-1	BH03	106	112	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-2058-1 SDG: 31403152.0169 Project/Site: Queenie 15 Federal #001H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21140/5-A

Lab Sample ID: LCS 880-21140/1-A

Matrix: Solid Analysis Batch: 21273 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21140

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/10/22 07:30	03/10/22 11:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/10/22 07:30	03/10/22 11:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/10/22 07:30	03/10/22 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/10/22 07:30	03/10/22 11:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/10/22 07:30	03/10/22 11:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/10/22 07:30	03/10/22 11:23	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/10/22 07:30	03/10/22 11:23	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/10/22 07:30	03/10/22 11:23	1

Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 21273** Prep Batch: 21140

ı		Spike	LCS	LCS				%Rec.	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	0.100	0.1031	-	mg/Kg		103	70 - 130	
	Toluene	0.100	0.1017		mg/Kg		102	70 - 130	
	Ethylbenzene	0.100	0.1016		mg/Kg		102	70 - 130	
	m-Xylene & p-Xylene	0.200	0.2115		mg/Kg		106	70 - 130	
	o-Xylene	0.100	0.1027		mg/Kg		103	70 - 130	
н									

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	103	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Lab Sample ID: LCSD 880-21140/2-A

Analysis Batch: 21273

Prep Type: Total/NA Prep Batch: 21140

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09642		mg/Kg		96	70 - 130	7	35
Toluene	0.100	0.09504		mg/Kg		95	70 - 130	7	35
Ethylbenzene	0.100	0.09497		mg/Kg		95	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1969		mg/Kg		98	70 - 130	7	35
o-Xylene	0.100	0.09585		mg/Kg		96	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery Qu	ıalifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1.4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-12215-A-1-D MS

Matrix: Solid

Analysis Batch: 21273

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

Prep Batch: 21140

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U	0.0996	0.09790		mg/Kg		98	70 - 130	
Toluene	<0.00198	U	0.0996	0.09742		mg/Kg		98	70 - 130	

Client: WSP USA Inc. Job ID: 890-2058-1 Project/Site: Queenie 15 Federal #001H SDG: 31403152.0169

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

Lab Sample ID: 880-12215-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 21273** Prep Batch: 21140

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00198	U	0.0996	0.09736		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00397	U	0.199	0.2021		mg/Kg		101	70 - 130
o-Xylene	<0.00198	U	0.0996	0.09834		mg/Kg		99	70 - 130

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 104 1,4-Difluorobenzene (Surr) 99 70 - 130

Lab Sample ID: 880-12215-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 21273** Prep Batch: 21140

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00198	U	0.0990	0.09953		mg/Kg		101	70 - 130	2	35
Toluene	<0.00198	U	0.0990	0.09910		mg/Kg		100	70 - 130	2	35
Ethylbenzene	<0.00198	U	0.0990	0.09916		mg/Kg		100	70 - 130	2	35
m-Xylene & p-Xylene	<0.00397	U	0.198	0.2084		mg/Kg		105	70 - 130	3	35
o-Xylene	<0.00198	U	0.0990	0.1013		mg/Kg		102	70 - 130	3	35

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 99 97 1,4-Difluorobenzene (Surr) 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21235/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 21319

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			03/10/22 08:42	1

Lab Sample ID: LCS 880-21235/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 21319

Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit %Rec Chloride 250 252.8 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-21235/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 21319

Spike LCSD LCSD %Rec. RPD Result Qualifier Added Limits Limit Analyte Unit D %Rec RPD Chloride 250 251.3 101 90 - 110 20 mg/Kg

Client: WSP USA Inc. Job ID: 890-2058-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.0169

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-12261-B-3-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble

Analysis Batch: 21319

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	<4.95	U F1	248	283.8	F1	mg/Kg		113	90 - 110	

Lab Sample ID: 880-12261-B-3-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 21319 Sample Sample Spike MSD MSD

%Rec. RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride <4.95 UF1 248 287.0 F1 mg/Kg 114 90 - 110

QC Association Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-2058-1 SDG: 31403152.0169

GC VOA

Prep Batch: 21140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2058-1	BH03	Total/NA	Solid	5035	
MB 880-21140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12215-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-12215-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 21273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2058-1	BH03	Total/NA	Solid	8021B	21140
MB 880-21140/5-A	Method Blank	Total/NA	Solid	8021B	21140
LCS 880-21140/1-A	Lab Control Sample	Total/NA	Solid	8021B	21140
LCSD 880-21140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21140
880-12215-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	21140
880-12215-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21140

Analysis Batch: 21338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2058-1	BH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2058-1	BH03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21302

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
l	890-2058-1	BH03	Total/NA	Solid	8015B NM	21230

Analysis Batch: 21385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2058-1	BH03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21235

Lab Sample ID 890-2058-1	Client Sample ID BH03	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-21235/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21235/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21235/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12261-B-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12261-B-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 21319

Released to Imaging: 5/3/2022 11:56:55 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2058-1	BH03	Soluble	Solid	300.0	21235
MB 880-21235/1-A	Method Blank	Soluble	Solid	300.0	21235
LCS 880-21235/2-A	Lab Control Sample	Soluble	Solid	300.0	21235
LCSD 880-21235/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21235
880-12261-B-3-D MS	Matrix Spike	Soluble	Solid	300.0	21235

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QC Association Summary

Client: WSP USA Inc. Job ID: 890-2058-1 Project/Site: Queenie 15 Federal #001H

SDG: 31403152.0169

HPLC/IC (Continued)

Analysis Batch: 21319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12261-B-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21235

Lab Chronicle

 Client: WSP USA Inc.
 Job ID: 890-2058-1

 Project/Site: Queenie 15 Federal #001H
 SDG: 31403152.0169

Client Sample ID: BH03 Lab Sample ID: 890-2058-1

Date Collected: 03/09/22 09:30

Date Received: 03/09/22 10:41

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			5.03 g	5 mL	21140	03/10/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21273	03/10/22 14:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			21338	03/10/22 16:29	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21385	03/11/22 10:24	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21230	03/10/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21302	03/11/22 02:22	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21235	03/10/22 12:30	SC	XEN MID
Soluble	Analysis	300.0		10			21319	03/10/22 18:17	SC	XEN MID

Laboratory References:

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

Eurofins Carlsbad

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Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-2058-1

 Project/Site: Queenie 15 Federal #001H
 SDG: 31403152.0169

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 by		and boother and consider a subbands. This list was	
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for
,	• '	Matrix	ed by the governing authority. This list ma	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

Method Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-2058-1

SDG: 31403152.0169

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

Released to Imaging: 5/3/2022 11:56:55 AM

Sample Summary

Client: WSP USA Inc.

Project/Site: Queenie 15 Federal #001H

Job ID: 890-2058-1

SDG: 31403152.0169

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2058-1	BH03	Solid	03/09/22 09:30	03/09/22 10:41	3

Revised Date 051418 Rev 2018.1								
		6						
		4 2	1 वर्षा १०५1	\.	0	the Cy		White Sand
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		Received by: (Signature)	Received I	Signature)	Relinquished by:
	rs. It assigns standard terms and conditions s are due to circumstances beyond the control e enforced unless previously negotiated.	Volice: 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 service. Xenco 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.	t company to Xenco, its aft les or expenses incurred b tted to Xenco, but not anal	e order from client sibility for any loss ach sample submi	utes a valid purchas assume any respons a charge of \$5 for e	samples constites and shall not each project and	votice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractory service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses of 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	votice: Signature of this o of service. Xenco will be of Xenco. A minimum cha
Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	Ni K Se Ag SiO2	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo N Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	N Sb As Ba Be B	Texas 11 AI 3010 : 8RCRA	8RCRA 13PPM Texas 11 AI TCLP / SPLP 6010: 8RCRA	8F alyzed	otal 200.7 6010 200.8 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) &
				-				
Discrete			× ×	ω <u></u>	9:30	3/9/2022	S	вноз
Sample Comments	σ		TPH (E BTEX (Depth	Time Sampled	Date Sampled	tification Matrix	Sample Identification
lab, if received by 4:30pm	a		EPA 0		1 -	Tota	Yes No	Sample Custody Seals:
arts the day recevied by the			=80	10.7 Co		Corre	S: Yes No NIA	Cooler Custody Seals:
	y Hillian	890-2058 Chain of Custody		7	00 - MA		(Yes) No	Received Intact:
)	ners	Thermometer ID	Ţ	1.0/0.8	Temperature (°C):
				S	Wet Ice: Yes	Yes No	IPT Temp Blank:	SAMPLE RECEIPT
			_	io.	Due Date:	vis Casey	Elliot Lee / Travis Casey	Sampler's Name:
WBS: C1.22.00191	<			JHP	Rush: 24HR			P.O. Number:
Incident # NAPP2201862045	Incide				Routine	.016	31403152.016	Project Number:
Work Order Notes	V	ANALYSIS REQUEST		Turn Around	Turn /	eral # 001H	Queenie 15 Federal # 001H	Project Name:
Other:	Deliverables: EDD ADaPT	Travis.Casey@wsp.com	, Joseph.Hernandez@wsp.com,	Email: Elliot.Lee@wsp.com,	Email: Ellic		(432) 704-5178	Phone:
RP Uvel IV	Reporting:Level II		Carlsbad, NM, 88220	City, State ZIP:	Cit		Midland, TX 79705	City, State ZIP:
	State of Project:	St		Address:		ilding 1, Unit	3300 North A Street Building 1, Unit 222	Address:
RC ⊕perfund □	Program: UST/PST ☐RP ☐rownfields	Progi		Company Name:	Co		WSP Permian office	Company Name:
nts	Work Order Comments			Bill to: (if different)	Bill		Joseph Hernandez	Project Manager:
ge of	o) www.xenco.com Page	Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	EL Paso,TX (915)585-34 80-355-0900) Atlanta,G	(432-704-5440) 0) Phoenix,AZ (4	Midland,TX s,NM (575-392-755	Hobbs	BORATORIES	LA
		Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334	Dallas,TX (214) 902-0300	(281) 240-4200 [Houston,TX (1
	Work Order No:	ustody	Chain of Custody	0				

Login Sample Receipt Checklist

Client: WSP USA Inc. Job Number: 890-2058-1 SDG Number: 31403152.0169

List Source: Eurofins Carlsbad

Login Number: 2058			List Source: Eurofins Carlsbad
List Number: 1			
Creator: Clifton, Cloe			
Question	Answer	Comment	

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2058-1 SDG Number: 31403152.0169

List Source: Eurofins Midland

List Creation: 03/10/22 11:27 AM

Creator: Rodriguez, Leticia

Login Number: 2058

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	

4

0

Q

11

12

14

<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 93097

CONDITIONS

Operator:	OGRID:
MARATHON OIL PERMIAN LLC	372098
990 Town & Country Blvd.	Action Number:
Houston, TX 77024	93097
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Deferral Request Approved. Going forward, please complete delineation prior to requesting a deferral. OCD needs to establish what is being deferred. BH-01 was not vertically delineated at 3' with TPH G/D at 1,606 mg/kg >1,000 criteria. Site has a prior deferral request approved, so OCD will approve nAPP2201862045.	5/3/2022