Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2118934484
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ 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 complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____Adrian Baker_____ Title: _____Environmental Coordinator_____

Signature: _____ Date: _____01/01/2022_____

Email: _____adrian.baker@exxonmobil.com_____ Telephone: _____432-236-3808_____

OCD Only

Received by: Chad Hensley Date: 02/18/2022

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Chad Hensley Date: 02/18/2022

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	NAPP2118934484
District RP	
Facility ID	
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Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume 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		

State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☐ The source of the release has been stopped.
- ☐ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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Printed Name: _____ Title: _____

Signature: Adrian Bates Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Ramona Marcus Date: 7/8/2021

Location:	Nash 39 Battery	
Spill Date:	7/3/2021	
Area 1		
Approximate Area =	12966.00	sq. ft.
Average Saturation (or depth) of spill =	0.75	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	2.88	bbls
Total Produced Water =	573.77	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**2.88**	**bbls**
Total Produced Water =	**573.77**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**2.78**	**bbls**
Total Produced Water =	**552.23**	**bbls**

Incident ID	NAPP2118934484
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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?	<50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☒ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

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.

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Page 4

State of New Mexico
Oil Conservation Division

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Printed Name: _____Adrian Baker_____ Title: _____Environmental Coordinator_____

Signature: _____ _____ Date: _____01/01/2022_____

Email: _____adrian.baker@exxonmobil.com_____ Telephone: _____432-236-3808_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2118934484
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Remediation Plan

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Printed Name: _____Adrian Baker_____ Title: _____Environmental Coordinator_____

Signature: _____ Date: _____01/01/2022_____

Email: _____adrian.baker@exxonmobil.com_____ Telephone: _____432-236-3808_____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

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

January 01, 2022

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

RE: Remediation Work Plan
Nash 39 Tank Battery
Incident Number NAPP2118934484
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Remediation Work Plan (Work Plan) detailing site assessment activities completed to date and a proposed work plan to address impacted soil at the Nash 39 Tank Battery (Site) in Unit K, Section 12, Township 23 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The following Work Plan proposes to establish a naturally occurring chloride concentration to be applied at the Site, complete excavation of impacted soil exceeding the Site Closure Criteria and/or the background chloride concentrations, and a variance to the sampling frequency due to the estimated size of the proposed excavation.

RELEASE BACKGROUND

On July 3, 2021 produced water tanks caught fire due to a lightning strike, resulting in the release of 2.88 barrels (bbls) of crude oil and 573.77 bbls of produced water into the damaged containment and onto the surface of the well pad. The fire department was contacted immediately, and the fire was extinguished. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 2.78 bbls of crude oil and 552.23 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on July 4, 2021 and a Release Notification Form C-141 (Form C-141) was submitted July 8, 2021. The release was assigned Incident Number NAPP2118934484. Initial response and removal of damaged equipment delayed remediation work at the Site. A 90-day extension request for submitting a remediation work plan or closure request was submitted to the NMOCD via email on September 29, 2021.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be less than 50 feet below ground

surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is the NM OSE well C-4472 located approximately 1.2 miles Southeast of the Site. The well was last measured in October 2020. The groundwater well has a reported depth to groundwater of 37 feet bgs and a total depth of 55 feet bgs. The referenced well records are included in Attachment 1.

The nearest continuously flowing water or significant watercourse to the Site is a salt lake located adjacent to and surrounding the Site. The Site is located within 200 feet of a lakebed and 300 feet from a wetland. The Site is not located near a 100-year floodplain. The Site is located greater than 300 feet from an occupied residence, school, hospital, institution, or church. The Site is located greater than 1,000 feet to a freshwater well or spring. The Site is underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On August 25, 2021 WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected six preliminary assessment soil samples (SS01 through SS06) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the impacted soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site assessment and a photographic log is included in Attachment 2.

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

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

Laboratory analytical results for preliminary soil samples SS01 through SS06 indicated that TPH, and/or chloride concentrations exceeded the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, additional delineation activities were scheduled.

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On October 7, 2021, WSP personnel returned to the Site to oversee delineation activities. Four potholes (PH01 through PH04) were advanced via track-hoe within the release extent to delineate vertical extent of impacted soil. The potholes were advanced to a maximum depth of 4 feet bgs. Delineation soil samples were collected from the potholes at depths ranging from 1-foot bgs to 4-feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. Pothole soil sample locations are depicted on Figure 2. The delineation soil samples were collected, handled, and analyzed following the same procedures as described above.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH04, indicated that benzene, BTEX, and TPH concentrations were compliant with the Closure Criteria. However, chloride concentrations exceeded Closure Criteria in all delineation samples from each pothole. The laboratory analytical results are summarized on the attached Table 1. Due to the proximity of the salt lake, background sampling was scheduled to investigate naturally occurring chloride concentrations at the Site.

BACKGROUND SOIL SAMPLING AND ANALYTICAL RESULTS

Six background potholes (BG01 through BG06) were advanced via track-hoe in undisturbed areas surrounding the well pad. The potholes were advanced to a maximum depth of 4 feet bgs. Soil samples were collected from the background potholes at depth ranging from 1 foot bgs to 4 feet bgs. Soil from the potholes was field screened for chloride utilizing chloride QuanTab® test strips. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The background pothole locations are depicted on Figure 3. The soil samples were collected, handled, and analyzed following the same procedures as described above.

Laboratory analytical results for the background soil samples indicated naturally occurring chloride concentrations ranged from 2,390 mg/kg to 30,200 mg/kg at depths ranging from 1-foot to 4 feet bgs. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 4.

PROPOSED REMEDIATION WORK PLAN

Based on the proximity of the salt lake and laboratory analytical results for 22 separate background soil samples collected in undisturbed areas, chloride naturally occurs in the subsurface at concentrations ranging from 2,390 mg/kg to 30,200 mg/kg. As such, WSP proposes a site-specific Closure Criteria for chloride concentrations in soil of 30,200 mg/kg. Except in the areas near preliminary soil samples SS01 and SS03, chloride concentrations in surface soil within the release footprint exceed the proposed background concentration. At SS01, TPH concentrations exceeding Table 1 Closure Criteria exist.

WSP proposes to excavate the impacted surface soil identified in the release footprint (except near the northeastern edge at SS03 and PH04) to below the Site Closure Criteria of 100 mg/kg for TPH and below a background chloride concentration of 30,200 mg/kg. The excavation area is estimated to be approximately 14,300 square feet and will be completed to an approximate depth of 1 foot bgs. Following excavation, confirmation samples will be collected from the floor and sidewalls of the excavation.

Due to the estimated size of the excavation, XTO requests a variance for frequency of excavation confirmation samples. XTO proposes the frequency of confirmation sampling for the excavation floor to be decreased from every 200 square feet (approximately 72 samples) to every 500 square feet (approximately 29 samples). Each 5-point composite floor sample will represent a 500 square foot area. Due to the anticipated shallow depth of the excavation, sidewalls will be included in the floor samples. Should the excavation depth exceed 2 feet bgs, sidewall samples will be collected separately at a frequency of 200 square feet. The confirmation soil samples will be placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples will be handled as described above and analyzed for BTEX, TPH, and chloride at Eurofins in Carlsbad, New Mexico.

XTO will begin the proposed remediation activities within 90 days of the date of approval of this work plan by NMOCD.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

Nihaar Katoch
Assistant Consultant, Geologist

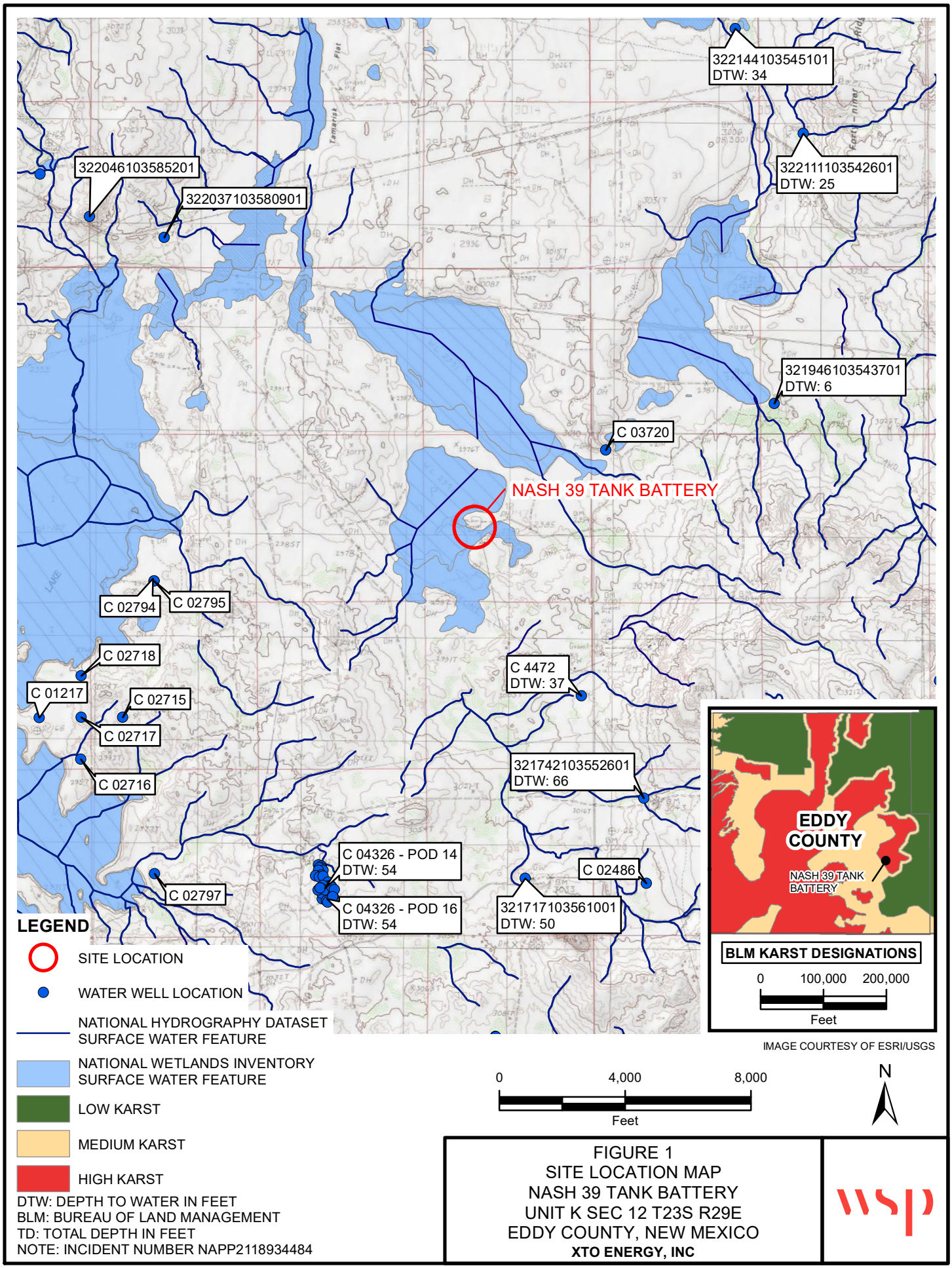
Ashley L. Ager, P.G.
Senior Geologist

cc: Shelby Pennington, XTO
Adrian Baker, XTO
Bureau of Land Management

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Figure 3	Background Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Photographic Log
Attachment 3	Lithologic / Soil Sampling Logs
Attachment 4	Laboratory Analytical Reports

FIGURES



DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NAPP2118934484

FIGURE 1
SITE LOCATION MAP
NASH 39 TANK BATTERY
UNIT K SEC 12 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\31403236.020.0129.05_NASH 39 TANK BATTERY\MXD\31403236.020.0129.05_FIG01_SL_RECEPTOR_2021_1.mxd

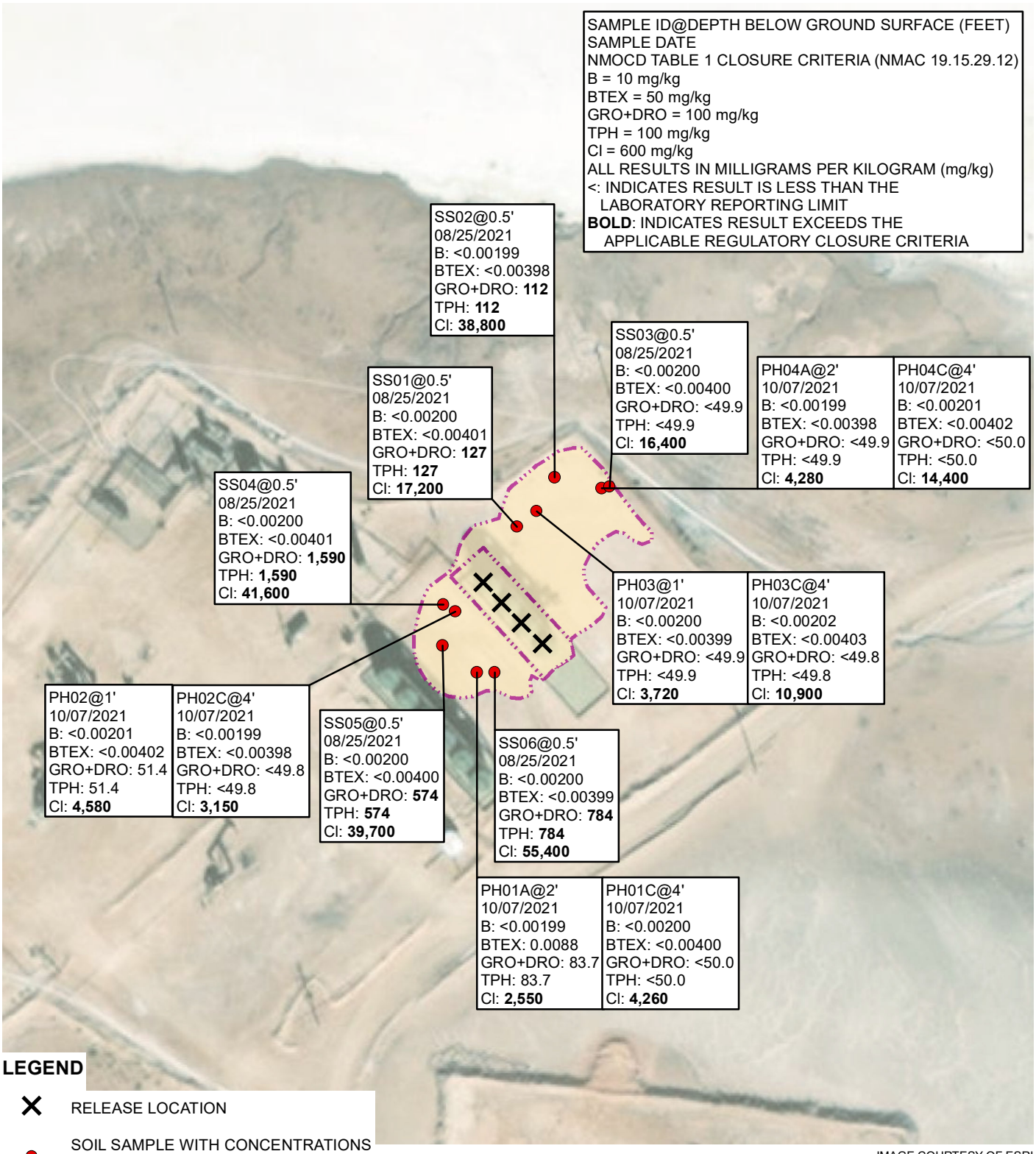
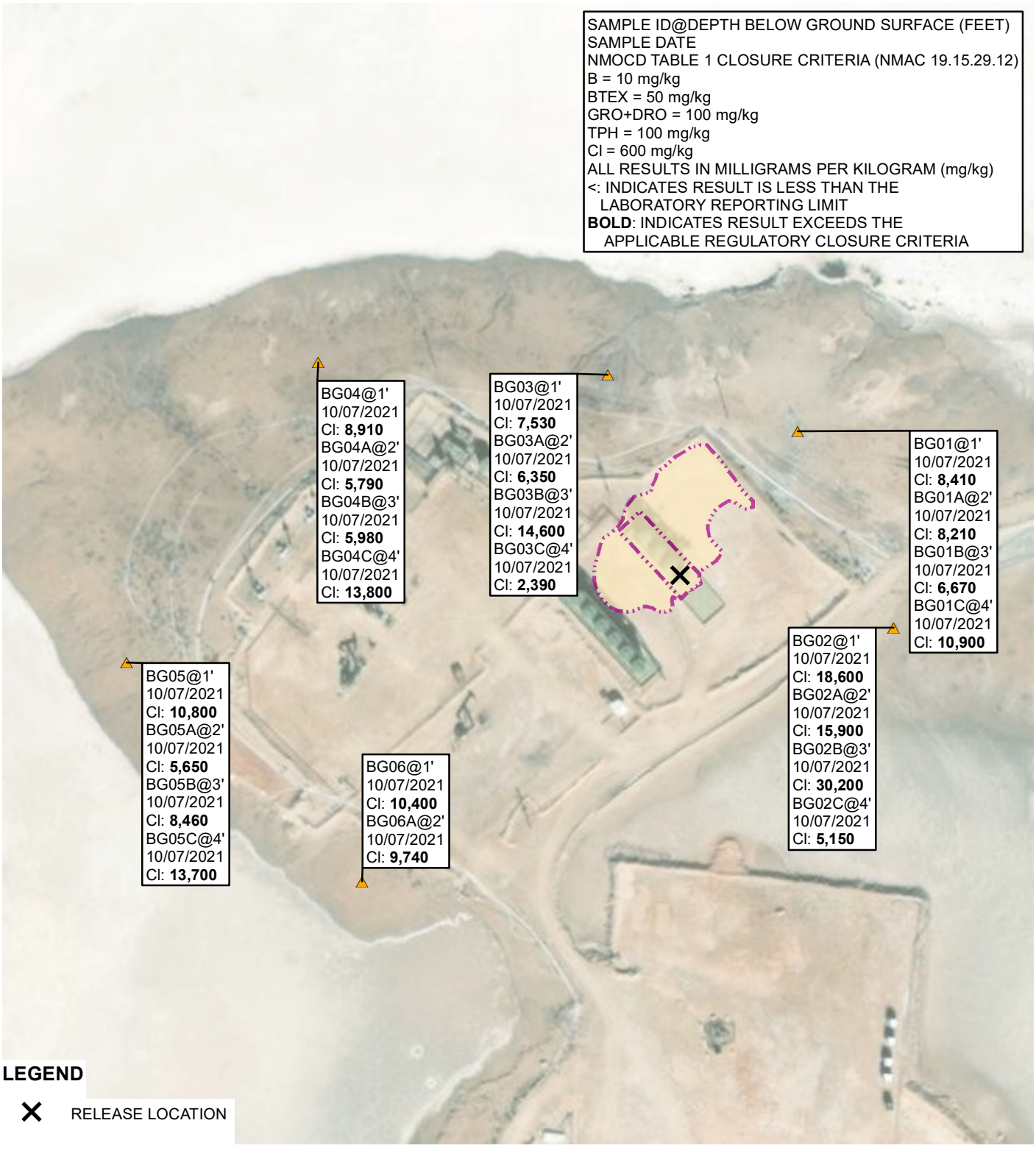


FIGURE 2
SOIL SAMPLE LOCATIONS
NASH 39 TANK BATTERY
UNIT K SEC 12 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\31403236.020.0129.05_NASH 39 TANK BATTERY\MXD\31403236.020.0129.05_FIG02_SS_LOC_2021.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NAPP2118934484

FIGURE 3
BACKGROUND SOIL SAMPLE LOCATIONS
NASH 39 TANK BATTERY
UNIT K SEC 12 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\31403236.020.0129.05_NASH 39 TANK BATTERY\MXD\31403236.020.0129.05_FIG03_BACKGROUND_2021.mxd

TABLES

Table 1

Soil Analytical Results
Nash 39 Tank Battery
NAPP2118934484
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	NE	**100**	**600**
Surface Samples										
SS01	08/25/2021	0.5	<0.00200	<0.00401	127	<50.0	<0.00401	127	**127**	**17,200**
SS02	08/25/2021	0.5	<0.00199	<0.00398	112	<49.9	<0.00398	112	**112**	**38,800**
SS03	08/25/2021	0.5	<0.00200	<0.00400	<49.9	<49.9	<0.00400	<49.9	<49.9	**16,400**
SS04	08/25/2021	0.5	<0.00200	<0.00401	1,590	<49.8	<0.00401	1,590	**1,590**	**41,600**
SS05	08/25/2021	0.5	<0.00200	<0.00400	574	<49.9	<0.00400	574	**574**	**39,700**
SS06	08/25/2021	0.5	<0.00200	<0.00399	784	<50.0	<0.00399	784	**784**	**55,400**
Delineation Samples										
PH01A	10/07/2021	2	<0.00199	0.0088	83.7	<49.9	<49.9	83.7	83.7	**2,550**
PH01C	10/07/2021	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**4,260**
PH02	10/07/2021	1	<0.00201	<0.00402	51.4	<50.0	<50.0	51.4	51.4	**4,580**
PH02C	10/07/2021	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	**3,150**
PH03	10/07/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	**3,720**
PH03C	10/07/2021	4	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	**10,900**
PH04A	10/07/2021	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**4,280**
PH04C	10/07/2021	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**14,400**
Background Samples										
BG01	10/07/2021	1	NA	NA	NA	NA	NA	NA	NA	**8,410**
BG01A	10/07/2021	2	NA	NA	NA	NA	NA	NA	NA	**8,210**
BG01B	10/07/2021	3	NA	NA	NA	NA	NA	NA	NA	**6,670**
BG01C	10/07/2021	4	NA	NA	NA	NA	NA	NA	NA	**10,900**

Table 1

Soil Analytical Results
Nash 39 Tank Battery
NAPP2118934484
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	NE	**100**	**600**
BG02	10/07/2021	1	NA	NA	NA	NA	NA	NA	NA	**18,600**
BG02A	10/07/2021	2	NA	NA	NA	NA	NA	NA	NA	**15,900**
BG02B	10/07/2021	3	NA	NA	NA	NA	NA	NA	NA	**30,200**
BG02C	10/07/2021	4	NA	NA	NA	NA	NA	NA	NA	**5,150**
BG03	10/07/2021	1	NA	NA	NA	NA	NA	NA	NA	**7,530**
BG03A	10/07/2021	2	NA	NA	NA	NA	NA	NA	NA	**6,350**
BG03B	10/07/2021	3	NA	NA	NA	NA	NA	NA	NA	**14,600**
BG03C	10/07/2021	4	NA	NA	NA	NA	NA	NA	NA	**2,390**
BG04	10/07/2021	1	NA	NA	NA	NA	NA	NA	NA	**8,910**
BG04A	10/07/2021	2	NA	NA	NA	NA	NA	NA	NA	**5,790**
BG04B	10/07/2021	3	NA	NA	NA	NA	NA	NA	NA	**5,980**
BG04C	10/07/2021	4	NA	NA	NA	NA	NA	NA	NA	**13,800**
BG05	10/07/2021	1	NA	NA	NA	NA	NA	NA	NA	**10,800**
BG05A	10/07/2021	2	NA	NA	NA	NA	NA	NA	NA	**5,650**
BG05B	10/07/2021	3	NA	NA	NA	NA	NA	NA	NA	**8,460**
BG05C	10/07/2021	4	NA	NA	NA	NA	NA	NA	NA	**13,700**

Table 1

Soil Analytical Results
Nash 39 Tank Battery
NAPP2118934484
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	NE	**100**	**600**
BG06	10/07/2021	1	NA	NA	NA	NA	NA	NA	NA	**10,400**
BG06A	10/07/2021	2	NA	NA	NA	NA	NA	NA	NA	**9,740**

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

ATTACHMENT 1: REFERENCED WELL RECORDS

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DII OCT 8 2020 PM2:24

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4472

WELL OWNER NAME(S)	PHONE (OPTIONAL)
XTO Energy (Kyle Littrell)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6401 Holiday Hill Dr.	Midland	TX	79707

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32°	18'	13.90"	N
	LONGITUDE	-103°	55'	51.66"	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

NE NE SE (Unit 1) Sec. 13 T23S R29E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
09/11/20	09/11/20	temporary well material	55	±37

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 37

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	55	±8.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

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

FOR OSE INTERNAL USE

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

FILE NO. C-4472	POD NO. 1	TRN NO. 677404
LOCATION 23S.29E.13.422	WELL TAG ID NO. —	PAGE 1 OF 2

OSE DII OCT 6 2020 PM2:24

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2	2	Sand, Medium , poorly-graded with silt and gravel , no plasticity, Brown	Y ✓N	
2	19	17	Caliche, increased cementation with depth, Light Gray	Y ✓N	
19	40	21	Dolomite/Dolostone with micro crystalline matrix, Yellow-Gray	✓Y N	
40	55	15	Clay, Fat inorganic, High Plasticity. Tan, Red	✓Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring plugged using Type I/II Neat Cement Slurry (<6.0 gallons per 94 lbs. sack) from total depth to surface.
Logs adapted from LTE on-site geologist.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 10/06/2020

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4472	POD NO. 1	TRN NO. 677404
LOCATION	WELL TAG ID NO. —	PAGE 2 OF 2

2020-10-05_C-4472POD1_OSE_Well Record and Log-forsign

Final Audit Report 2020-10-06

Created:	2020-10-06
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAVNExAMfaqXv8kEK9Z4CDvLMLBTSbjMjK

"2020-10-05_C-4472POD1_OSE_Well Record and Log-forsign" History

Document created by Lucas Middleton (lucas@atkinseng.com)
2020-10-06 - 3:00:23 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2020-10-06 - 3:00:55 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2020-10-06 - 4:18:52 PM GMT- IP address: 74.50.153.115

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2020-10-06 - 4:20:55 PM GMT - Time Source: server- IP address: 74.50.153.115

Agreement completed.
2020-10-06 - 4:20:55 PM GMT

OSE DII OCT 6 2020 PM2:24

Adobe Sign

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

10/06/2020

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

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4472 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4472 Pod1.

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

Sincerely,

Lucas Middleton

Enclosures: as noted above

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category: Site Information Geographic Area: United States GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

USGS 321742103552601 23S.30E.19.123421

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°17'42", Longitude 103°55'26" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 100 feet
Land surface altitude: 3,034 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-02-06	1993-05-06	8
Field/Lab water-quality samples	1972-09-20	1972-09-20	1
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

---

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category: Groundwater Geographic Area: United States GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =

- 321742103552601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

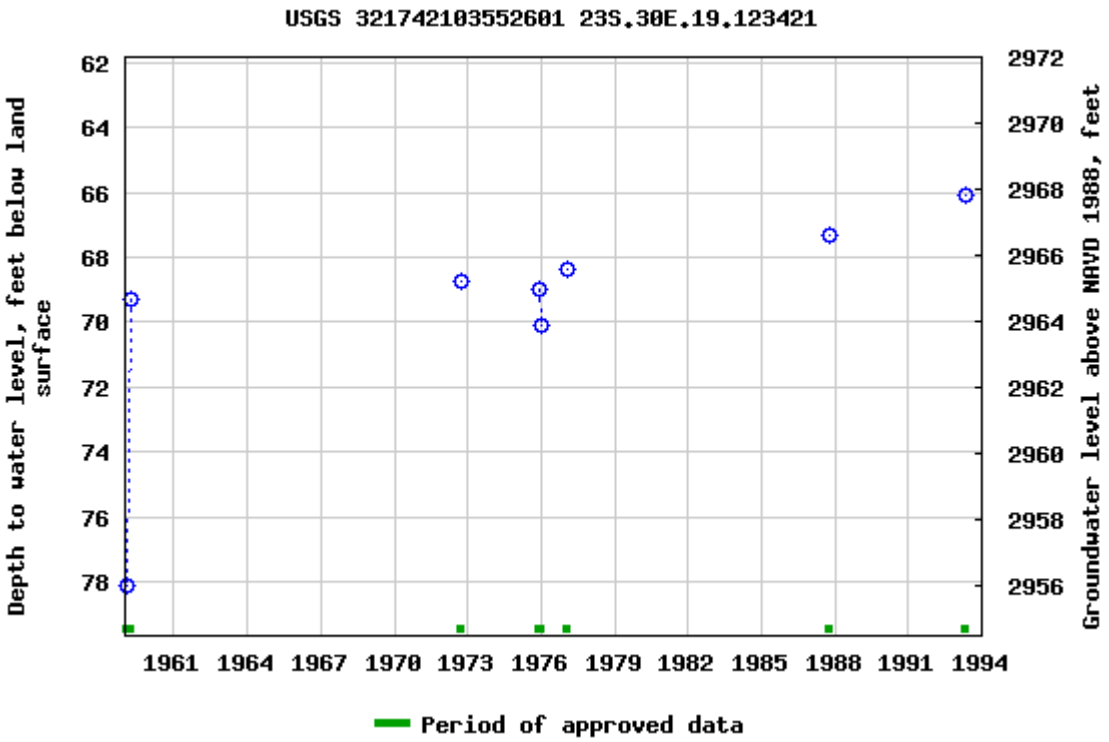
USGS 321742103552601 23S.30E.19.123421

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°17'42", Longitude 103°55'26" NAD27
Land-surface elevation 3,034 feet above NAVD88
The depth of the well is 100 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-12-09 16:05:16 EST
0.71 0.65 nadww02

Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: NWIS Site Information for USA: Site Inventory
URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321742103552601

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2021-12-09 16:10:48 EST
0.3 0.27 sdww02

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy	Nash 39 Tank Battery Eddy County, New Mexico	NAPP2118934484

Photo No.	Date
1	July 4, 2021

Spill extent facing North West.

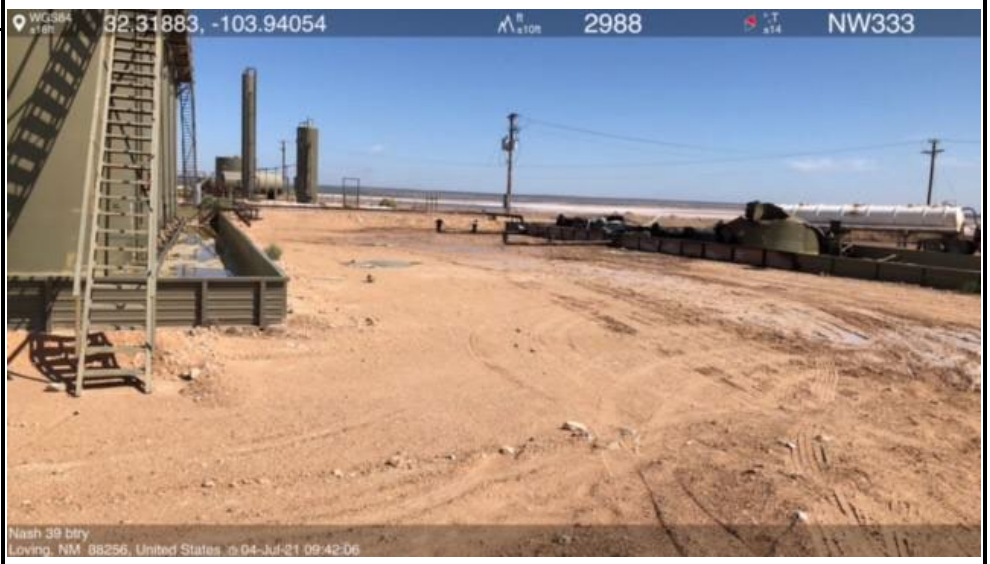


Photo No.	Date
2	August 25, 2021

Spill extent facing North West. Note the removal of the damaged tank battery.

ATTACHMENT 3: LITHOLOGIC / SOIL SAMPLING LOGS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH 01	Date: 10/7/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC	Method: Trackhoe		
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	6,476	1.2	N		1	1	SM	Silty Sand
D	2,072	1.7	N	PH01 A	2	2	CCHE	Caliche
D	1568	0.4	N		3	3	CCHE	Caliche
D	4,768	0.6	N	PH01 C	4	4	CCHE	Caliche

TD @ 4 ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH 02	Date: 10/7/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC	Method: Trackhoe		
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	4,768	8.8	N	PH02	1	1	SM	Silty sand
D	2,600	1	N		2	2	CCHE	Caliche
D	3456	1.2	N		3	3	CCHE	Caliche
D	3,456	1.7	N	PH02 C	4	4	CCHE	Caliche

TD @ 4ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH 03	Date: 10/7/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC	Method: Trackhoe		
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	3,756	0.3	N	PH03	1	1	CCHE	Caliche
D	4,072	0.2	N		2	2	CCHE	Caliche
D	8120	0.2	N		3	3	CCHE	Caliche
D	8,768	0.5	N	PH03 C	4	4	CCHE	Caliche

TD @ 4 ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH 04	Date: 10/7/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC	Method: Trackhoe		
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	2,600	0.4	N		1	1	CCHE	Caliche
D	2,600	0.6	N	PH04 A	2	2	CCHE	Caliche
D	2600	0.4	N		3	3	CCHE	Caliche
D	12,044	0.3	N	PH04 C	4	4	CCHE	Caliche

TD @ 4ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BG 01	Date: 10/6/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC			Method: Trackhoe
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	10,244		N	BG 01	1	1	SM	Silty Sand
D	8,768		N	BG01 A	2	2	SM	Silty Sand
D	11096		N	BG01 B	3	3	SM	Silty Sand
D	13,108		N	BG01 C	4	4	SM	Silty Sand

TD @ 4ft bgs

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BG 02	Date: 10/6/2021
	Site Name: Nash 39 Tank Battery	
	RP or Incident Number: NAPP2118934484	
	WSP Job Number: 31403236.020.0129	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By AC	Method: Trackhoe
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25" / Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	19,232		N	BG02	1	1	SM	Silty Sand
D	15,696		N	BG02 A	2	2	CCHE	Caliche
D	17312		N	BG02 B	3	3	CCHE	Caliche
D	17,312		N		4	4	CCHE	Caliche

TD @ 4 ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BG 03	Date: 10/6/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC	Method: Trackhoe		
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	7,528		N	BG03	1	1	SM	Silty Sand
D	10,244		N	BG03 A	2	2	SM	Silty Sand
D	8120		N	BG03 B	3	3	SM	Silty Sand
D	14,312		N	BG03 C	4	4	SM	Silty Sand

TD @ 4 ft bgs

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BG 04	Date: 10/6/2021
	Site Name: Nash 39 Tank Battery	
	RP or Incident Number: NAPP2118934484	
	WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: AC	Method: Trackhoe

Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	10,244		N	BG04	1	1	SM	Silty sand
D	6,004		N	BG04 A	2	2	SM	Silty sand
D	7528		N	BG04 B	3	3	CCHE	Caliche
D	6,004		N	BG04 C	4	4	CCHE	Caliche

TD @ 4 ft bgs

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: BG 05	Date: 10/6/2021
	Site Name: Nash 39 Tank Battery	
	RP or Incident Number: NAPP2118934484	
	WSP Job Number: 31403236.020.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID	Logged By: AC	Method: Trackhoe
		Hole Diameter: 2.25"	Total Depth: 4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	9,468		N	BG05	1	1	SM	Silty sand
D	8,168		N	BG05 A	2	2	CCHE	Caliche
D	10244		N	BG05 B	3	3	CCHE	Caliche
D	19,232		N	BG05 C	4	4	CCHE	Caliche

TD @ 4 ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BG 06	Date: 10/6/2021
Site Name: Nash 39 Tank Battery	
RP or Incident Number: NAPP2118934484	
WSP Job Number: 31403236.020.0129	
Logged By: AC	Method: Trackhoe
Lat/Long: 32.31903, -103.94152	Field Screening: Chloride, PID
Hole Diameter: 2.25"	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	12,044		N	BG 06	1	1	SM	Silty sand
D	10,744		N	BG 06 A	2	2	SM	Silty sand
N/A	N/A		N/A		3	3	N/A	N/A
N/A	N/A		N/A		4	4	N/A	N/A

TD @ 4 ft bgs

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1174-1
Laboratory Sample Delivery Group: 31403236.020.0129
Client Project/Site: Nash 39 Tank Battery

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

Attn: Dan Moir

Authorized for release by:
9/1/2021 3:30:04 PM

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

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Laboratory Job ID: 890-1174-1
SDG: 31403236.020.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Job ID: 890-1174-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1174-1

Receipt
The samples were received on 8/26/2021 11:32 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 1.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7158 and analytical batch 880-7183 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
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7184 and analytical batch 880-7197 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.

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

Client Sample ID: SS01

Lab Sample ID: 890-1174-1
Matrix: Solid
Date Collected: 08/25/21 14:26
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 08:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 08:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 08:50	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/27/21 10:33	08/28/21 08:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 08:50	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/27/21 10:33	08/28/21 08:50	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/27/21 10:33	08/28/21 08:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/27/21 10:33*	*08/28/21 08:50*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*08/27/21 10:33*	*08/28/21 08:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/28/21 04:00	1
Diesel Range Organics (Over C10-C28)	**127**		50.0		mg/Kg		08/27/21 13:35	08/28/21 04:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/28/21 04:00	1
Total TPH	**127**		50.0		mg/Kg		08/27/21 13:35	08/28/21 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/27/21 13:35*	*08/28/21 04:00*	*1*
o-Terphenyl	*112*		*70 - 130*	*08/27/21 13:35*	*08/28/21 04:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17200**		248		mg/Kg			08/30/21 01:53	50

Client Sample ID: SS02

Lab Sample ID: 890-1174-2
Matrix: Solid
Date Collected: 08/25/21 14:30
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/27/21 10:33	08/28/21 09:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/27/21 10:33	08/28/21 09:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/27/21 10:33	08/28/21 09:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/27/21 10:33	08/28/21 09:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/27/21 10:33	08/28/21 09:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/27/21 10:33	08/28/21 09:16	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/27/21 10:33	08/28/21 09:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*08/27/21 10:33*	*08/28/21 09:16*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*08/27/21 10:33*	*08/28/21 09:16*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: SS02 — Lab Sample ID: 890-1174-2

Date Collected: 08/25/21 14:30 **Matrix: Solid**
Date Received: 08/26/21 11:32
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 04:21	1
Diesel Range Organics (Over C10-C28)	**112**		49.9		mg/Kg		08/27/21 13:35	08/28/21 04:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 04:21	1
Total TPH	**112**		49.9		mg/Kg		08/27/21 13:35	08/28/21 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*08/27/21 13:35*	*08/28/21 04:21*	*1*
o-Terphenyl	*117*		*70 - 130*	*08/27/21 13:35*	*08/28/21 04:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38800**		250		mg/Kg			08/30/21 01:58	50

Client Sample ID: SS03 — Lab Sample ID: 890-1174-3

Date Collected: 08/25/21 14:35 **Matrix: Solid**
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 09:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 09:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 09:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 09:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 09:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 09:42	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*08/27/21 10:33*	*08/28/21 09:42*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*08/27/21 10:33*	*08/28/21 09:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 04:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 04:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 04:42	1
Total TPH	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*08/27/21 13:35*	*08/28/21 04:42*	*1*
o-Terphenyl	*108*		*70 - 130*	*08/27/21 13:35*	*08/28/21 04:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16400**		249		mg/Kg			08/30/21 02:03	50

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

Client Sample ID: SS04

Lab Sample ID: 890-1174-4
Matrix: Solid
Date Collected: 08/25/21 14:40
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:08	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/27/21 10:33	08/28/21 10:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:08	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/27/21 10:33	08/28/21 10:08	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/27/21 10:33	08/28/21 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*08/27/21 10:33*	*08/28/21 10:08*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*08/27/21 10:33*	*08/28/21 10:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/27/21 13:35	08/28/21 05:03	1
Diesel Range Organics (Over C10-C28)	**1590**		49.8		mg/Kg		08/27/21 13:35	08/28/21 05:03	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/27/21 13:35	08/28/21 05:03	1
Total TPH	**1590**		49.8		mg/Kg		08/27/21 13:35	08/28/21 05:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*08/27/21 13:35*	*08/28/21 05:03*	*1*
o-Terphenyl	*98*		*70 - 130*	*08/27/21 13:35*	*08/28/21 05:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41600**		250		mg/Kg			08/30/21 02:09	50

Client Sample ID: SS05

Lab Sample ID: 890-1174-5
Matrix: Solid
Date Collected: 08/25/21 14:55
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 10:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 10:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 10:34	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 10:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*08/27/21 10:33*	*08/28/21 10:34*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*08/27/21 10:33*	*08/28/21 10:34*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

Client Sample ID: SS05

Date Collected: 08/25/21 14:55
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Lab Sample ID: 890-1174-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 05:24	1
Diesel Range Organics (Over C10-C28)	**574**		49.9		mg/Kg		08/27/21 13:35	08/28/21 05:24	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/27/21 13:35	08/28/21 05:24	1
Total TPH	**574**		49.9		mg/Kg		08/27/21 13:35	08/28/21 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*08/27/21 13:35*	*08/28/21 05:24*	*1*
o-Terphenyl	*116*		*70 - 130*	*08/27/21 13:35*	*08/28/21 05:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39700**		251		mg/Kg			08/30/21 02:14	50

Client Sample ID: SS06

Date Collected: 08/25/21 15:10
Date Received: 08/26/21 11:32
Sample Depth: 0.5

Lab Sample ID: 890-1174-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 11:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 11:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 11:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/27/21 10:33	08/28/21 11:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 11:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/27/21 10:33	08/28/21 11:00	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/27/21 10:33	08/28/21 11:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*08/27/21 10:33*	*08/28/21 11:00*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*08/27/21 10:33*	*08/28/21 11:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/28/21 05:45	1
Diesel Range Organics (Over C10-C28)	**784**		50.0		mg/Kg		08/27/21 13:35	08/28/21 05:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/28/21 05:45	1
Total TPH	**784**		50.0		mg/Kg		08/27/21 13:35	08/28/21 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*08/27/21 13:35*	*08/28/21 05:45*	*1*
o-Terphenyl	*117*		*70 - 130*	*08/27/21 13:35*	*08/28/21 05:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55400**		248		mg/Kg			08/31/21 19:04	50

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-5513-A-1-A MS	Matrix Spike	122	126										
880-5513-A-1-B MSD	Matrix Spike Duplicate	94	98										
890-1174-1	SS01	122	119										
890-1174-2	SS02	120	117										
890-1174-3	SS03	130	119										
890-1174-4	SS04	124	117										
890-1174-5	SS05	107	101										
890-1174-6	SS06	120	113										
LCS 880-7158/1-A	Lab Control Sample	107	118										
LCSD 880-7158/2-A	Lab Control Sample Dup	118	121										
MB 880-7146/5-A	Method Blank	71	103										
MB 880-7158/5-A	Method Blank	70	103										

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										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-5484-A-5-D MS	Matrix Spike	92	99										
880-5484-A-5-E MSD	Matrix Spike Duplicate	92	99										
890-1174-1	SS01	98	112										
890-1174-2	SS02	102	117										
890-1174-3	SS03	94	108										
890-1174-4	SS04	94	98										
890-1174-5	SS05	104	116										
890-1174-6	SS06	109	117										
LCS 880-7193/2-A	Lab Control Sample	95	102										
LCSD 880-7193/3-A	Lab Control Sample Dup	91	98										
MB 880-7193/1-A	Method Blank	98	115										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7146/5-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/26/21 15:44	08/27/21 18:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*08/26/21 15:44*	*08/27/21 18:33*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/26/21 15:44*	*08/27/21 18:33*	*1*

Lab Sample ID: MB 880-7158/5-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*08/27/21 10:33*	*08/28/21 07:57*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/27/21 10:33*	*08/28/21 07:57*	*1*

Lab Sample ID: LCS 880-7158/1-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7158

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1009		mg/Kg		101	70 - 130
Toluene	0.100	0.09915		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1007		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2017		mg/Kg		101	70 - 130
o-Xylene	0.100	0.09923		mg/Kg		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-7158/2-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7158

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1021		mg/Kg		102	70 - 130	1	35
Toluene			0.100	0.09516		mg/Kg		95	70 - 130	4	35
Ethylbenzene			0.100	0.1036		mg/Kg		104	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2081		mg/Kg		104	70 - 130	3	35
o-Xylene			0.100	0.1038		mg/Kg		104	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

Lab Sample ID: 880-5513-A-1-A MS
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7158

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.101	0.05222	F1	mg/Kg		52	70 - 130		
Toluene	<0.00200	U F1	0.101	0.05001	F1	mg/Kg		50	70 - 130		
Ethylbenzene	<0.00200	U F1	0.101	0.04375	F1	mg/Kg		43	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.08514	F1	mg/Kg		42	70 - 130		
o-Xylene	<0.00200	U F1	0.101	0.04188	F1	mg/Kg		42	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*

Lab Sample ID: 880-5513-A-1-B MSD
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7158

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.101	0.06023	F1	mg/Kg		60	70 - 130	14	35
Toluene	<0.00200	U F1	0.101	0.05872	F1	mg/Kg		58	70 - 130	16	35
Ethylbenzene	<0.00200	U F1	0.101	0.05223	F1	mg/Kg		52	70 - 130	18	35
m-Xylene & p-Xylene	<0.00399	U F1	0.201	0.1003	F1	mg/Kg		50	70 - 130	16	35
o-Xylene	<0.00200	U F1	0.101	0.04742	F1	mg/Kg		47	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

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

Lab Sample ID: MB 880-7193/1-A
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7193

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1
Total TPH	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/27/21 13:35*	*08/27/21 22:03*	*1*
o-Terphenyl	*115*		*70 - 130*	*08/27/21 13:35*	*08/27/21 22:03*	*1*

Lab Sample ID: LCS 880-7193/2-A
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7193

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	881.0		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1015		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-7193/3-A
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7193

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	873.2		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	997.7		mg/Kg		100	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: 880-5484-A-5-D MS
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	995	840.2		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	995	895.5		mg/Kg		90	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

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

Lab Sample ID: 880-5484-A-5-D MS
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7193

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 880-5484-A-5-E MSD
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7193

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	813.7		mg/Kg		82	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	909.9		mg/Kg		91	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	99		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7184/1-A
Matrix: Solid
Analysis Batch: 7197

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/29/21 23:36	1

Lab Sample ID: LCS 880-7184/2-A
Matrix: Solid
Analysis Batch: 7197

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	267.1		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-7184/3-A
Matrix: Solid
Analysis Batch: 7197

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	266.1		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-1169-A-1-E MS
Matrix: Solid
Analysis Batch: 7197

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	743	F1	498	1310	F1	mg/Kg		114	90 - 110		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1169-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	743	F1	498	1309	F1	mg/Kg		114	90 - 110	0	20

Lab Sample ID: MB 880-7258/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7352

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/31/21 18:48	1

Lab Sample ID: LCS 880-7258/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7352

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	266.8		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-7258/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7352

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	265.2		mg/Kg		106	90 - 110	1	20

Lab Sample ID: 890-1174-6 MS — **Client Sample ID: SS06**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7352

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	55400		12400	69220	4	mg/Kg		111	90 - 110

Lab Sample ID: 890-1174-6 MSD — **Client Sample ID: SS06**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 7352

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	55400		12400	69250	4	mg/Kg		112	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

GC VOA

Prep Batch: 7146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7146/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 7158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-1	SS01	Total/NA	Solid	5035	
890-1174-2	SS02	Total/NA	Solid	5035	
890-1174-3	SS03	Total/NA	Solid	5035	
890-1174-4	SS04	Total/NA	Solid	5035	
890-1174-5	SS05	Total/NA	Solid	5035	
890-1174-6	SS06	Total/NA	Solid	5035	
MB 880-7158/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7158/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7158/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5513-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-5513-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 7183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-1	SS01	Total/NA	Solid	8021B	7158
890-1174-2	SS02	Total/NA	Solid	8021B	7158
890-1174-3	SS03	Total/NA	Solid	8021B	7158
890-1174-4	SS04	Total/NA	Solid	8021B	7158
890-1174-5	SS05	Total/NA	Solid	8021B	7158
890-1174-6	SS06	Total/NA	Solid	8021B	7158
MB 880-7146/5-A	Method Blank	Total/NA	Solid	8021B	7146
MB 880-7158/5-A	Method Blank	Total/NA	Solid	8021B	7158
LCS 880-7158/1-A	Lab Control Sample	Total/NA	Solid	8021B	7158
LCSD 880-7158/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7158
880-5513-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	7158
880-5513-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	7158

GC Semi VOA

Analysis Batch: 7166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-1	SS01	Total/NA	Solid	8015B NM	7193
890-1174-2	SS02	Total/NA	Solid	8015B NM	7193
890-1174-3	SS03	Total/NA	Solid	8015B NM	7193
890-1174-4	SS04	Total/NA	Solid	8015B NM	7193
890-1174-5	SS05	Total/NA	Solid	8015B NM	7193
890-1174-6	SS06	Total/NA	Solid	8015B NM	7193
MB 880-7193/1-A	Method Blank	Total/NA	Solid	8015B NM	7193
LCS 880-7193/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7193
LCSD 880-7193/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7193
880-5484-A-5-D MS	Matrix Spike	Total/NA	Solid	8015B NM	7193
880-5484-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7193

Prep Batch: 7193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-1	SS01	Total/NA	Solid	8015NM Prep	
890-1174-2	SS02	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

GC Semi VOA (Continued)

Prep Batch: 7193 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-3	SS03	Total/NA	Solid	8015NM Prep	
890-1174-4	SS04	Total/NA	Solid	8015NM Prep	
890-1174-5	SS05	Total/NA	Solid	8015NM Prep	
890-1174-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-7193/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7193/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7193/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5484-A-5-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5484-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-1	SS01	Soluble	Solid	DI Leach	
890-1174-2	SS02	Soluble	Solid	DI Leach	
890-1174-3	SS03	Soluble	Solid	DI Leach	
890-1174-4	SS04	Soluble	Solid	DI Leach	
890-1174-5	SS05	Soluble	Solid	DI Leach	
MB 880-7184/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7184/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7184/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1169-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1169-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 7197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-1	SS01	Soluble	Solid	300.0	7184
890-1174-2	SS02	Soluble	Solid	300.0	7184
890-1174-3	SS03	Soluble	Solid	300.0	7184
890-1174-4	SS04	Soluble	Solid	300.0	7184
890-1174-5	SS05	Soluble	Solid	300.0	7184
MB 880-7184/1-A	Method Blank	Soluble	Solid	300.0	7184
LCS 880-7184/2-A	Lab Control Sample	Soluble	Solid	300.0	7184
LCSD 880-7184/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7184
890-1169-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	7184
890-1169-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7184

Leach Batch: 7258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-6	SS06	Soluble	Solid	DI Leach	
MB 880-7258/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7258/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7258/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1174-6 MS	SS06	Soluble	Solid	DI Leach	
890-1174-6 MSD	SS06	Soluble	Solid	DI Leach	

Analysis Batch: 7352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1174-6	SS06	Soluble	Solid	300.0	7258
MB 880-7258/1-A	Method Blank	Soluble	Solid	300.0	7258

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

HPLC/IC (Continued)

Analysis Batch: 7352 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-7258/2-A	Lab Control Sample	Soluble	Solid	300.0	7258
LCSD 880-7258/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7258
890-1174-6 MS	SS06	Soluble	Solid	300.0	7258
890-1174-6 MSD	SS06	Soluble	Solid	300.0	7258

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: SS01 Lab Sample ID: 890-1174-1

Date Collected: 08/25/21 14:26 **Matrix: Solid**
Date Received: 08/26/21 11:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		1	7183	08/28/21 08:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 04:00	AJ	XEN MID
Soluble	Leach	DI Leach			7184	08/27/21 12:02	CH	XEN MID
Soluble	Analysis	300.0		50	7197	08/30/21 01:53	CH	XEN MID

Client Sample ID: SS02 Lab Sample ID: 890-1174-2

Date Collected: 08/25/21 14:30 **Matrix: Solid**
Date Received: 08/26/21 11:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		1	7183	08/28/21 09:16	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 04:21	AJ	XEN MID
Soluble	Leach	DI Leach			7184	08/27/21 12:02	CH	XEN MID
Soluble	Analysis	300.0		50	7197	08/30/21 01:58	CH	XEN MID

Client Sample ID: SS03 Lab Sample ID: 890-1174-3

Date Collected: 08/25/21 14:35 **Matrix: Solid**
Date Received: 08/26/21 11:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		1	7183	08/28/21 09:42	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 04:42	AJ	XEN MID
Soluble	Leach	DI Leach			7184	08/27/21 12:02	CH	XEN MID
Soluble	Analysis	300.0		50	7197	08/30/21 02:03	CH	XEN MID

Client Sample ID: SS04 Lab Sample ID: 890-1174-4

Date Collected: 08/25/21 14:40 **Matrix: Solid**
Date Received: 08/26/21 11:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		1	7183	08/28/21 10:08	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 05:03	AJ	XEN MID
Soluble	Leach	DI Leach			7184	08/27/21 12:02	CH	XEN MID
Soluble	Analysis	300.0		50	7197	08/30/21 02:09	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: SS05 Lab Sample ID: 890-1174-5

Date Collected: 08/25/21 14:55 **Matrix: Solid**
Date Received: 08/26/21 11:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		1	7183	08/28/21 10:34	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 05:24	AJ	XEN MID
Soluble	Leach	DI Leach			7184	08/27/21 12:02	CH	XEN MID
Soluble	Analysis	300.0		50	7197	08/30/21 02:14	CH	XEN MID

Client Sample ID: SS06 Lab Sample ID: 890-1174-6

Date Collected: 08/25/21 15:10 **Matrix: Solid**
Date Received: 08/26/21 11:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		1	7183	08/28/21 11:00	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 05:45	AJ	XEN MID
Soluble	Leach	DI Leach			7258	08/30/21 09:52	CH	XEN MID
Soluble	Analysis	300.0		50	7352	08/31/21 19:04	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-1174-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1174-1
SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1174-1	SS01	Solid	08/25/21 14:26	08/26/21 11:32	0.5
890-1174-2	SS02	Solid	08/25/21 14:30	08/26/21 11:32	0.5
890-1174-3	SS03	Solid	08/25/21 14:35	08/26/21 11:32	0.5
890-1174-4	SS04	Solid	08/25/21 14:40	08/26/21 11:32	0.5
890-1174-5	SS05	Solid	08/25/21 14:55	08/26/21 11:32	0.5
890-1174-6	SS06	Solid	08/25/21 15:10	08/26/21 11:32	0.5

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849 Email:	Email:	Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com

Work Order Comments

Program: UST/PST ☐ RP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Nash 39 Tank Battery	Turn Around	
Project Number:	31403236.020.0129	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.2 / 1.0	Thermometer ID	T-NM-001	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	6	

ANALYSIS REQUEST

Work Order Notes

Cost Center # 1055841001
Incident # NAPP2118934484

890-1174 Chain of Custody

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
SS01	S	8/25/2021	14:26	0.5'	1	X	X	X	DISCRETE
SS02	S	8/25/2021	14:30	0.5'	1	X	X	X	DISCRETE
SS03	S	8/25/2021	14:35	0.5'	1	X	X	X	DISCRETE
SS04	S	8/25/2021	14:40	0.5'	1	X	X	X	DISCRETE
SS05	S	8/25/2021	14:55	0.5'	1	X	X	X	DISCRETE
SS06	S	8/25/2021	15:10	0.5'	1	X	X	X	DISCRETE

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers	8/26/21 @ 1150	2 Anna Byers		8/26/21 11:32
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-371 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1174-1
Address: 1211 W Florida Ave	Due Date Requested: 9/1/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Nash 39 Tank Battery	Project #: 88000207			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M Hexane		
B NaOH	N None		
C Zn Acetate	O AsNaO2		
D Nitric Acid	P Na2O4S		
E NaHSO4	Q Na2SO3		
F MeOH	R Na2S2O3		
G Amchlor	S H2SO4		
H - Ascorbic Acid	T TSP Dodecahydrate		
I Ice	U Acetone		
J DI Water	V MCAA		
K EDTA	W pH 4-5		
L EDA	Z other (specify)		

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_NM/8015NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX - LL	Total Number of containers	Special Instructions/Note
			Preservation Code:								
SS01 (890-1174-1)	8/25/21	14 26 Mountain		Solid			X	X	X	1	
SS02 (890-1174-2)	8/25/21	14 30 Mountain		Solid			X	X	X	1	
SS03 (890-1174-3)	8/25/21	14 35 Mountain		Solid			X	X	X	1	
SS04 (890-1174-4)	8/25/21	14 40 Mountain		Solid			X	X	X	1	
SS05 (890-1174-5)	8/25/21	14 55 Mountain		Solid			X	X	X	1	
SS06 (890-1174-6)	8/25/21	15 10 Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by: Ice Cut 8.26.21	Date/Time	Company	Received by	Date/Time: 8-27-21 11.00 pm	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time: 2.3 12.8	Company

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1174-1
SDG Number: 31403236.020.0129

Login Number: 1174
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1174-1
SDG Number: 31403236.020.0129

Login Number: 1174
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 08/27/21 10:52 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3 / 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1379-1
Laboratory Sample Delivery Group: 31403236.020.0129
Client Project/Site: Nash 39 Tank Battery

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

Attn: Dan Moir

Authorized for release by:
10/14/2021 7:57:57 PM

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

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Laboratory Job ID: 890-1379-1
SDG: 31403236.020.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Qualifiers

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Job ID: 890-1379-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1379-1

Receipt
The samples were received on 10/7/2021 3:22 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9288 and analytical batch 880-9418 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1379-1
SDG: 31403236.020.0129

Client Sample ID: BG01
Lab Sample ID: 890-1379-1
Date Collected: 10/06/21 10:15
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8410		49.7		mg/Kg			10/14/21 10:33	10

Client Sample ID: BG01A
Lab Sample ID: 890-1379-2
Date Collected: 10/06/21 10:20
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8210		101		mg/Kg			10/14/21 10:39	20

Client Sample ID: BG01B
Lab Sample ID: 890-1379-3
Date Collected: 10/06/21 10:25
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6670		250		mg/Kg			10/14/21 10:45	50

Client Sample ID: BG01C
Lab Sample ID: 890-1379-4
Date Collected: 10/06/21 10:35
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10900		248		mg/Kg			10/14/21 10:50	50

Client Sample ID: BG02
Lab Sample ID: 890-1379-5
Date Collected: 10/06/21 10:55
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18600		249		mg/Kg			10/14/21 10:56	50

Client Sample ID: BG02A
Lab Sample ID: 890-1379-6
Date Collected: 10/06/21 11:00
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15900		250		mg/Kg			10/14/21 11:01	50

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: BG02B — Lab Sample ID: 890-1379-7

Date Collected: 10/06/21 11:10 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30200		250		mg/Kg			10/14/21 11:07	50

Client Sample ID: BG02C — Lab Sample ID: 890-1379-8

Date Collected: 10/06/21 11:20 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5150	F1	99.8		mg/Kg			10/14/21 13:57	20

Client Sample ID: BG03 — Lab Sample ID: 890-1379-9

Date Collected: 10/06/21 12:05 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7530		101		mg/Kg			10/14/21 14:19	20

Client Sample ID: BG03A — Lab Sample ID: 890-1379-10

Date Collected: 10/06/21 12:10 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6350		99.0		mg/Kg			10/14/21 14:26	20

Client Sample ID: BG03B — Lab Sample ID: 890-1379-11

Date Collected: 10/06/21 12:15 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14600		248		mg/Kg			10/14/21 14:33	50

Client Sample ID: BG03C — Lab Sample ID: 890-1379-12

Date Collected: 10/06/21 12:30 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390		50.0		mg/Kg			10/14/21 14:40	10

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: BG04 — Lab Sample ID: 890-1379-13

Date Collected: 10/06/21 12:45 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8910		99.2		mg/Kg			10/14/21 15:02	20

Client Sample ID: BG04A — Lab Sample ID: 890-1379-14

Date Collected: 10/06/21 12:50 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5790		99.4		mg/Kg			10/14/21 15:09	20

Client Sample ID: BG04B — Lab Sample ID: 890-1379-15

Date Collected: 10/06/21 12:55 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5980		99.6		mg/Kg			10/14/21 15:16	20

Client Sample ID: BG04C — Lab Sample ID: 890-1379-16

Date Collected: 10/06/21 13:00 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13800		250		mg/Kg			10/14/21 15:23	50

Client Sample ID: BG05 — Lab Sample ID: 890-1379-17

Date Collected: 10/06/21 13:20 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10800		99.0		mg/Kg			10/14/21 15:31	20

Client Sample ID: BG05A — Lab Sample ID: 890-1379-18

Date Collected: 10/06/21 13:30 **Matrix: Solid**
Date Received: 10/07/21 15:22
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5650		100		mg/Kg			10/14/21 15:38	20

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1379-1
SDG: 31403236.020.0129

Client Sample ID: BG05B
Lab Sample ID: 890-1379-19

Date Collected: 10/06/21 13:35
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8460		99.8		mg/Kg			10/14/21 15:59	20

Client Sample ID: BG05C
Lab Sample ID: 890-1379-20

Date Collected: 10/06/21 13:45
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13700		252		mg/Kg			10/14/21 16:06	50

Client Sample ID: BG06
Lab Sample ID: 890-1379-21

Date Collected: 10/06/21 14:30
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10400		99.4		mg/Kg			10/14/21 16:28	20

Client Sample ID: BG06A
Lab Sample ID: 890-1379-22

Date Collected: 10/06/21 14:45
Matrix: Solid
Date Received: 10/07/21 15:22
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9740		100		mg/Kg			10/14/21 16:35	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1379-1
SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9288/1-A
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/14/21 13:36	1

Lab Sample ID: LCS 880-9288/2-A
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	236.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-9288/3-A
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	254.5		mg/Kg		102	90 - 110	7	20

Lab Sample ID: 890-1379-8 MS
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: BG02C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5150	F1	4990	11970	F1	mg/Kg		137	90 - 110		

Lab Sample ID: 890-1379-8 MSD
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: BG02C
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5150	F1	4990	11470	F1	mg/Kg		127	90 - 110	4	20

Lab Sample ID: 890-1379-18 MS
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: BG05A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5650		5020	10840		mg/Kg		103	90 - 110		

Lab Sample ID: 890-1379-18 MSD
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: BG05A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5650		5020	10490		mg/Kg		96	90 - 110	3	20

Lab Sample ID: MB 880-9287/1-A
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/14/21 08:19	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1379-1
SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-9287/2-A
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	242.9		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-9287/3-A
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	244.2		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-7018-A-3-B MS
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	16000		5000	20980		mg/Kg		100	90 - 110		

Lab Sample ID: 880-7018-A-3-C MSD
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16000		5000	21000		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-7032-A-1-B MS
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1730		1240	3034		mg/Kg		105	90 - 110		

Lab Sample ID: 880-7032-A-1-C MSD
Matrix: Solid
Analysis Batch: 9434

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1730		1240	3045		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

HPLC/IC

Leach Batch: 9287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1379-1	BG01	Soluble	Solid	DI Leach	
890-1379-2	BG01A	Soluble	Solid	DI Leach	
890-1379-3	BG01B	Soluble	Solid	DI Leach	
890-1379-4	BG01C	Soluble	Solid	DI Leach	
890-1379-5	BG02	Soluble	Solid	DI Leach	
890-1379-6	BG02A	Soluble	Solid	DI Leach	
890-1379-7	BG02B	Soluble	Solid	DI Leach	
MB 880-9287/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9287/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9287/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7018-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7018-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-7032-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7032-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 9288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1379-8	BG02C	Soluble	Solid	DI Leach	
890-1379-9	BG03	Soluble	Solid	DI Leach	
890-1379-10	BG03A	Soluble	Solid	DI Leach	
890-1379-11	BG03B	Soluble	Solid	DI Leach	
890-1379-12	BG03C	Soluble	Solid	DI Leach	
890-1379-13	BG04	Soluble	Solid	DI Leach	
890-1379-14	BG04A	Soluble	Solid	DI Leach	
890-1379-15	BG04B	Soluble	Solid	DI Leach	
890-1379-16	BG04C	Soluble	Solid	DI Leach	
890-1379-17	BG05	Soluble	Solid	DI Leach	
890-1379-18	BG05A	Soluble	Solid	DI Leach	
890-1379-19	BG05B	Soluble	Solid	DI Leach	
890-1379-20	BG05C	Soluble	Solid	DI Leach	
890-1379-21	BG06	Soluble	Solid	DI Leach	
890-1379-22	BG06A	Soluble	Solid	DI Leach	
MB 880-9288/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9288/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9288/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1379-8 MS	BG02C	Soluble	Solid	DI Leach	
890-1379-8 MSD	BG02C	Soluble	Solid	DI Leach	
890-1379-18 MS	BG05A	Soluble	Solid	DI Leach	
890-1379-18 MSD	BG05A	Soluble	Solid	DI Leach	

Analysis Batch: 9418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1379-8	BG02C	Soluble	Solid	300.0	9288
890-1379-9	BG03	Soluble	Solid	300.0	9288
890-1379-10	BG03A	Soluble	Solid	300.0	9288
890-1379-11	BG03B	Soluble	Solid	300.0	9288
890-1379-12	BG03C	Soluble	Solid	300.0	9288
890-1379-13	BG04	Soluble	Solid	300.0	9288
890-1379-14	BG04A	Soluble	Solid	300.0	9288
890-1379-15	BG04B	Soluble	Solid	300.0	9288
890-1379-16	BG04C	Soluble	Solid	300.0	9288

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

HPLC/IC (Continued)

Analysis Batch: 9418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1379-17	BG05	Soluble	Solid	300.0	9288
890-1379-18	BG05A	Soluble	Solid	300.0	9288
890-1379-19	BG05B	Soluble	Solid	300.0	9288
890-1379-20	BG05C	Soluble	Solid	300.0	9288
890-1379-21	BG06	Soluble	Solid	300.0	9288
890-1379-22	BG06A	Soluble	Solid	300.0	9288
MB 880-9288/1-A	Method Blank	Soluble	Solid	300.0	9288
LCS 880-9288/2-A	Lab Control Sample	Soluble	Solid	300.0	9288
LCSD 880-9288/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9288
890-1379-8 MS	BG02C	Soluble	Solid	300.0	9288
890-1379-8 MSD	BG02C	Soluble	Solid	300.0	9288
890-1379-18 MS	BG05A	Soluble	Solid	300.0	9288
890-1379-18 MSD	BG05A	Soluble	Solid	300.0	9288

Analysis Batch: 9434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1379-1	BG01	Soluble	Solid	300.0	9287
890-1379-2	BG01A	Soluble	Solid	300.0	9287
890-1379-3	BG01B	Soluble	Solid	300.0	9287
890-1379-4	BG01C	Soluble	Solid	300.0	9287
890-1379-5	BG02	Soluble	Solid	300.0	9287
890-1379-6	BG02A	Soluble	Solid	300.0	9287
890-1379-7	BG02B	Soluble	Solid	300.0	9287
MB 880-9287/1-A	Method Blank	Soluble	Solid	300.0	9287
LCS 880-9287/2-A	Lab Control Sample	Soluble	Solid	300.0	9287
LCSD 880-9287/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9287
880-7018-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	9287
880-7018-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9287
880-7032-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	9287
880-7032-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9287

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: BG01 — Lab Sample ID: 890-1379-1

Date Collected: 10/06/21 10:15 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		10	9434	10/14/21 10:33	CH	XEN MID

Client Sample ID: BG01A — Lab Sample ID: 890-1379-2

Date Collected: 10/06/21 10:20 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		20	9434	10/14/21 10:39	CH	XEN MID

Client Sample ID: BG01B — Lab Sample ID: 890-1379-3

Date Collected: 10/06/21 10:25 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		50	9434	10/14/21 10:45	CH	XEN MID

Client Sample ID: BG01C — Lab Sample ID: 890-1379-4

Date Collected: 10/06/21 10:35 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		50	9434	10/14/21 10:50	CH	XEN MID

Client Sample ID: BG02 — Lab Sample ID: 890-1379-5

Date Collected: 10/06/21 10:55 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		50	9434	10/14/21 10:56	CH	XEN MID

Client Sample ID: BG02A — Lab Sample ID: 890-1379-6

Date Collected: 10/06/21 11:00 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		50	9434	10/14/21 11:01	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: BG02B — Lab Sample ID: 890-1379-7

Date Collected: 10/06/21 11:10 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9287	10/12/21 10:25	CH	XEN MID
Soluble	Analysis	300.0		50	9434	10/14/21 11:07	CH	XEN MID

Client Sample ID: BG02C — Lab Sample ID: 890-1379-8

Date Collected: 10/06/21 11:20 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 13:57	CH	XEN MID

Client Sample ID: BG03 — Lab Sample ID: 890-1379-9

Date Collected: 10/06/21 12:05 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 14:19	CH	XEN MID

Client Sample ID: BG03A — Lab Sample ID: 890-1379-10

Date Collected: 10/06/21 12:10 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 14:26	CH	XEN MID

Client Sample ID: BG03B — Lab Sample ID: 890-1379-11

Date Collected: 10/06/21 12:15 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		50	9418	10/14/21 14:33	CH	XEN MID

Client Sample ID: BG03C — Lab Sample ID: 890-1379-12

Date Collected: 10/06/21 12:30 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		10	9418	10/14/21 14:40	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: BG04 — Lab Sample ID: 890-1379-13

Date Collected: 10/06/21 12:45 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 15:02	CH	XEN MID

Client Sample ID: BG04A — Lab Sample ID: 890-1379-14

Date Collected: 10/06/21 12:50 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 15:09	CH	XEN MID

Client Sample ID: BG04B — Lab Sample ID: 890-1379-15

Date Collected: 10/06/21 12:55 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 15:16	CH	XEN MID

Client Sample ID: BG04C — Lab Sample ID: 890-1379-16

Date Collected: 10/06/21 13:00 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		50	9418	10/14/21 15:23	CH	XEN MID

Client Sample ID: BG05 — Lab Sample ID: 890-1379-17

Date Collected: 10/06/21 13:20 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 15:31	CH	XEN MID

Client Sample ID: BG05A — Lab Sample ID: 890-1379-18

Date Collected: 10/06/21 13:30 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 15:38	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: BG05B — Lab Sample ID: 890-1379-19

Date Collected: 10/06/21 13:35 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 15:59	CH	XEN MID

Client Sample ID: BG05C — Lab Sample ID: 890-1379-20

Date Collected: 10/06/21 13:45 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		50	9418	10/14/21 16:06	CH	XEN MID

Client Sample ID: BG06 — Lab Sample ID: 890-1379-21

Date Collected: 10/06/21 14:30 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 16:28	CH	XEN MID

Client Sample ID: BG06A — Lab Sample ID: 890-1379-22

Date Collected: 10/06/21 14:45 **Matrix: Solid**
Date Received: 10/07/21 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 16:35	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

Method Summary

Client: WSP USA Inc. Job ID: 890-1379-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	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.

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1379-1
SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1379-1	BG01	Solid	10/06/21 10:15	10/07/21 15:22	1
890-1379-2	BG01A	Solid	10/06/21 10:20	10/07/21 15:22	2
890-1379-3	BG01B	Solid	10/06/21 10:25	10/07/21 15:22	3
890-1379-4	BG01C	Solid	10/06/21 10:35	10/07/21 15:22	4
890-1379-5	BG02	Solid	10/06/21 10:55	10/07/21 15:22	1
890-1379-6	BG02A	Solid	10/06/21 11:00	10/07/21 15:22	2
890-1379-7	BG02B	Solid	10/06/21 11:10	10/07/21 15:22	3
890-1379-8	BG02C	Solid	10/06/21 11:20	10/07/21 15:22	4
890-1379-9	BG03	Solid	10/06/21 12:05	10/07/21 15:22	1
890-1379-10	BG03A	Solid	10/06/21 12:10	10/07/21 15:22	2
890-1379-11	BG03B	Solid	10/06/21 12:15	10/07/21 15:22	3
890-1379-12	BG03C	Solid	10/06/21 12:30	10/07/21 15:22	4
890-1379-13	BG04	Solid	10/06/21 12:45	10/07/21 15:22	1
890-1379-14	BG04A	Solid	10/06/21 12:50	10/07/21 15:22	2
890-1379-15	BG04B	Solid	10/06/21 12:55	10/07/21 15:22	3
890-1379-16	BG04C	Solid	10/06/21 13:00	10/07/21 15:22	4
890-1379-17	BG05	Solid	10/06/21 13:20	10/07/21 15:22	1
890-1379-18	BG05A	Solid	10/06/21 13:30	10/07/21 15:22	2
890-1379-19	BG05B	Solid	10/06/21 13:35	10/07/21 15:22	3
890-1379-20	BG05C	Solid	10/06/21 13:45	10/07/21 15:22	4
890-1379-21	BG06	Solid	10/06/21 14:30	10/07/21 15:22	1
890-1379-22	BG06A	Solid	10/06/21 14:45	10/07/21 15:22	2

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 3

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Nash 39 Tank Battery	Turn Around	
Project Number:	31403236.020.0129	Routine	☑
P.O. Number:	7/3/2021	Rush:	
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	6.0 / 5.8	Thermometer ID	T-NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BG01	S	10/06/21	1015	1'				x	DISCRETE
BG01A	S	10/06/21	1020	2'				x	DISCRETE
BG01B	S	10/06/21	1025	3'				x	DISCRETE
BG01C	S	10/06/21	1035	4'				x	DISCRETE
BG02	S	10/06/21	1055	1'				x	DISCRETE
BG02A	S	10/06/21	1100	2'				x	DISCRETE
BG02B	S	10/06/21	1110	3'				x	DISCRETE
BG02C	S	10/06/21	1120	4'				x	DISCRETE
BG03	S	10/06/21	1205	1'				x	DISCRETE
BG03A	S	10/06/21	1210	2'				x	DISCRETE

890-1379 Chain of Custody

Work Order Notes

ID: NAPP2118934484
CC#: 1055841001
API: 30-015-36951

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

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Alexis Castro	N. Dao	10/7/21 3:18	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 2 of 3

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Nash 39 Tank Battery	Turn Around	
Project Number:	31403236.020.0129	Routine	☑
P.O. Number:	7/3/2021	Rush:	
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	6.0 / 5.8	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Work Order Notes

ID: NAPP2118934484
CC#: 1055841001
API: 30-015-36951

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BG03B	S	10/06/21	1215	3'				x	DISCRETE
BG03C	S	10/06/21	1230	4'				x	DISCRETE
BG04	S	10/06/21	1245	1'				x	DISCRETE
BG04A	S	10/06/21	1250	2'				x	DISCRETE
BG04B	S	10/06/21	1255	3'				x	DISCRETE
BG04C	S	10/06/21	1300	4'				x	DISCRETE
BG05	S	10/06/21	1320	1'				x	DISCRETE
BG05A	S	10/06/21	1330	2'				x	DISCRETE
BG05B	S	10/06/21	1335	3'				x	DISCRETE
BG05C	S	10/06/21	1345	4'				x	DISCRETE

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10/7/21 7:18	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

XENCO LABORATORIES

Chain of Custody

Work Order No: ______

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 3 of 3

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

		Turn Around	
Project Name:	Nash 39 Tank Battery	Routine	☑
Project Number:	31403236.020.0129	Rush:	
P.O. Number:	7/3/2021		
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT	Temp Blank: (Yes) No	Wet Ice: (Yes) No	
Temperature (°C):	6.0/5.8	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BG06	S	10/06/21	1430	1'				x	DISCRETE
BG06A	S	10/06/21	1445	2'				x	DISCRETE

AC

Work Order Notes

ID: NAPP2118934484
CC#: 1055841001
API: 30-015-36951

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

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	10/7/21 3:19	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-454 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1379-1
Address: 1211 W Florida Ave,	Due Date Requested: 10/13/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Nash 39 Tank Battery	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B - NaOH, C Zn Acetate, D - Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I - Ice, J DI Water, K EDTA, L EDA, M - Hexane, N None, O - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
BG01 (890-1379-1)	10/6/21	10 15 Mountain		Solid			X	1	
BG01A (890-1379-2)	10/6/21	10 20 Mountain		Solid			X	1	
BG01B (890-1379-3)	10/6/21	10 25 Mountain		Solid			X	1	
BG01C (890-1379-4)	10/6/21	10 35 Mountain		Solid			X	1	
BG02 (890-1379-5)	10/6/21	10 55 Mountain		Solid			X	1	
BG02A (890-1379-6)	10/6/21	11 00 Mountain		Solid			X	1	
BG02B (890-1379-7)	10/6/21	11 10 Mountain		Solid			X	1	
BG02C (890-1379-8)	10/6/21	11 20 Mountain		Solid			X	1	
BG03 (890-1379-9)	10/6/21	12 05 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time: 10/8/21	Company	Received by	Date/Time: 10 9 21	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time.	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 2 4/29

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-454 2
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1379-1
Address: 1211 W Florida Ave,	Due Date Requested: 10/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Nash 39 Tank Battery	Project #: 89000004			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note
			Preservation Code:						
BG03A (890-1379-10)	10/6/21	12 10 Mountain		Solid			X	1	
BG03B (890-1379-11)	10/6/21	12 15 Mountain		Solid			X	1	
BG03C (890-1379-12)	10/6/21	12 30 Mountain		Solid			X	1	
BG04 (890-1379-13)	10/6/21	12 45 Mountain		Solid			X	1	
BG04A (890-1379-14)	10/6/21	12 50 Mountain		Solid			X	1	
BG04B (890-1379-15)	10/6/21	12 55 Mountain		Solid			X	1	
BG04C (890-1379-16)	10/6/21	13 00 Mountain		Solid			X	1	
BG05 (890-1379-17)	10/6/21	13 20 Mountain		Solid			X	1	
BG05A (890-1379-18)	10/6/21	13 30 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:

Relinquished by:	Date/Time: 10/8/21	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-454 3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 3 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1379-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 10/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Nash 39 Tank Battery	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note.
			Preservation Code:						
BG05B (890-1379-19)	10/6/21	13 35 Mountain		Solid			X	1	
BG05C (890-1379-20)	10/6/21	13 45 Mountain		Solid			X	1	
BG06 (890-1379-21)	10/6/21	14 30 Mountain		Solid			X	1	
BG06A (890-1379-22)	10/6/21	14 45 Mountain		Solid			X	1	

Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 10/8/21	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1379-1
SDG Number: 31403236.020.0129

Login Number: 1379
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1379-1
SDG Number: 31403236.020.0129

Login Number: 1379
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland
List Creation: 10/11/21 08:46 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4/2.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1381-1
Laboratory Sample Delivery Group: 31403236.020.0129
Client Project/Site: Nash 39 Tank Battery

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

Attn: Dan Moir

JKramer

Authorized for release by:
10/18/2021 2:27:53 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Laboratory Job ID: 890-1381-1
SDG: 31403236.020.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Job ID: 890-1381-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1381-1

Receipt
The samples were received on 10/8/2021 8:19 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9452 and analytical batch 880-9522 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-9438 and analytical batch 880-9428 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9207 and analytical batch 880-9380 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH01A
Lab Sample ID: 890-1381-1
Date Collected: 10/07/21 09:55 **Matrix: Solid**
Date Received: 10/08/21 08:19
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 19:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 19:32	1
Ethylbenzene	**0.00249**		0.00199		mg/Kg		10/13/21 10:00	10/13/21 19:32	1
m-Xylene & p-Xylene	**0.00631**		0.00398		mg/Kg		10/13/21 10:00	10/13/21 19:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 19:32	1
Xylenes, Total	**0.00631**		0.00398		mg/Kg		10/13/21 10:00	10/13/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*10/13/21 10:00*	*10/13/21 19:32*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*10/13/21 10:00*	*10/13/21 19:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00880**		0.00398		mg/Kg			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**83.7**		49.9		mg/Kg			10/13/21 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		10/14/21 09:34	10/14/21 16:06	1
Diesel Range Organics (Over C10-C28)	**83.7**		49.9		mg/Kg		10/14/21 09:34	10/14/21 16:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/14/21 09:34	10/14/21 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*10/14/21 09:34*	*10/14/21 16:06*	*1*
o-Terphenyl	*112*		*70 - 130*	*10/14/21 09:34*	*10/14/21 16:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2550**		49.9		mg/Kg			10/14/21 16:42	10

Client Sample ID: PH01C
Lab Sample ID: 890-1381-2
Date Collected: 10/07/21 10:15 **Matrix: Solid**
Date Received: 10/08/21 08:19
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/13/21 10:00	10/13/21 19:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/13/21 10:00	10/13/21 19:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/13/21 10:00	10/13/21 19:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/13/21 10:00	10/13/21 19:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/13/21 10:00	10/13/21 19:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/13/21 10:00	10/13/21 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*10/13/21 10:00*	*10/13/21 19:52*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Client Sample ID: PH01C

Date Collected: 10/07/21 10:15
Date Received: 10/08/21 08:19
Sample Depth: 4

Lab Sample ID: 890-1381-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*10/13/21 10:00*	*10/13/21 19:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/13/21 15:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		10/14/21 09:34	10/14/21 16:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 09:34	10/14/21 16:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/14/21 09:34	10/14/21 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*10/14/21 09:34*	*10/14/21 16:28*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/14/21 09:34*	*10/14/21 16:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4260**		99.0	mg/Kg			10/14/21 16:49	20

Client Sample ID: PH02

Date Collected: 10/07/21 10:30
Date Received: 10/08/21 08:19
Sample Depth: 1

Lab Sample ID: 890-1381-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/13/21 10:00	10/13/21 20:12	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/13/21 10:00	10/13/21 20:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/13/21 10:00	10/13/21 20:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/13/21 10:00	10/13/21 20:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/13/21 10:00	10/13/21 20:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/13/21 10:00	10/13/21 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*10/13/21 10:00*	*10/13/21 20:12*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*10/13/21 10:00*	*10/13/21 20:12*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.4**		50.0	mg/Kg			10/13/21 15:17	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH02 — Lab Sample ID: 890-1381-3

Date Collected: 10/07/21 10:30 **Matrix: Solid**
Date Received: 10/08/21 08:19
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		10/14/21 09:34	10/14/21 16:49	1
Diesel Range Organics (Over C10-C28)	**51.4**		50.0		mg/Kg		10/14/21 09:34	10/14/21 16:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/14/21 09:34	10/14/21 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/14/21 09:34*	*10/14/21 16:49*	*1*
o-Terphenyl	*99*		*70 - 130*	*10/14/21 09:34*	*10/14/21 16:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4580**		101		mg/Kg			10/14/21 16:56	20

Client Sample ID: PH02C — Lab Sample ID: 890-1381-4

Date Collected: 10/07/21 10:55 **Matrix: Solid**
Date Received: 10/08/21 08:19
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 20:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 20:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 20:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/13/21 10:00	10/13/21 20:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/13/21 10:00	10/13/21 20:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/13/21 10:00	10/13/21 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*10/13/21 10:00*	*10/13/21 20:33*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*10/13/21 10:00*	*10/13/21 20:33*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/13/21 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		10/14/21 09:34	10/14/21 17:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/14/21 09:34	10/14/21 17:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/14/21 09:34	10/14/21 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*10/14/21 09:34*	*10/14/21 17:11*	*1*
o-Terphenyl	*92*		*70 - 130*	*10/14/21 09:34*	*10/14/21 17:11*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH02C — Lab Sample ID: 890-1381-4

Date Collected: 10/07/21 10:55 **Matrix: Solid**
Date Received: 10/08/21 08:19
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3150		99.2		mg/Kg			10/14/21 17:04	20

Client Sample ID: PH03 — Lab Sample ID: 890-1381-5

Date Collected: 10/07/21 12:20 **Matrix: Solid**
Date Received: 10/08/21 08:19
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/13/21 09:16	10/13/21 18:51	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/13/21 09:16	10/13/21 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*10/13/21 09:16*	*10/13/21 18:51*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*10/13/21 09:16*	*10/13/21 18:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/13/21 16:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/13/21 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		10/14/21 09:34	10/14/21 17:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/14/21 09:34	10/14/21 17:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/14/21 09:34	10/14/21 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*10/14/21 09:34*	*10/14/21 17:32*	*1*
o-Terphenyl	*92*		*70 - 130*	*10/14/21 09:34*	*10/14/21 17:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3720		99.4		mg/Kg			10/14/21 17:11	20

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH03C
Lab Sample ID: 890-1381-6
Date Collected: 10/07/21 12:45
Matrix: Solid
Date Received: 10/08/21 08:19
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/14/21 10:45	10/16/21 15:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/14/21 10:45	10/16/21 15:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/14/21 10:45	10/16/21 15:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/14/21 10:45	10/16/21 15:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/14/21 10:45	10/16/21 15:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/14/21 10:45	10/16/21 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*10/14/21 10:45*	*10/16/21 15:39*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/14/21 10:45*	*10/16/21 15:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/18/21 15:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/13/21 15:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		10/14/21 09:34	10/14/21 17:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/14/21 09:34	10/14/21 17:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/14/21 09:34	10/14/21 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*10/14/21 09:34*	*10/14/21 17:54*	*1*
o-Terphenyl	*88*		*70 - 130*	*10/14/21 09:34*	*10/14/21 17:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10900**		249		mg/Kg			10/14/21 01:19	50

Client Sample ID: PH04A
Lab Sample ID: 890-1381-7
Date Collected: 10/07/21 13:05
Matrix: Solid
Date Received: 10/08/21 08:19
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/14/21 10:45	10/16/21 15:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/14/21 10:45	10/16/21 15:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/14/21 10:45	10/16/21 15:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/14/21 10:45	10/16/21 15:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/14/21 10:45	10/16/21 15:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/14/21 10:45	10/16/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*10/14/21 10:45*	*10/16/21 15:59*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Client Sample ID: PH04A

Date Collected: 10/07/21 13:05
Date Received: 10/08/21 08:19
Sample Depth: 2

Lab Sample ID: 890-1381-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*10/14/21 10:45*	*10/16/21 15:59*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/18/21 15:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/13/21 15:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		10/14/21 09:34	10/14/21 18:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 09:34	10/14/21 18:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/14/21 09:34	10/14/21 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/14/21 09:34*	*10/14/21 18:37*	*1*
o-Terphenyl	*87*		*70 - 130*	*10/14/21 09:34*	*10/14/21 18:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4280**		100	mg/Kg			10/14/21 01:24	20

Client Sample ID: PH04C

Date Collected: 10/07/21 13:15
Date Received: 10/08/21 08:19
Sample Depth: 4

Lab Sample ID: 890-1381-8

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/14/21 10:45	10/16/21 16:20	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/14/21 10:45	10/16/21 16:20	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/14/21 10:45	10/16/21 16:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/14/21 10:45	10/16/21 16:20	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/14/21 10:45	10/16/21 16:20	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/14/21 10:45	10/16/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*10/14/21 10:45*	*10/16/21 16:20*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*10/14/21 10:45*	*10/16/21 16:20*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/18/21 15:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/13/21 15:17	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Client Sample ID: PH04C

Date Collected: 10/07/21 13:15
Date Received: 10/08/21 08:19
Sample Depth: 4

Lab Sample ID: 890-1381-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		10/14/21 09:34	10/14/21 18:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/14/21 09:34	10/14/21 18:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/14/21 09:34	10/14/21 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*10/14/21 09:34*	*10/14/21 18:59*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/14/21 09:34*	*10/14/21 18:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14400**		250		mg/Kg			10/14/21 01:30	50

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1374-A-1-G MSD	Matrix Spike Duplicate	113	81
890-1374-A-1-I MS	Matrix Spike	121	85
890-1381-1	PH01A	141 S1+	83
890-1381-2	PH01C	118	86
890-1381-3	PH02	128	82
890-1381-4	PH02C	129	75
890-1381-5	PH03	74	86
890-1381-5 MS	PH03	129	82
890-1381-5 MSD	PH03	112	114
890-1381-6	PH03C	101	98
890-1381-7	PH04A	89	99
890-1381-8	PH04C	88	84
890-1383-A-21-C MS	Matrix Spike	106	115
890-1383-A-21-D MSD	Matrix Spike Duplicate	231 S1+	90
LCS 880-9327/1-A	Lab Control Sample	112	85
LCS 880-9367/1-A	Lab Control Sample	91	90
LCS 880-9452/1-A	Lab Control Sample	89	107
LCSD 880-9327/2-A	Lab Control Sample Dup	118	83
LCSD 880-9367/2-A	Lab Control Sample Dup	99	84
LCSD 880-9452/2-A	Lab Control Sample Dup	88	100
MB 880-9327/5-A	Method Blank	110	71
MB 880-9367/5-A	Method Blank	101	100
MB 880-9452/5-A	Method Blank	101	109
MB 880-9532/5-A	Method Blank	102	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-6806-A-1-B MS	Matrix Spike	93	88
880-6806-A-1-C MSD	Matrix Spike Duplicate	93	89
890-1381-1	PH01A	105	112
890-1381-2	PH01C	89	96
890-1381-3	PH02	92	99
890-1381-4	PH02C	89	92
890-1381-5	PH03	89	92
890-1381-6	PH03C	87	88
890-1381-7	PH04A	85	87
890-1381-8	PH04C	89	91
LCS 880-9438/2-A	Lab Control Sample	97	94
LCSD 880-9438/3-A	Lab Control Sample Dup	85	83
MB 880-9438/1-A	Method Blank	85	90

Surrogate Legend

1CO = 1-Chlorooctane

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-9327/5-A
Matrix: Solid
Analysis Batch: 9368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9327

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/12/21 16:16	10/13/21 12:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/12/21 16:16	10/13/21 12:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/12/21 16:16	10/13/21 12:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/12/21 16:16	10/13/21 12:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/12/21 16:16	10/13/21 12:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/12/21 16:16	10/13/21 12:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/12/21 16:16*	*10/13/21 12:41*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*10/12/21 16:16*	*10/13/21 12:41*	*1*

Lab Sample ID: LCS 880-9327/1-A
Matrix: Solid
Analysis Batch: 9368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9327

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08846		mg/Kg		88	70 - 130		
Toluene			0.100	0.08931		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.09418		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1960		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09808		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: LCSD 880-9327/2-A
Matrix: Solid
Analysis Batch: 9368

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9327

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09373		mg/Kg		94	70 - 130	6	35
Toluene			0.100	0.09698		mg/Kg		97	70 - 130	8	35
Ethylbenzene			0.100	0.1013		mg/Kg		101	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2116		mg/Kg		106	70 - 130	8	35
o-Xylene			0.100	0.1068		mg/Kg		107	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

Lab Sample ID: 890-1374-A-1-G MSD
Matrix: Solid
Analysis Batch: 9368

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 9327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0990	0.09429		mg/Kg		95	70 - 130	11	35
Toluene	<0.00198	U	0.0990	0.09461		mg/Kg		96	70 - 130	6	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

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

Lab Sample ID: 890-1374-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 9368 — **Prep Batch: 9327**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00198	U	0.0990	0.09854		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene	<0.00396	U	0.198	0.2040		mg/Kg		103	70 - 130	1	35
o-Xylene	<0.00198	U	0.0990	0.1031		mg/Kg		104	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*

Lab Sample ID: 890-1374-A-1-I MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 9368 — **Prep Batch: 9327**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U	0.100	0.08471		mg/Kg		84	70 - 130
Toluene	<0.00198	U	0.100	0.08921		mg/Kg		89	70 - 130
Ethylbenzene	<0.00198	U	0.100	0.09814		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.201	0.2025		mg/Kg		101	70 - 130
o-Xylene	<0.00198	U	0.100	0.1018		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: MB 880-9367/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 9391 — **Prep Batch: 9367**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/13/21 09:16	10/13/21 18:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/13/21 09:16	10/13/21 18:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/13/21 09:16	10/13/21 18:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*10/13/21 09:16*	*10/13/21 18:29*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/13/21 09:16*	*10/13/21 18:29*	*1*

Lab Sample ID: LCS 880-9367/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 9391 — **Prep Batch: 9367**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.100	0.07521		mg/Kg		75	70 - 130
Toluene			0.100	0.09132		mg/Kg		91	70 - 130
Ethylbenzene			0.100	0.09196		mg/Kg		92	70 - 130
m-Xylene & p-Xylene			0.200	0.1590		mg/Kg		80	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

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

Lab Sample ID: LCS 880-9367/1-A
Matrix: Solid
Analysis Batch: 9391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9367

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.08118		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-9367/2-A
Matrix: Solid
Analysis Batch: 9391

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9367

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07841		mg/Kg		78	70 - 130	4	35
Toluene			0.100	0.09925		mg/Kg		99	70 - 130	8	35
Ethylbenzene			0.100	0.1010		mg/Kg		101	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1748		mg/Kg		87	70 - 130	9	35
o-Xylene			0.100	0.08367		mg/Kg		84	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: 890-1381-5 MS
Matrix: Solid
Analysis Batch: 9391

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 9367

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.101	0.04938	F1	mg/Kg		49	70 - 130		
Toluene	<0.00200	U	0.101	0.09252		mg/Kg		92	70 - 130		
Ethylbenzene	<0.00200	U	0.101	0.09947		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene	<0.00399	U	0.202	0.1832		mg/Kg		91	70 - 130		
o-Xylene	<0.00200	U F1	0.101	0.09200		mg/Kg		91	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 890-1381-5 MSD
Matrix: Solid
Analysis Batch: 9391

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 9367

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.07031		mg/Kg		70	70 - 130	35	35
Toluene	<0.00200	U	0.100	0.08628		mg/Kg		86	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.100	0.08211		mg/Kg		81	70 - 130	19	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1459		mg/Kg		73	70 - 130	23	35
o-Xylene	<0.00200	U F1	0.100	0.06779	F1	mg/Kg		67	70 - 130	30	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

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

Lab Sample ID: 890-1381-5 MSD
Matrix: Solid
Analysis Batch: 9391

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 9367

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: MB 880-9452/5-A
Matrix: Solid
Analysis Batch: 9522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9452

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/14/21 10:45	10/16/21 13:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/14/21 10:45	10/16/21 13:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/14/21 10:45	10/16/21 13:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/14/21 10:45	10/16/21 13:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/14/21 10:45	10/16/21 13:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/14/21 10:45	10/16/21 13:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	10/14/21 10:45	10/16/21 13:28	1
1,4-Difluorobenzene (Surr)	109		70 - 130	10/14/21 10:45	10/16/21 13:28	1

Lab Sample ID: LCS 880-9452/1-A
Matrix: Solid
Analysis Batch: 9522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9452

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1109		mg/Kg		111	70 - 130		
Toluene			0.100	0.1159		mg/Kg		116	70 - 130		
Ethylbenzene			0.100	0.1131		mg/Kg		113	70 - 130		
m-Xylene & p-Xylene			0.200	0.2200		mg/Kg		110	70 - 130		
o-Xylene			0.100	0.1155		mg/Kg		116	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-9452/2-A
Matrix: Solid
Analysis Batch: 9522

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9452

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1045		mg/Kg		105	70 - 130	6	35
Toluene			0.100	0.1099		mg/Kg		110	70 - 130	5	35
Ethylbenzene			0.100	0.1111		mg/Kg		111	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2172		mg/Kg		109	70 - 130	1	35
o-Xylene			0.100	0.1149		mg/Kg		115	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

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

Lab Sample ID: LCSD 880-9452/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 9522 **Prep Batch: 9452**

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

Lab Sample ID: 890-1383-A-21-C MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 9522 **Prep Batch: 9452**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1 F2	0.0990	0.04929	F1	mg/Kg		49	70 - 130
Toluene	<0.00200	U F1	0.0990	0.05318	F1	mg/Kg		54	70 - 130
Ethylbenzene	<0.00200	U F1 F2	0.0990	0.05533	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.198	0.1097	F1	mg/Kg		55	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0990	0.07653		mg/Kg		76	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 890-1383-A-21-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 9522 **Prep Batch: 9452**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.100	0.01519	F1 F2	mg/Kg		15	70 - 130	106	35
Toluene	<0.00200	U F1	0.100	0.04473	F1	mg/Kg		45	70 - 130	17	35
Ethylbenzene	<0.00200	U F1 F2	0.100	0.02272	F1 F2	mg/Kg		22	70 - 130	84	35
m-Xylene & p-Xylene	<0.00401	U F1	0.201	0.1159	F1	mg/Kg		58	70 - 130	5	35
o-Xylene	<0.00200	U F1 F2	0.100	0.02061	F1 F2	mg/Kg		19	70 - 130	115	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	231	S1+	70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-9532/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 9522 **Prep Batch: 9532**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/15/21 13:57	10/16/21 01:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/15/21 13:57	10/16/21 01:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/15/21 13:57	10/16/21 01:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/15/21 13:57	10/16/21 01:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/15/21 13:57	10/16/21 01:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/15/21 13:57	10/16/21 01:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	10/15/21 13:57	10/16/21 01:24	1
1,4-Difluorobenzene (Surr)	107		70 - 130	10/15/21 13:57	10/16/21 01:24	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

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

Lab Sample ID: MB 880-9438/1-A
Matrix: Solid
Analysis Batch: 9428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9438

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/14/21 09:34	10/14/21 12:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/14/21 09:34	10/14/21 12:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/14/21 09:34	10/14/21 12:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/14/21 09:34*	*10/14/21 12:54*	*1*
o-Terphenyl	*90*		*70 - 130*	*10/14/21 09:34*	*10/14/21 12:54*	*1*

Lab Sample ID: LCS 880-9438/2-A
Matrix: Solid
Analysis Batch: 9428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9438

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	980.1		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1069		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: LCSD 880-9438/3-A
Matrix: Solid
Analysis Batch: 9428

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9438

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	774.1	*1	mg/Kg		77	70 - 130	23	20
Diesel Range Organics (Over C10-C28)			1000	874.0		mg/Kg		87	70 - 130	20	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Lab Sample ID: 880-6806-A-1-B MS
Matrix: Solid
Analysis Batch: 9428

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9438

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	997	886.2		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	914.4		mg/Kg		90	70 - 130		

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

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

Lab Sample ID: 880-6806-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 9428 **Prep Batch: 9438**

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-6806-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 9428 **Prep Batch: 9438**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	1000	932.1		mg/Kg		89	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	935.1		mg/Kg		92	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	89		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9207/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 9380

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/13/21 22:53	1

Lab Sample ID: LCS 880-9207/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 9380

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	249.6		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-9207/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 9380

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	250.6		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-6964-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 9380

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	17200	F1	5040	24840	F1	mg/Kg		151	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-6964-A-1-C MSD
Matrix: Solid
Analysis Batch: 9380

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17200	F1	5040	24900	F1	mg/Kg		152	90 - 110	0	20

Lab Sample ID: MB 880-9288/1-A
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/14/21 13:36	1

Lab Sample ID: LCS 880-9288/2-A
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	236.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-9288/3-A
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	254.5		mg/Kg		102	90 - 110	7	20

Lab Sample ID: 890-1379-A-18-B MS
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5650		5020	10840		mg/Kg		103	90 - 110		

Lab Sample ID: 890-1379-A-18-C MSD
Matrix: Solid
Analysis Batch: 9418

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5650		5020	10490		mg/Kg		96	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

GC VOA

Prep Batch: 9327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Total/NA	Solid	5035	
890-1381-2	PH01C	Total/NA	Solid	5035	
890-1381-3	PH02	Total/NA	Solid	5035	
890-1381-4	PH02C	Total/NA	Solid	5035	
MB 880-9327/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9327/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9327/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1374-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1374-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	

Prep Batch: 9367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-5	PH03	Total/NA	Solid	5035	
MB 880-9367/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9367/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9367/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1381-5 MS	PH03	Total/NA	Solid	5035	
890-1381-5 MSD	PH03	Total/NA	Solid	5035	

Analysis Batch: 9368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Total/NA	Solid	8021B	9327
890-1381-2	PH01C	Total/NA	Solid	8021B	9327
890-1381-3	PH02	Total/NA	Solid	8021B	9327
890-1381-4	PH02C	Total/NA	Solid	8021B	9327
MB 880-9327/5-A	Method Blank	Total/NA	Solid	8021B	9327
LCS 880-9327/1-A	Lab Control Sample	Total/NA	Solid	8021B	9327
LCSD 880-9327/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9327
890-1374-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	9327
890-1374-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	9327

Analysis Batch: 9374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Total/NA	Solid	Total BTEX	
890-1381-2	PH01C	Total/NA	Solid	Total BTEX	
890-1381-3	PH02	Total/NA	Solid	Total BTEX	
890-1381-4	PH02C	Total/NA	Solid	Total BTEX	

Analysis Batch: 9391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-5	PH03	Total/NA	Solid	8021B	9367
MB 880-9367/5-A	Method Blank	Total/NA	Solid	8021B	9367
LCS 880-9367/1-A	Lab Control Sample	Total/NA	Solid	8021B	9367
LCSD 880-9367/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9367
890-1381-5 MS	PH03	Total/NA	Solid	8021B	9367
890-1381-5 MSD	PH03	Total/NA	Solid	8021B	9367

Analysis Batch: 9398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-5	PH03	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

GC VOA

Prep Batch: 9452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-6	PH03C	Total/NA	Solid	5035	
890-1381-7	PH04A	Total/NA	Solid	5035	
890-1381-8	PH04C	Total/NA	Solid	5035	
MB 880-9452/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9452/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9452/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1383-A-21-C MS	Matrix Spike	Total/NA	Solid	5035	
890-1383-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 9522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-6	PH03C	Total/NA	Solid	8021B	9452
890-1381-7	PH04A	Total/NA	Solid	8021B	9452
890-1381-8	PH04C	Total/NA	Solid	8021B	9452
MB 880-9452/5-A	Method Blank	Total/NA	Solid	8021B	9452
MB 880-9532/5-A	Method Blank	Total/NA	Solid	8021B	9532
LCS 880-9452/1-A	Lab Control Sample	Total/NA	Solid	8021B	9452
LCSD 880-9452/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9452
890-1383-A-21-C MS	Matrix Spike	Total/NA	Solid	8021B	9452
890-1383-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	9452

Prep Batch: 9532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-9532/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 9796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-6	PH03C	Total/NA	Solid	Total BTEX	
890-1381-7	PH04A	Total/NA	Solid	Total BTEX	
890-1381-8	PH04C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Total/NA	Solid	8015 NM	
890-1381-2	PH01C	Total/NA	Solid	8015 NM	
890-1381-3	PH02	Total/NA	Solid	8015 NM	
890-1381-4	PH02C	Total/NA	Solid	8015 NM	
890-1381-5	PH03	Total/NA	Solid	8015 NM	
890-1381-6	PH03C	Total/NA	Solid	8015 NM	
890-1381-7	PH04A	Total/NA	Solid	8015 NM	
890-1381-8	PH04C	Total/NA	Solid	8015 NM	

Analysis Batch: 9428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Total/NA	Solid	8015B NM	9438
890-1381-2	PH01C	Total/NA	Solid	8015B NM	9438
890-1381-3	PH02	Total/NA	Solid	8015B NM	9438
890-1381-4	PH02C	Total/NA	Solid	8015B NM	9438
890-1381-5	PH03	Total/NA	Solid	8015B NM	9438

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

GC Semi VOA (Continued)

Analysis Batch: 9428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-6	PH03C	Total/NA	Solid	8015B NM	9438
890-1381-7	PH04A	Total/NA	Solid	8015B NM	9438
890-1381-8	PH04C	Total/NA	Solid	8015B NM	9438
MB 880-9438/1-A	Method Blank	Total/NA	Solid	8015B NM	9438
LCS 880-9438/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9438
LCSD 880-9438/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9438
880-6806-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	9438
880-6806-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9438

Prep Batch: 9438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Total/NA	Solid	8015NM Prep	
890-1381-2	PH01C	Total/NA	Solid	8015NM Prep	
890-1381-3	PH02	Total/NA	Solid	8015NM Prep	
890-1381-4	PH02C	Total/NA	Solid	8015NM Prep	
890-1381-5	PH03	Total/NA	Solid	8015NM Prep	
890-1381-6	PH03C	Total/NA	Solid	8015NM Prep	
890-1381-7	PH04A	Total/NA	Solid	8015NM Prep	
890-1381-8	PH04C	Total/NA	Solid	8015NM Prep	
MB 880-9438/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9438/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9438/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6806-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6806-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 9207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-6	PH03C	Soluble	Solid	DI Leach	
890-1381-7	PH04A	Soluble	Solid	DI Leach	
890-1381-8	PH04C	Soluble	Solid	DI Leach	
MB 880-9207/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9207/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9207/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6964-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6964-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 9288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Soluble	Solid	DI Leach	
890-1381-2	PH01C	Soluble	Solid	DI Leach	
890-1381-3	PH02	Soluble	Solid	DI Leach	
890-1381-4	PH02C	Soluble	Solid	DI Leach	
890-1381-5	PH03	Soluble	Solid	DI Leach	
MB 880-9288/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9288/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9288/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1379-A-18-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1379-A-18-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

HPLC/IC

Analysis Batch: 9380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-6	PH03C	Soluble	Solid	300.0	9207
890-1381-7	PH04A	Soluble	Solid	300.0	9207
890-1381-8	PH04C	Soluble	Solid	300.0	9207
MB 880-9207/1-A	Method Blank	Soluble	Solid	300.0	9207
LCS 880-9207/2-A	Lab Control Sample	Soluble	Solid	300.0	9207
LCSD 880-9207/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9207
880-6964-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	9207
880-6964-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9207

Analysis Batch: 9418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1381-1	PH01A	Soluble	Solid	300.0	9288
890-1381-2	PH01C	Soluble	Solid	300.0	9288
890-1381-3	PH02	Soluble	Solid	300.0	9288
890-1381-4	PH02C	Soluble	Solid	300.0	9288
890-1381-5	PH03	Soluble	Solid	300.0	9288
MB 880-9288/1-A	Method Blank	Soluble	Solid	300.0	9288
LCS 880-9288/2-A	Lab Control Sample	Soluble	Solid	300.0	9288
LCSD 880-9288/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9288
890-1379-A-18-B MS	Matrix Spike	Soluble	Solid	300.0	9288
890-1379-A-18-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9288

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH01A — Lab Sample ID: 890-1381-1

Date Collected: 10/07/21 09:55 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/13/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 19:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 16:06	AJ	XEN MID
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		10	9418	10/14/21 16:42	CH	XEN MID

Client Sample ID: PH01C — Lab Sample ID: 890-1381-2

Date Collected: 10/07/21 10:15 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/13/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 19:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 16:28	AJ	XEN MID
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 16:49	CH	XEN MID

Client Sample ID: PH02 — Lab Sample ID: 890-1381-3

Date Collected: 10/07/21 10:30 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/13/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 20:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 16:49	AJ	XEN MID
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 16:56	CH	XEN MID

Client Sample ID: PH02C — Lab Sample ID: 890-1381-4

Date Collected: 10/07/21 10:55 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/13/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 20:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH02C — Lab Sample ID: 890-1381-4

Date Collected: 10/07/21 10:55 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 17:11	AJ	XEN MID
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 17:04	CH	XEN MID

Client Sample ID: PH03 — Lab Sample ID: 890-1381-5

Date Collected: 10/07/21 12:20 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9367	10/13/21 09:16	MR	XEN MID
Total/NA	Analysis	8021B		1	9391	10/13/21 18:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9398	10/13/21 16:28	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 17:32	AJ	XEN MID
Soluble	Leach	DI Leach			9288	10/12/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		20	9418	10/14/21 17:11	CH	XEN MID

Client Sample ID: PH03C — Lab Sample ID: 890-1381-6

Date Collected: 10/07/21 12:45 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9452	10/14/21 10:45	KL	XEN MID
Total/NA	Analysis	8021B		1	9522	10/16/21 15:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9796	10/18/21 15:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 17:54	AJ	XEN MID
Soluble	Leach	DI Leach			9207	10/11/21 12:12	CH	XEN MID
Soluble	Analysis	300.0		50	9380	10/14/21 01:19	CH	XEN MID

Client Sample ID: PH04A — Lab Sample ID: 890-1381-7

Date Collected: 10/07/21 13:05 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9452	10/14/21 10:45	KL	XEN MID
Total/NA	Analysis	8021B		1	9522	10/16/21 15:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9796	10/18/21 15:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 18:37	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Client Sample ID: PH04A — Lab Sample ID: 890-1381-7

Date Collected: 10/07/21 13:05 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9207	10/11/21 12:12	CH	XEN MID
Soluble	Analysis	300.0		20	9380	10/14/21 01:24	CH	XEN MID

Client Sample ID: PH04C — Lab Sample ID: 890-1381-8

Date Collected: 10/07/21 13:15 **Matrix: Solid**
Date Received: 10/08/21 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9452	10/14/21 10:45	KL	XEN MID
Total/NA	Analysis	8021B		1	9522	10/16/21 16:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	9796	10/18/21 15:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9438	10/14/21 09:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9428	10/14/21 18:59	AJ	XEN MID
Soluble	Leach	DI Leach			9207	10/11/21 12:12	CH	XEN MID
Soluble	Analysis	300.0		50	9380	10/14/21 01:30	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-1381-1
Project/Site: Nash 39 Tank Battery SDG: 31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Nash 39 Tank Battery

Job ID: 890-1381-1
SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1381-1	PH01A	Solid	10/07/21 09:55	10/08/21 08:19	2
890-1381-2	PH01C	Solid	10/07/21 10:15	10/08/21 08:19	4
890-1381-3	PH02	Solid	10/07/21 10:30	10/08/21 08:19	1
890-1381-4	PH02C	Solid	10/07/21 10:55	10/08/21 08:19	4
890-1381-5	PH03	Solid	10/07/21 12:20	10/08/21 08:19	1
890-1381-6	PH03C	Solid	10/07/21 12:45	10/08/21 08:19	4
890-1381-7	PH04A	Solid	10/07/21 13:05	10/08/21 08:19	2
890-1381-8	PH04C	Solid	10/07/21 13:15	10/08/21 08:19	4

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Nash 39 Tank Battery	Turn Around	
Project Number:	31403236.020.0129	Routine	✓
P.O. Number:	7/3/2021	Rush:	
Sampler's Name:	Alexis Castro	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	2.0 / 1.8	Thermometer ID	
Received Intact:	(Yes) No		NM-007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

890-1381 Chain of Custody

Work Order Notes

CC: 1055841001
INC: NAPP2118934484
API: 30-015-36951

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH01A	S	10/07/21	0955	2'	1	x	x	x	DISCRETE
PH01C	S	10/07/21	1015	4'	1	x	x	x	DISCRETE
PH02	S	10/07/21	1030	1'	1	x	x	x	DISCRETE
PH02C	S	10/07/21	1055	4'	1	x	x	x	DISCRETE
PH03	S	10/07/21	1220	1'	1	x	x	x	DISCRETE
PH03C	S	10/07/21	1245	4'	1	x	x	x	DISCRETE
PH04A	S	10/07/21	1305	2'	1	x	x	x	DISCRETE
PH04C	S	10/07/21	1315	4'	1	x	x	x	DISCRETE
			AC						

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.8.21 0818	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-454 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1381-1
Address: 1211 W Florida Ave ,	Due Date Requested: 10/14/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Nash 39 Tank Battery	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E - NaHSO4, F MeOH, G - Amchlor, H Ascorbic Acid, I - Ice, J DI Water, K EDTA, L EDA, M Hexane, N - None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH01A (890-1381-1)	10/7/21	09 55 Mountain		Solid			X	X	X	X	X	1	
PH01C (890-1381-2)	10/7/21	10 15 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-1381-3)	10/7/21	10 30 Mountain		Solid			X	X	X	X	X	1	
PH02C (890-1381-4)	10/7/21	10 55 Mountain		Solid			X	X	X	X	X	1	
PH03 (890-1381-5)	10/7/21	12 20 Mountain		Solid			X	X	X	X	X	1	
PH03C (890-1381-6)	10/7/21	12 45 Mountain		Solid			X	X	X	X	X	1	
PH04A (890-1381-7)	10/7/21	13 05 Mountain		Solid			X	X	X	X	X	1	
PH04C (890-1381-8)	10/7/21	13 15 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank 2

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	N. Ortiz	10/8/21		Kramer	10.9.21	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks. 2.4/2.9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1381-1
SDG Number: 31403236.020.0129

Login Number: 1381
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1381-1
SDG Number: 31403236.020.0129

Login Number: 1381
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland
List Creation: 10/11/21 08:46 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4/2.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 69760

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 69760
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	The OCD does NOT approve the background chloride concentration of 30,200 mg/kg as closure criteria.	2/18/2022
chensley	The OCD will accept closure for chlorides at 20,000.	2/18/2022
chensley	Closure report due 04/18/2022.	2/18/2022