State of New Mexico
Oil Conservation Division

Incident ID	nAPP2200728755
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] 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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 4/4/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: Robert Hamlet Date: 5/4/2022

- [ ] Approved
- [x] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: Robert Hamlet Date: 5/4/2022

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	nAPP2200728755
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: jim.raley@dvn.com	Incident # *(assigned by OCD)* nAPP2200728755
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

Latitude 32.0224991 Longitude -103.8669281
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: ROSS DRAW UNIT #011	Site Type: Oil Production Site
Date Release Discovered: January 4th. 2022	API# *(if applicable) 30-015-24307*

Unit Letter	Section	Township	Range	County
O	22	26S	30E	Eddy

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) 20	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 24	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride 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: Dump malfunctioned on separator, causing fluids to escape from PRV and impact soils in dirt secondary containment, pad surface and slightly off-pad.

[Saturated Soil Volume yds^3 x percent porosity x (6.41187 bbls/1 yds^3)] = bbls of residual fluid in soil
[Fluid Volume yds^3 x (6.41187 bbls/1 yds^3)] = bbls of free-standing fluid

State of New Mexico
Oil Conservation Division

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Facility ID	
Application ID	

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) Via email sent to Mike Bratcher, Emily Hernandez and Robert Hamlet on 1/4/2022	

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.

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: ____James Raley_____ Title: Environmental Specialist _____

Signature: _____ _____ Date: ___1/10/2022_____

email: ___jim.raley@dvn.com_____ Telephone: ___575-689-7597_____

OCD Only

Received by: Ramona Marcus Date: 1/10/2022

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

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 71386
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	1/10/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2200728755
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>105 (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.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2200728755
District RP	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Jim Raley Title: Environmental Professional

Signature: Date: 4/4/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2200728755
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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- [ ] Extents of contamination must be fully delineated.
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Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 4/4/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: _____ Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____ Date: _____

ENSOLUM

REMEDIATION WORK PLAN AND DEFERRAL REQUEST REPORT

Site Location:

Ross Draw Unit #011
Eddy County, New Mexico
Incident Numbers:
NHMP1412241998
nAB1632647780
nAB1712951426
nAB1728553778
nAB1728551205
nAPP2200728755

April 1, 2022
Ensolum Project No. 03A1987006

Prepared for:

WPX Energy Permian, LLC
5315 Buena Vista Dr.
Carlsbad, NM 88220
Attention: Jim Raley

Prepared by:

Joseph S. Hernandez
Senior Geologist

Ashley Ager, M.S., PG
Program Director, Geologist

ENSOLUM

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1.2 Site Characterization ..... 2&3
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2.0 SOIL SAMPLING AND INITIAL REMEDIAL ACTIONS 3
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APPENDICES

Appendix A: Figure 1 – Site Map
Figure 2A – Delineation Soil Sample Locations (nAP1712951426 and nAPP2200728755)
Figure 2B – Delineation Soil Sample Locations (nAB172855377 and nAB1728551205)
Figure 3 – Area of Concern Tract (NHMP1412241998)
Figure 4 – Proposed Excavation Extent

Appendix B: Well Record

Appendix C: Lithologic Soil Sampling Logs

Appendix D: Photographic Log

Appendix E: Tables

Appendix F: Laboratory Analytical Reports & Chain-of-Custody Documentation

1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared this Remediation Work Plan Report (RWP) to document site assessment, soil sampling activities and preliminary corrective actions performed to date by WPX Permian Energy, LLC (WPX) at the Ross Draw Unit #011 (hereinafter referred to as the "Site") in Unit O, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico **(Figure 1 in Appendix A).** Based on field observations, field screening activities and review of the laboratory analytical results from delineation soil sampling activities at the Site, WPX respectfully submits this RWP, which summarizes soil sampling activities and initial response efforts that have occurred and proposes additional remediation and soil sampling activities to further investigate and address reportable releases of produced water and/or crude oil at the Site.

Additionallly, WPX has provided relevant information from a recent deferral request (Incident Number NRM2034258716), authored by WSP USA Inc. (WSP) and approved by New Mexico Oil Conservation Division (NMOCD) on January 13, 2022 for a release that overlapped historical Incident Number nAB1632647780. WPX respectfully requests NMOCD review the field summary and laboratory analytical data as it is applicable in the deferral request for Incident Number nAB1632647780. All previous remediation activities and soil sample analytical results can be referenced in the original approved Deferral Request.

1.1 Site Description and Release Background

The Site is located within Eddy County, New Mexico (32.022210° N, 103.867013°W) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land **(Figure 1 in Appendix A)**.

NHMP1412241998

On March 18, 2014, a 4-inch PVC transfer line leaked and caused 200 barrels (bbls) of oil and produced water to be released and migrate southwest-west approximately 0.6 miles through the pasture. No fluids were able to be recovered immediately. WPX reported the release to the NMOCD via email and with a subsquent Corrective Action Form C-141 (Form C-141) dated March 29, 2014. The release was assigned Incident Number NHMP1412241998.

nAB1632647780

On November 5, 2016, a pump air locked and caused an oil tank to overfill and release approximately 70 bbls of crude oil into the earthen containment berm. No fluids escaped the earthern containment berm. Approximately 66 bbls of crude oil were recovered via vacuum truck. WPX reported the release to the NMOCD via email on November 6, 2016 and with a subsquent Form C-141 on November 17, 2016. The release was assigned Incident Number nAB1632647780.

nAB1712951426

On April 20, 2017, human error during equipment reconfiguration resulted in overpressurization of an aboveground poly line that released approximately 50 bbls of crude oil to the pasture north and west of the well pad location. Approximately 40 bbls of crude oil were recovered. WPX

reported the release to the NMOCD via email on April 21, 2017 and with a subsquent Form C-141 on May 2, 2017. The release was assigned Incident Number nAB1712951426.

nAB1728553778 and nAB1728551205

On September 21, 2017 and September 30, 2017 it was discovered that a poly line had failed between 75 and 100 feet south of the well pad and resulted in an unknown volume of produced water to be released and migrate an estimated 600 yards southwest in the pasture. No fluids were able to be recovered immediately due to heavy rainfall but volumes appeared to exceed the reportable limit. WPX reported the releases to the NMOCD via email and with subsquent Form C-141s on October 5, 2017. Incident Numbers nAB1728553778 and nAB1728551205, respectively were assigned.

nAPP2200728755

On January 4, 2022, the dump malfunctioned on a separator, causing the release of approximately 24 bbls of produced water and 20 bbls of crude oil into a earthen berm secondary containment and immediate pasture. No fluids were able to be recovered immediately but the release area on pad was excavated to approximately 0.5 foot below ground surface (bgs) to address surface staining. WPX reported the release to the NMOCD via email on January 4, 2022 and with a subsquent Form C-141 January 10, 2022. The release was assigned Incident Number nAPP2200728755.

1.2 Site Characterization

Ensolum characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on **Figure 1 in Appendix A.**

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based a soil boring (MW-1) that was drilled by Talon LPE on December 9, 2020, located approximately 0.40 miles southeast of the Site. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 106 feet bgs. No fluids were observed within the soil boring after at least 72 hours. Following the observation period, the boring was plugged and abandoned. The well log is provided as **Appendix B.**

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 Hydrocarbon (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

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

1.3 Project Objective

The primary objectives of Ensolum's scope of services were to document soil characterization and delineation actions performed at the Site were completed in accordance with the applicable NMOCD regulatory RWP guidelines and to document those concentrations of constituents of concern (COCs) present in soil remaining on-Site required to be addressed.

2.0 SOIL SAMPLING AND INITIAL REMEDIAL ACTIONS

WPX conducted initial remediation activities for Incident Number nAPP2200728755 by excavating impacted soil on pad for off-Site disposal. WSP conducted soil sampling activities to verify the presence or absence of soil impacts associated with the subject releases.

2.1 Delineation Activities

nAP1712951426 and nAPP2200728755

On January 25, 2022 and Febraury 28, 2022, delineation activities were conducted by WSP to confirm the presence or absence of impacted soil in areas associated with the subject release area. Delineation samples were collected in boreholes advanced with a hand auger (samples designated BH). Delineation activites were directed by field sceening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A total of two soil samples were collected from each delineation soil sample location (BH01 through BH17): the sample with the highest observed field screening (ranging from 0.5 foot bgs to 3 foot bgs) and the greatest depth (4 feet bgs). The location of the delineation samples are shown in **Figure 2A in Appendix A**. Field screening results and observations for each delineation soil sample were recorded on lithologic/soil sampling logs **(Appendix C).** The soil samples were placed directly into a 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 procedures, to Eurofins LLC (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0. Photographic documentation during delineation activities is included in **Appendix D.**

nAB1728553778 and nAB1728551205

On March 3, 2022, delineation activities were conducted by WSP to confirm the presence or absence of impacted soil in areas associated with the subject release area. Delineation samples were collected in boreholes advanced with a hand auger (samples designated BH). Delineation activites were directed by field sceening soil for VOCs utilizing a calibrated PID and chloride using Hach® chloride QuanTab® test strips. A total of two soil samples were collected from each delineation soil sample location (BH01 through BH10): the sample with the highest observed field screening (ranging from 0.5 foot bgs to 2 feet bgs) and the greatest depth (4 feet bgs). The location of the delineation samples are shown in **Figure 2B in Appendix A**. Field screening results and observations for each delineation soil sample were recorded on lithologic/soil

sampling logs **(Appendix C).** The soil samples were handled, collected and analyzed as previously described. Photographic documentation during delineation activities is included in **Appendix D.**

3.0 SOIL SAMPLING RESULTS

nAP1712951426 and nAPP2200728755

Laboratory analytical results for delineation soil samples BH03, BH04, BH10, BH13, BH16 and BH17 indicated COCs were above the reclamation standard requirement. Based on the current extent of soil characterization at the Site, it appears that vertical impacts exceeding Closure Criteria do not exceed 4 feet bgs in the pasture. Laboratory analytical results for delineation soil samples BH01, BH02, BH05 through BH09, BH11, BH12, BH14 and BH15 indicated COCs were within the applicable Closure Criteria and/or reclamation standard requirement.

nAB1728553778 and nAB1728551205

Laboratory analytical results for delineation soil samples BH01 through BH03 indicated COCs were above the reclamation standard requirement. Based on the current extent of soil characterization at the Site, it appears that vertical impacts exceeding Closure Criteria do not exceed 4 feet bgs in the pasture. Laboratory analytical results for delineation soil samples BH04 through BH10 indicated COCs were within the applicable reclamation standard requirement.

Laboratory analytical results are summarized in the **Table 1** included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

4.0 DEFFERAL REQUEST

nAB1632647780

The Deferral Request for Incident Number NRM2034258716, authored by WSP, was approved by NMOCD on January 13, 2022 and overlapped historical Incident Number nAB1632647780. WPX respectfully requests NMOCD review the laboratory analytical data as it can be applicable for this release to provide vertical and lateral definition of the historical release. All previous remediation activities and soil sample analytical results can be referenced in the original approved Deferral Request.

Based on the summary of the approved Deferral Request, the following findings and conclusions regarding the incident are presented:

- Based on laboratory analytical results of confirmation and delineation soil samples for Incident Number NRM2034258716, impacts associated with Incident Number nAB1632647780 were confirmed to have remained within the secondary containment, as documented on the Form C-141;
- Based on soil laboratory analytical results and extent of release area within the secondary earthen berm containment, an estimated **102 cubic yards** was approved to be deferred until the Plugging and Abandonment or recontruction of the Site, whichever comes first.

Based on the findings and conclusions of this approved Deferral Report and review and applicability to historical Incident Number nAB1632647780, No Further Action appears warranted at this time and the Site should be respectfully considered for Deferral by the NMOCD using the previously collected data.

5.0 REMEDIATION WORK PLAN

Based on the results documented in this report, the following findings and conclusions regarding the releases are presented:

- Areas within the top four feet of the pasture contain impacted soil exceeding the reclamation standard; however, impacts exceeding Closure Criteria within the area of concerns for nAB1728551205, nAB1728553778 and nAB1712951426 and release extent for nAPP220728755 do not appear to exceed 4 feet bgs;
- Based on existing soil analytical results and mapped extent of the release areas, an estimated **6,840 cubic yards** of impacted soil is anticipated to be remediated and/or removed from the Site for disposal in accordance with state and federal regulations. The current proposed excavation extent is depicted on **Figure 4 in Appendix A**;
- Based on laboratory analytical results for delineation samples from BH01, BH06, BH05, BH09, BH11 and BH12 (nAP1712951426 and nAPP2200728755), no remediation efforts are required in these areas. No areas on pad exceed the Closure Criteria for the Site.

Based on the conclusions presented above, the following remediation is proposed:

- Soil characterization and investigation is required to determine the lateral and vertical extent of impact associated with Incident Number NHMP1412241998. A proposed tract that aligns with details provided on the C-141 is provided on **Figure 3 in Appendix A.** Ensolum will conduct delineation activities to verify the presence or absence of soil impacts associated with this incident. Laboratory analytical results will be used to update additional cubic yards of soil to be remediated, if any;
- Horizontal delineation of all releases associated with nAB1728551205, nAB1728553778 and nAB1712951426 and nAPP220728755 will be defined through delineation samples or 5-point composite sidewall samples following the removal of residual impacts;
- Impacted soil will be excavated from the top four feet of the areas in the pasture containing soil exceeding the reclamation standard. Excavated soil will then be transferred to: (a) a New Mexico approved landfill facility for disposal and the excavation will be backfilled with Non-waste containing soil, as defined by “Procedures for Implementation of the Spill Rule” (September 6, 2019) or (b) an on-site ex-situ treatment cell for chloride extraction. Following review of the additional soil characterization at the Site, WPX will re-evaluate the proposed remedial options and submit a revised RWP detailing the option (b) treatment and sampling plan for NMOCD review, if selected.
- Surface scraping may be conducted to remove any minor surficial staining in areas that are delineated;

- Access for remediation or disturbance that occurs offsite requires BLM approval with additional coverage. WPX will prepare and submit documentation for proposed work areas before initiating corrective actions;

- There are areas off pad (ex. Right-of-Way) that will likely require third-party operator oversight and additional safety measures before or during remediation activities near their respective subsurface pipelines. WPX or the third party operator may implement additional safety precautions above encroachment guidelines, including restrictions on hand shoveling and cribbing. These restrictions may be implemented as health and safety precautions at the judgment and responsibility of a WPX or third-party operator safety representative.

- Subsequent to the completion of remediation and receipt of soil confirmation sample results documenting that impacted soil had been removed, the excavation will be backfilled with clean and/or treated soil and restored to “as close to its original state” as possible.

5.1 Proposed Sampling

WPX is requesting a variance to the 200 square foot confirmation sampling requirement for the areas to be excavated, which would require an estimated 193 floor samples within the release extent, excluding sidewall samples. Due to the large extent of the impacted areas (38,500 square feet), Ensolum proposes increasing the confirmation sampling size to collecting a 5-point composite sample to represent each 1,000 square foot area for the floors and sidewalls of the excavation.

5.2 Proposed Schedule

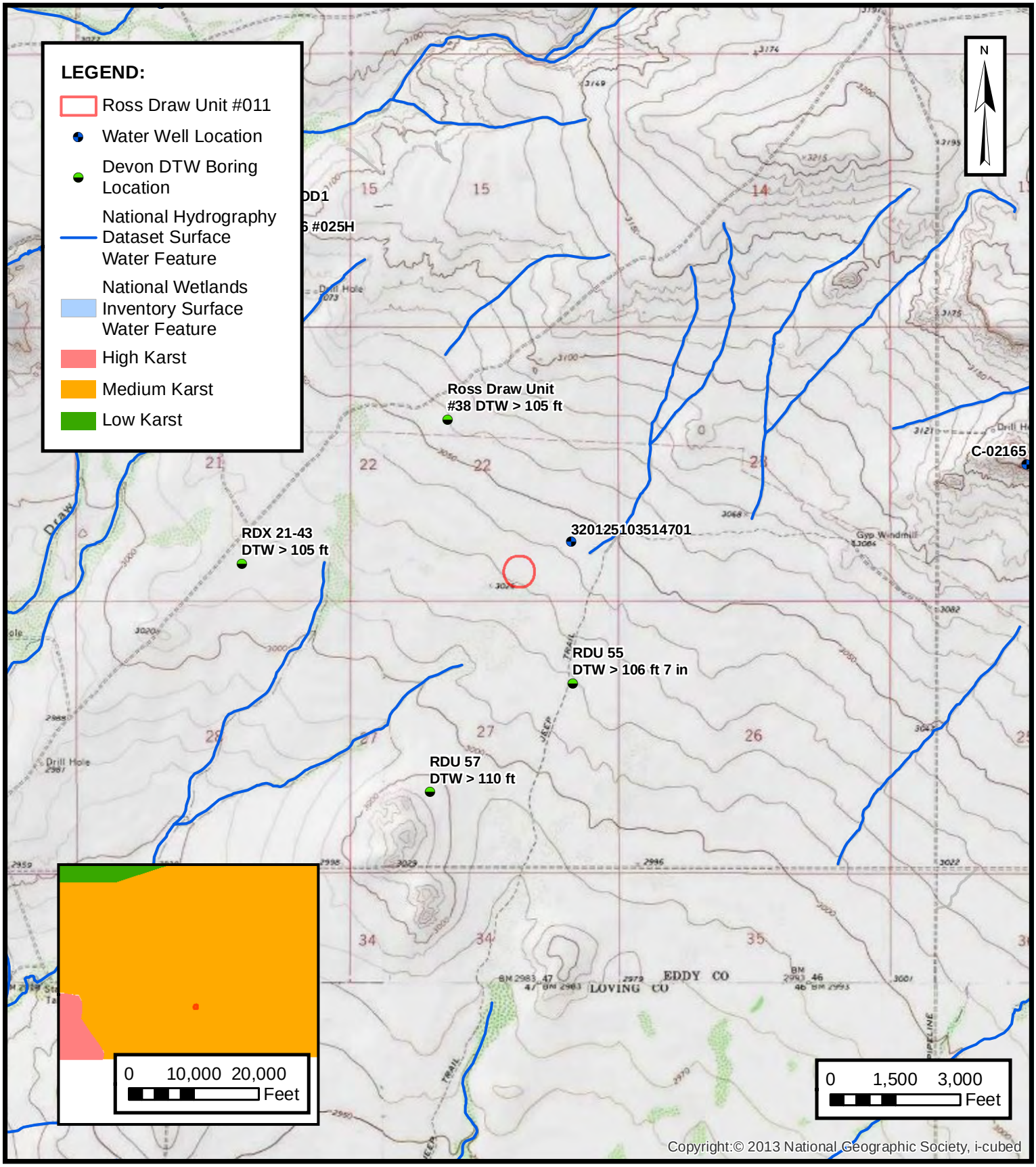
WPX believes the scope of work described above will meet requirements set forth in NMAC 19.15.29.13 and be protective of human health, the environment, and groundwater. As such, WPX respectfully requests approval of this RWP from NMOCD.

Based on the extent of corrective measures, planning and potential third-party operator oversight at the Site, WPX anticipates beginning remediation by **January 2023.**

ENSOLUM

APPENDIX A

Figures



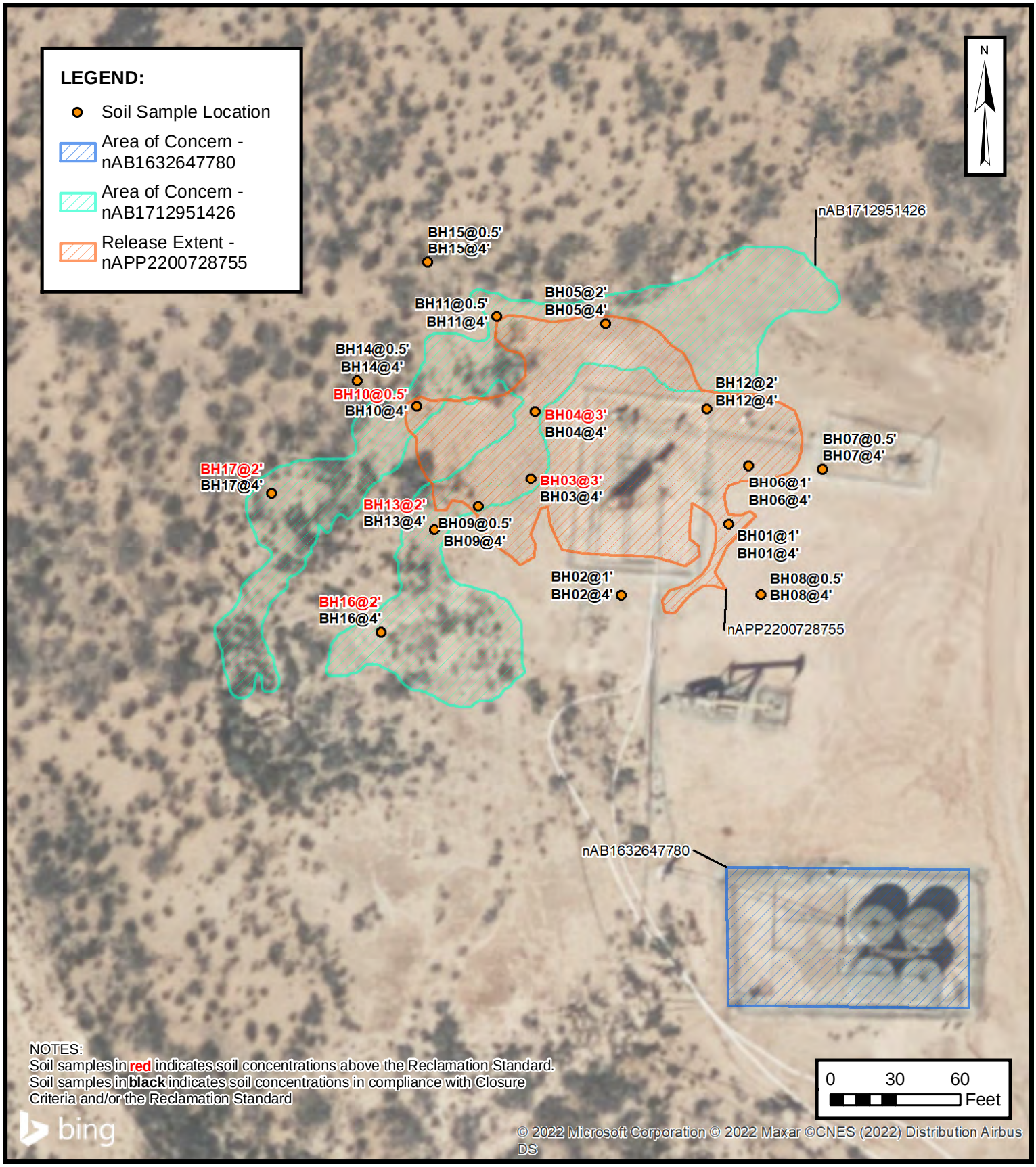
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP

WPX ENERGY PERMIAN, LLC.
ROSS DRAW UNIT #011
Eddy County, New Mexico
32.022210° N, 103.867013° W

PROJECT NUMBER: 03A1987006

FIGURE
1



ENSOLUM
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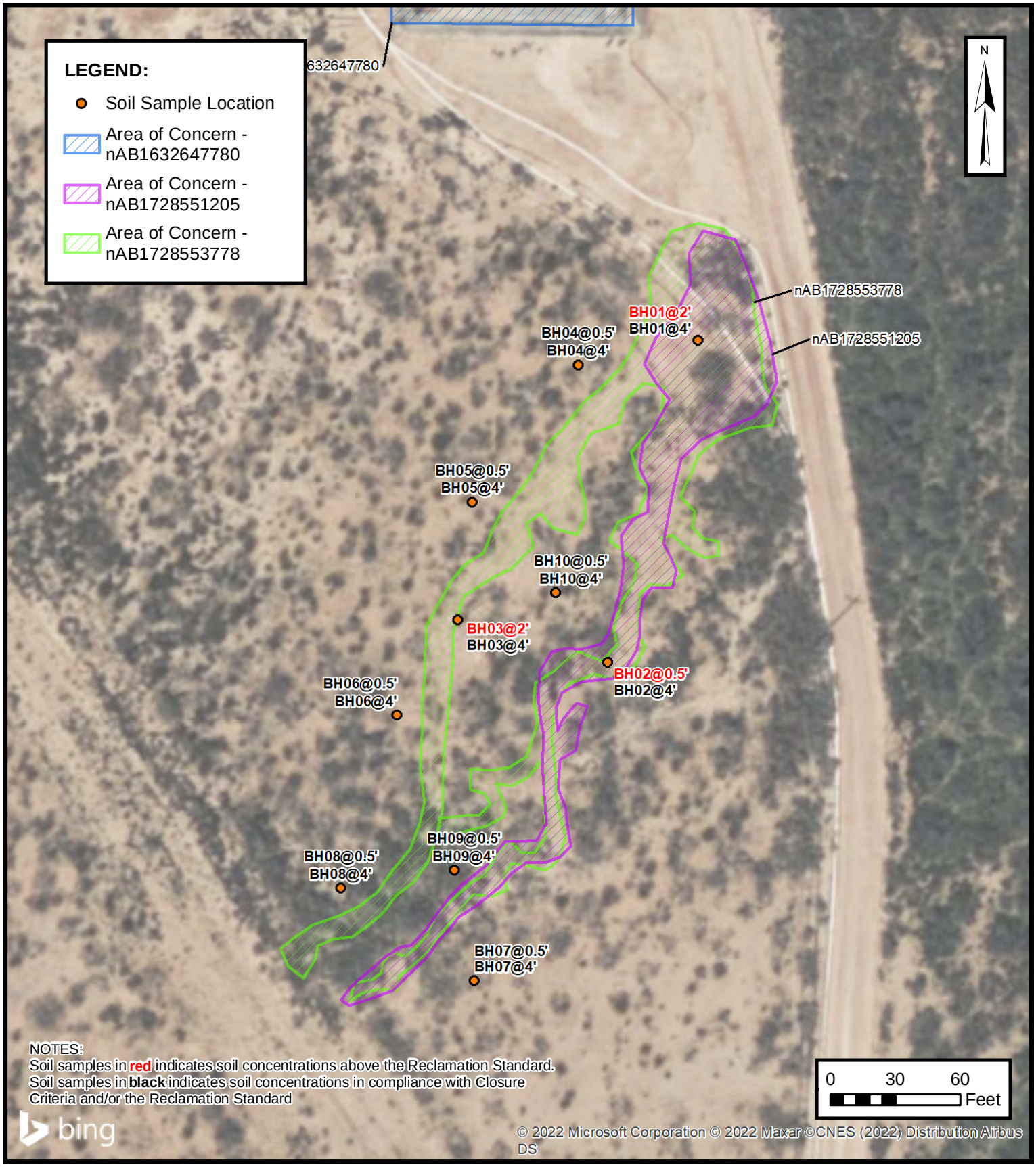
DELINEATION SOIL SAMPLE LOCATION MAP 2A

WPX ENERGY PERMIAN, LLC.
ROSS DRAW UNIT #011
Eddy County, New Mexico
32.022210° N, 103.867013° W

PROJECT NUMBER: 03A1987006

FIGURE
2A



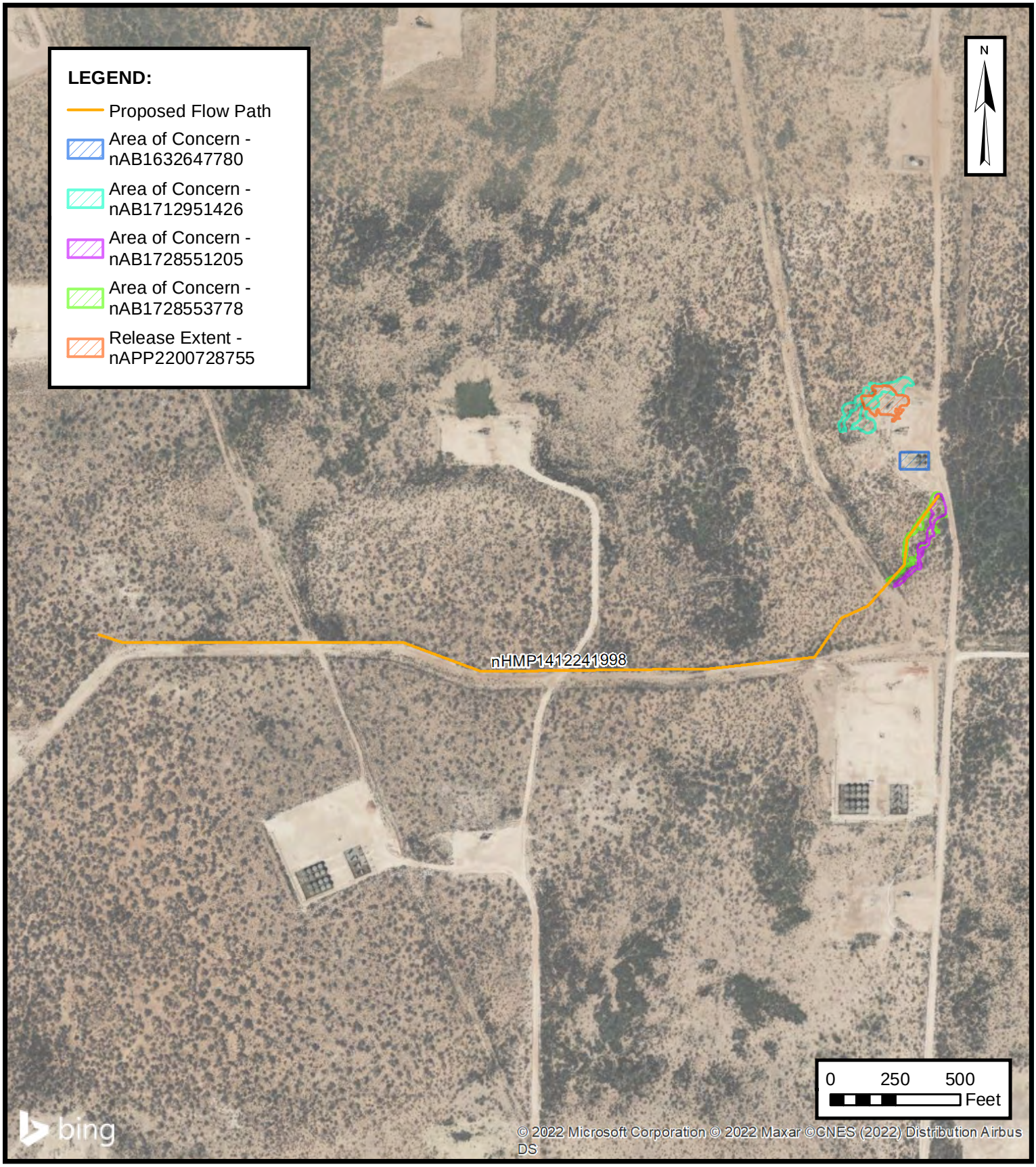
ENSOLUM
Environmental & Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATION MAP 2B

WPX ENERGY PERMIAN, LLC.
ROSS DRAW UNIT #011
Eddy County, New Mexico
32.022210° N, 103.867013° W

PROJECT NUMBER: 03A1987006

FIGURE
2B



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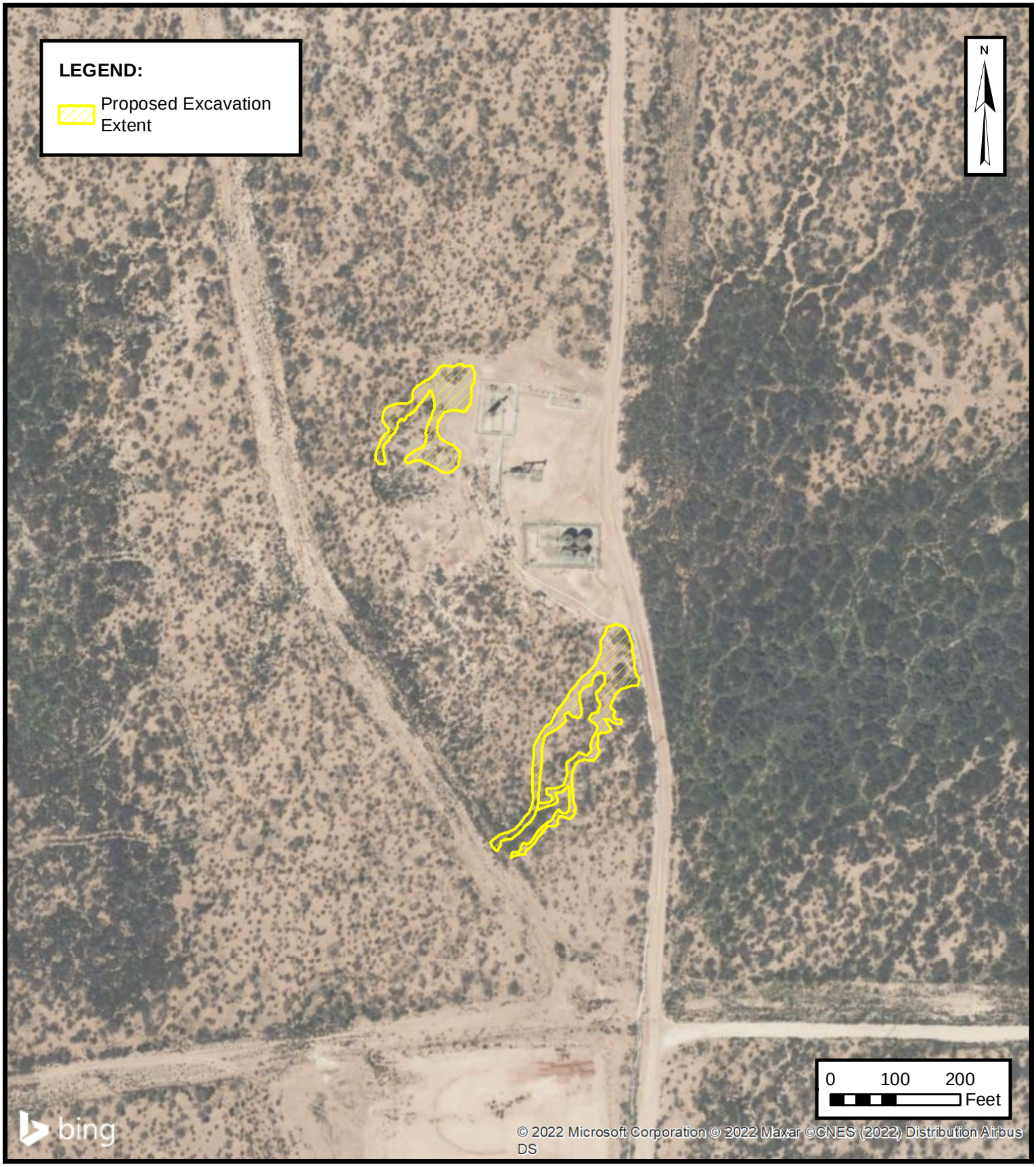
AREA OF CONCERN TRACT

WPX ENERGY PERMIAN, LLC.
ROSS DRAW UNIT #011
Eddy County, New Mexico
32.022210° N, 103.867013° W

PROJECT NUMBER: 03A1987006

FIGURE
3



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PROPOSED EXCAVATION AREAS

WPX ENERGY PERMIAN, LLC.
ROSS DRAW UNIT #011
Eddy County, New Mexico
32.022210° N, 103.867013° W

PROJECT NUMBER: 03A1987006

FIGURE

4

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APPENDIX B

Well Record

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #55	
Date: 12/9/2020		Client: WPX Energy	
Drilling Method: Air Rotary	Sampling Method: None	Logged By: J. Linn, PG	Drilled By: Talon LPE
Gravel Pack Type: 10/20 Sand	Gravel Pack Depth Interval: 3 Bags	Seal Type: None / Seal Depth Interval: None	Latitude: 32.016165
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-101'7"		Boring Total Depth (ft. BGS): 106'7"	Longitude: -103.86346
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 101'7" - 106'7"		Well Total Depth (ft. BGS): 106'7"	Depth to Water (ft. BTOC): >106' 7" / DTW Date: 12/16/2020

Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion
0	NM	L	D	N	N	NM	SP	NS	Pale pink to buff colored poorly graded sand with minor silt	
5										
10										
15										
20	NM	L	D	N	N	NM	SW	NS	Pale tan orange well graded fine sand with minor medium and coarse sand	
25										
30										
35	NM	L	D	N	N	NM	SP	NS	Pale orange brown poorly graded fine sand with minor gravel	
40										
45										
50										
55										
60										
65	NM	L	D	N	N	NM	SP	NS	Grey poorly graded fine sand with minor gravel	
70										
75										
80										
85										
90	NM	L	D	N	N	NM	SP	NS	Darker grey poorly graded fine sand with minor silt and minor medium sand	
95										
100	NM	M	D	N	N	NM	SC	NS	Dark grey fine sand with moderate silt and clay - TD 106'7"	
106'7"										

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: BH01	Date: 1-25-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: Hand Auger
Coordinates: 32.022700°, -103.866936°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	0-4', SAND, dry, dark brown, poorly graded with silt, some staining, H-C odor.
M	1,260	1.6	Y	BH01	1	1		At 2', decrease in staing to slight staining, decrease in odor to slight H-C ofor.
								At 3', no staining, no odor.
M	816	0.9	Y		2	2		
M	1,020	0.2	N		3	3		
M	1,176	0.1	N	BH01	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH02	Date: 1-25-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: Hand Auger
Coordinates: 32.022624°, -103.867072°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	0-4', SAND, dry, dark brown, poorly graded with silt, no staining, no odor.
M	<128	0.1	N	BH02	1	1		
M	<128	0.1	N		2	2		
M	<128	0	N		3	3		
M	<128	0.2	N	BH02	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH03	Date: 1-25-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: Hand Auger
Coordinates: 32.022749°, -103.867186°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	0-4', SAND, dry, dark brown, poorly graded with silt, no staining, slight odor.
								At 3', no odor.
M	<128	2.5	Y		1	1		
M	280	2.5	N		2	2		
M	1,544	1.1	N	BH03	3	3		
M	1,896	1.4	N	BH03	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH04	Date: 1-25-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: Hand Auger
Coordinates: 32.022821°, -103.867181°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	0-4', SAND, dry, dark brown, poorly graded with silt, slight staining, slight odor.
								At 2', no staining.
M	180	27.6	Y		1	1		At 3', color change to light brown, no odor.
								At 4' color change to dark brown.
M	1,260	9.9	N		2	2		
M	2,552	14.5	N	BH04	3	3		
M	1,772	20.2	N	BH04	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH05	Date: 1-25-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: Hand Auger
Coordinates: 32.022915°, -103.867092°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	0-4', SAND, dry, dark brown, poorly graded with silt, no staining, no odor. At 2', color change to light brown.
M	152	0.1	N	BH05	1	1		
M	<128	0.1	N		2	2		
M	<128	0.1	N		3	3		
M	<128	0.1	N	BH05	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH06	Date: 1-25-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: Hand Auger
Coordinates: 32.022763°, -103.866911°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP-SM	0-4', SAND, dry, dark brown, poorly graded with silt, no staining, no odor.
M	488	0.1	N	BH06	1	1		At 3', color change to light brown.
M	444	0	N		2	2		
M	444	0.9	N		3	3		
M	356	0.4	N	BH06	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH07	Date: 2-18-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 3 32.022759°, -103.866818°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	588	0.1	N	BH07	0.5	0	CCHE	0-1',CALICHE, dry, light brown-brown, well graded, very fine-fine grain, no stain, no odor.
D	<128	0.7	N		1	1	SP-SM	1-3',SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	<128	0.2	N		2	2		
						3	CCHE	3-4',CALICHE, dry, light brown-brown, well graded, very fine-medium grain, no stain, no odor.
D	444	0.2	N	BH07	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH08	Date: 2-18-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022624°, -103.866896°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	444	0.1	N	BH08	0.5	0	CCHE	0-1',CALICHE, dry, light brown-brown, well graded, very fine-fine grain, no stain, no odor.
D	152	0.1	N		1	1	SP-SM	1-3',SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	<128	0.1	N		2	2		
						3		
D	<128	0.1	N	BH08	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH09	Date: 2-18-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022719°, -103.867253°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	444	0.5	N	BH09	0.5	0	SP-SM	0-4',SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	820	0.9	N		1	1		
D	1,360	0.8	N		2	2		
						3		At 3', color change to light brown-brown.
D	756	1.8	N	BH09	4	4	TD	Total depth at 4' bgs.

ENSOLUM

Sample Name: BH10	Date: 2-18-2022
Site Name: Ross Draw Unit #011	
Incident Number: nAPP2200728755 & nAB1712951426	
Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM / Method: Hand Auger
Coordinates: 32.022827°, -103.867331°	Hole Diameter: 4" / Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	280	0.5	N	BH10	0.5	0	SP	0-1',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<128	0.9	N		1	1	SP-SM	1-3', SAND, dry, reddish brown-brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	2,224	0.8	N		2	2		
						3	SM	3-4', SILTY SAND, dry, tan-light brown, fine-medium grain, no stain, no odor.
D	11,016	1.8	N	BH10	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH11	Date: 2-18-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022923°, -103.867229°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<128	2.2	N	BH11	0.5	0	SP	0-3', SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<128	4.3	N		1	1		
D	120	2.3	N		2	2		
						3	CCHE	3-4', CALICHE, dry, tan, well graded, fine-medium grain, no stain, no odor.
D	2,188	4.3	N	BH11	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH12	Date: 2-28-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022824°, -103.866964°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1,556	0.3	N		0.5	0	SW-SM	0-1', SAND, dry, brown, well graded with silt, very fine-fine grain, no stain, no odor.
D	1,780	0.4	N		1	1	SP-SM	1-4', SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	2,200	0.9	N	BH12	2	2		
						3		
D	1,556	0.3	N	BH12	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH13	Date: 2-28-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022694°, -103.867308°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	142	N/A	N		0.5	0	SP	0-2', SAND, dry, brown, poorly graded, very fine-fine grain, organics, no stain, no odor. Note: PID not calibrating. Only screening for chlorides.
D	1,360	N/A	N		1	1		At 1', some silt.
D	2,840	N/A	N	BH13	2	2	SW-SM	2-3', SAND, dry, brown, well graded with silt, very fine- fine grain, no stain, no odor.
						3	CCHE	3-4', CALICHE, dry, light brown, well graded, very fine-fine grain, no stain, no odor.
D	4,884	N/A	N	BH13	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH14	Date: 2-28-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022854°, -103.867406°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	360	N/A	N	BH14	0.5	0	SP	0-4', SAND, dry, brown, poorly graded, very fine-fine grain, organics, no stain, no odor.
D	<120	N/A	N		1	1		NOTE: PID not calibrating. Only screening for chlorides.
D	<120	N/A	N		2	2		
						3		At 4', some silt.
D	120	N/A	N	BH14	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH15	Date: 2-28-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022981°, -103.867317°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	N/A	N	BH15	0.5	0	SP	0-3', SAND, dry, brown, poorly graded, very fine-fine grain, organics, no stain, no odor.
D	<120	N/A	N		1	1		NOTE: PID not calibrating. Only screening for chlorides.
D	<120	N/A	N		2	2		
						3	SW	3-4', SAND, dry, light brown, well graded, very fine-fine grain, no stain, no odor.
D	<120	N/A	N	BH15	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH16	Date: 2-28-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022584°, -103.867375°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	N/A	N		0.5	0	SP	0-3', SAND, dry, brown, poorly graded, very fine-fine grain, organics, no stain, no odor.
D	1,360	N/A	N		1	1		NOTE: PID not calibrating. Only screening for chlorides.
D	1,556	N/A	N	BH16	2	2		
						3	SW-SM	3-4', SAND, dry, tan-light brown, well graded with silt, very fine-fine grain, no stain, no odor.
D	3,076	N/A	N	BH16	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH17	Date: 2-28-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAPP2200728755 & nAB1712951426	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.022733°, -103.867514°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	N/A	N		0.5	0	SP	0-3', SAND, dry, brown, poorly graded, very fine-fine grain, organics, no stain, no odor.
								At 1', no organics.
D	<120	N/A	N		1	1		NOTE: PID not calibrating. Only screening for chlorides.
D	888	N/A	N	BH17	2	2		
						3	SW-SM	3-4', SAND, dry, light brown, well graded with silt, very fine-fine grain, no stain, no odor.
D	6,160	N/A	N	BH17	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH01	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021844°, -103.866550°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	6,160	1.5	N		0.5	0	SP	0-1',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	6,160	1	N		1	1	SP-SM	1-4',SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	6,664	0.8	N	BH01	2	2		
						3		
D	7,824	1.1	N	BH01	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH02	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021498°, -103.866665°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	3,076	0.4	N	BH02	0.5	0	SP	0-1',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	1,664	0.4	N		1	1	SP-SM	1-4',SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	1,452	0.5	N		2	2		
						3		
D	9,244	0.6	N	BH02	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH03	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021543°, -103.866854°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	0.4	N		0.5	0	SP	0-1',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	252	0.3	N		1	1	SP-SM	1-2',SAND, dry, brown, poorly graded with silt, very fine-fine grain, no stain, no odor.
D	1,556	0.3	N	BH03	2	2	SW-SM	2-4',SAND, dry, brown, well graded with silt, very fine-fine grain, no stain, no odor.
						3		
D	7,216	0.9	N	BH03	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH05	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021670°, -103.866836°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	2.6	N	BH05	0.5	0	SP	0-4',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<120	4	N		1	1		
D	<120	3.6	N		2	2		
						3		
D	<120	4.3	N	BH05	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH06	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021442°, -103.866931°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	144	0.7	N	BH06	0.5	0	SP	0-4',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<120	0.8	N		1	1		
D	<120	1.7	N		2	2		
						3		
D	<120	2.9	N	BH06	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH07	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021156°, -103.866833°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	1.8	N	BH07	0.5	0	SP	0-4',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<120	1.9	N		1	1		
D	<120	2.1	N		2	2		
						3		
D	120	2.3	N	BH07	4	4	TD	Total depth at 4' bgs.

ENSOLUM	Sample Name: BH08	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021256°, -103.867002°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	1.3	N	BH08	0.5	0	SP	0-4',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<120	1.4	N		1	1		
D	<120	1.9	N		2	2		
						3		
D	<120	3.6	N	BH08	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH09	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021275°, -103.866859°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	1.1	N	BH09	0.5	0	SP	0-4',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<120	1.5	N		1	1		
D	<120	1.7	N		2	2		
						3		
D	168	1	N	BH09	4	4	TD	Total depth at 4' bgs.

ENSOLUM

	Sample Name: BH10	Date: 3-3-2022
	Site Name: Ross Draw Unit #011	
	Incident Number: nAB1728551205 & nAB1728553778	
	Job Number: 03A1987006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Hand Auger
Coordinates: 32.021573°, -103.866730°	Hole Diameter: 4"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<120	1.7	N	BH10	0.5	0	SP	0-4',SAND, dry, brown, poorly graded, very fine-fine grain, no stain, no odor.
D	<120	3.2	N		1	1		
D	<120	3.2	N		2	2		
						3		
D	<120	4.2	N	BH10	4	4	TD	Total depth at 4' bgs.

ENSOLUM

APPENDIX D

Photographic Log

ENSOLUM

Photographic Log

WPX Energy Permian, LLC.
Ross Draw Unit #011 - Project Location
Ensolum Job Number: 03A1987006

Photograph 1
Date: January 25, 2022
Description: View of the Site during delineation activities

Photograph 2
Date: January 25, 2022
Description: View of the Site during delineation activities

Photograph 3
Date: February 28, 2022
Description: View of the Site during delineation

Photograph 4
Date: March 3, 2022
Description: View of the Site during delineation activities

ENSOLUM

APPENDIX E

Tables

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - Ross Draw Unit #011
Eddy County, New Mexico

Ensolum Project No. 03A1987006

Sample Name	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Delineation Soil Sample Analytical Results										
Incident Number: nAB1712951426 and nAPP220728755										
BH01	1/25/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,490
BH01	1/25/2022	4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,320
BH02	1/25/2022	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	15.7
BH02	1/25/2022	4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	11.2
BH03	1/25/2022	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	**2,570***
BH03	1/25/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,420
BH04	1/25/2022	3	<0.00202	<0.00403	<49.9	68.8	<49.9	68.8	68.8	**3,320***
BH04	1/25/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,610
BH05	1/25/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	134
BH05	1/25/2022	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	35.6
BH06	1/25/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	601
BH06	1/25/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	464
BH07	2/18/2022	0.5	<0.00199	<0.00398	<50.0	81.7	<50.0	81.7	81.7	582
BH07	2/18/2022	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	510
BH08	2/18/2022	0.5	<0.00200	<0.00399	<50.0	108	<50.0	108	108	492
BH08	2/18/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	12.9
BH09	2/18/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	365
BH09	2/18/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	347
BH10	2/18/2022	0.5	<0.00200	<0.00399	<250	**1,660**	<250	**1,660**	**1,660**	**906***
BH10	2/18/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	18,000
BH11	2/18/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	135
BH11	2/18/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	3,220
BH12	2/28/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,610
BH12	2/28/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,360
BH13	2/28/2022	2	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	**4,430***
BH13	2/28/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7,260

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - Ross Draw Unit #011
Eddy County, New Mexico

Ensolum Project No. 03A1987006

Sample Name	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
BH14	2/28/2022	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	464
BH14	2/28/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	115
BH15	2/28/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	77.5
BH15	2/28/2022	4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	21.4
BH16	2/28/2022	2	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	**1,940***
BH16	2/28/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,650
BH17	2/28/2022	2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	**1,090***
BH17	2/28/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	8,280
Incident Number: nAB1728551205 and nAB1728553778										
BH01	3/3/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**8,700***
BH01	3/3/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	9,220
BH02	3/3/2022	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	**4,300***
BH02	3/3/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	8,350
BH03	3/3/2022	2	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**3,310***
BH03	3/3/2022	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	62.6
BH04	3/3/2022	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	45.3
BH04	3/3/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	29.1
BH05	3/3/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	5.80
BH05	3/3/2022	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	62.6
BH06	3/3/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	<4.97
BH06	3/3/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	63.4
BH07	3/3/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	5.01
BH07	3/3/2022	4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	130
BH08	3/3/2022	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	5.90
BH08	3/3/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	57.1

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - Ross Draw Unit #011
Eddy County, New Mexico

Ensolum Project No. 03A1987006

Sample Name	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
BH09	3/3/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	10.4
BH09	3/3/2022	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	174
BH10	3/3/2022	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	5.95
BH10	3/3/2022	4	<0.00199	<0.00398	<50.0	70.6	<50.0	70.6	70.6	34.6

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil Range Organics

TPH: Total Petroleum Hydrocarbon

*Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria and/or reclamation requirement for Soils Impacted by a Release*

** - indicates top 4 feet in the pasture area impacted by the release, NMAC 19.15.29.13. D (1) that will be reclaimed following remediation.*

ENSOLUM

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1876-1
Laboratory Sample Delivery Group: Eddy
Client Project/Site: RDU 11

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
2/3/2022 12:01:30 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: RDU 11

Laboratory Job ID: 890-1876-1
SDG: Eddy

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Job ID: 890-1876-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1876-1

Receipt
The samples were received on 1/26/2022 4:08 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH05 (890-1876-9), BH05 (890-1876-10), BH06 (890-1876-11), (890-1883-A-1-C MS) and (890-1883-A-1-D MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18029 and analytical batch 880-18094 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: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH01
Date Collected: 01/25/22 09:10
Date Received: 01/26/22 16:08
Sample Depth: 1

Lab Sample ID: 890-1876-1
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		01/28/22 12:00	01/28/22 14:28	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/28/22 12:00	01/28/22 14:28	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/28/22 12:00	01/28/22 14:28	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/28/22 12:00	01/28/22 14:28	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/28/22 12:00	01/28/22 14:28	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/28/22 12:00	01/28/22 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*01/28/22 12:00*	*01/28/22 14:28*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/28/22 12:00*	*01/28/22 14:28*	*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			02/02/22 16:52	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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 11:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 11:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*01/31/22 11:10*	*02/01/22 11:34*	*1*
o-Terphenyl	*90*		*70 - 130*	*01/31/22 11:10*	*02/01/22 11:34*	*1*

Client Sample ID: BH01
Date Collected: 01/25/22 09:24
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 14:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 14:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 14:48	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/28/22 12:00	01/28/22 14:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 14:48	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/28/22 12:00	01/28/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*01/28/22 12:00*	*01/28/22 14:48*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/28/22 12:00*	*01/28/22 14:48*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH01
Date Collected: 01/25/22 09:24
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-2
Matrix: Solid

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/02/22 16:52	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			01/31/22 13:14	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	49.9		mg/Kg		01/31/22 11:10	02/01/22 11:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 11:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*01/31/22 11:10*	*02/01/22 11:56*	*1*
o-Terphenyl	*92*		*70 - 130*	*01/31/22 11:10*	*02/01/22 11:56*	*1*

Client Sample ID: BH02
Date Collected: 01/25/22 09:32
Date Received: 01/26/22 16:08
Sample Depth: 1

Lab Sample ID: 890-1876-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		01/28/22 12:00	01/28/22 16:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:12	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/28/22 12:00	01/28/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*01/28/22 12:00*	*01/28/22 16:12*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/28/22 12:00*	*01/28/22 16:12*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/02/22 16:52	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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 12:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 12:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 12:18	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH02
Date Collected: 01/25/22 09:32
Date Received: 01/26/22 16:08
Sample Depth: 1

Lab Sample ID: 890-1876-3
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*01/31/22 11:10*	*02/01/22 12:18*	*1*
o-Terphenyl	*90*		*70 - 130*	*01/31/22 11:10*	*02/01/22 12:18*	*1*

Client Sample ID: BH02
Date Collected: 01/25/22 09:50
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		01/28/22 12:00	01/28/22 16:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 16:32	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/28/22 12:00	01/28/22 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*01/28/22 12:00*	*01/28/22 16:32*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/28/22 12:00*	*01/28/22 16:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/02/22 16:52	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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 12:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 12:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*01/31/22 11:10*	*02/01/22 12:40*	*1*
o-Terphenyl	*86*		*70 - 130*	*01/31/22 11:10*	*02/01/22 12:40*	*1*

Client Sample ID: BH03
Date Collected: 01/25/22 10:08
Date Received: 01/26/22 16:08
Sample Depth: 3

Lab Sample ID: 890-1876-5
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		01/28/22 12:00	01/28/22 16:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/28/22 12:00	01/28/22 16:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/28/22 12:00	01/28/22 16:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/28/22 12:00	01/28/22 16:53	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH03
Date Collected: 01/25/22 10:08
Date Received: 01/26/22 16:08
Sample Depth: 3

Lab Sample ID: 890-1876-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/28/22 12:00	01/28/22 16:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/28/22 12:00	01/28/22 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*01/28/22 12:00*	*01/28/22 16:53*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*01/28/22 12:00*	*01/28/22 16:53*	*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			02/02/22 16:52	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			01/31/22 13:14	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	49.9		mg/Kg		01/31/22 11:10	02/01/22 13:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 13:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*01/31/22 11:10*	*02/01/22 13:02*	*1*
o-Terphenyl	*93*		*70 - 130*	*01/31/22 11:10*	*02/01/22 13:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2570**		25.3		mg/Kg			02/01/22 18:58	5

Client Sample ID: BH03
Date Collected: 01/25/22 10:14
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/28/22 12:00	01/28/22 17:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/28/22 12:00	01/28/22 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*01/28/22 12:00*	*01/28/22 17:13*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/28/22 12:00*	*01/28/22 17:13*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH03
Date Collected: 01/25/22 10:14
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-6
Matrix: Solid

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/02/22 16:52	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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 13:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 13:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*01/31/22 11:10*	*02/01/22 13:24*	*1*
o-Terphenyl	*84*		*70 - 130*	*01/31/22 11:10*	*02/01/22 13:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2420**	**F1**	24.8		mg/Kg			02/01/22 19:04	5

Client Sample ID: BH04
Date Collected: 01/25/22 10:34
Date Received: 01/26/22 16:08
Sample Depth: 3

Lab Sample ID: 890-1876-7
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 17:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 17:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 17:34	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		01/28/22 12:00	01/28/22 17:34	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/28/22 12:00	01/28/22 17:34	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/28/22 12:00	01/28/22 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/28/22 12:00*	*01/28/22 17:34*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*01/28/22 12:00*	*01/28/22 17:34*	*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			02/02/22 16:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**68.8**		49.9		mg/Kg			01/31/22 13:14	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	49.9		mg/Kg		01/31/22 11:10	02/01/22 13:46	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH04
Date Collected: 01/25/22 10:34
Date Received: 01/26/22 16:08
Sample Depth: 3

Lab Sample ID: 890-1876-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	**68.8**		49.9		mg/Kg		01/31/22 11:10	02/01/22 13:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*01/31/22 11:10*	*02/01/22 13:46*	*1*
o-Terphenyl	*103*		*70 - 130*	*01/31/22 11:10*	*02/01/22 13:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3320**		25.0		mg/Kg			02/01/22 19:22	5

Client Sample ID: BH04
Date Collected: 01/25/22 10:40
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-8
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/28/22 12:00	01/28/22 17:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/28/22 12:00	01/28/22 17:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/28/22 12:00	01/28/22 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/28/22 12:00*	*01/28/22 17:54*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/28/22 12:00*	*01/28/22 17:54*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/02/22 16:52	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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 14:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 14:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*01/31/22 11:10*	*02/01/22 14:08*	*1*
o-Terphenyl	*86*		*70 - 130*	*01/31/22 11:10*	*02/01/22 14:08*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH04
Date Collected: 01/25/22 10:40
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-8
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2610		25.0		mg/Kg			02/01/22 19:38	5

Client Sample ID: BH05
Date Collected: 01/25/22 13:20
Date Received: 01/26/22 16:08
Sample Depth: 2

Lab Sample ID: 890-1876-9
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 18:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 18:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 18:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/28/22 12:00	01/28/22 18:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 12:00	01/28/22 18:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/28/22 12:00	01/28/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*01/28/22 12:00*	*01/28/22 18:14*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/28/22 12:00*	*01/28/22 18:14*	*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			02/02/22 16:52	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			01/31/22 13:14	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	49.9		mg/Kg		01/31/22 11:10	02/01/22 14:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 14:30	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 11:10	02/01/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*68*	*S1-*	*70 - 130*	*01/31/22 11:10*	*02/01/22 14:30*	*1*
o-Terphenyl	*76*		*70 - 130*	*01/31/22 11:10*	*02/01/22 14:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		5.02		mg/Kg			02/01/22 19:56	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH05

Date Collected: 01/25/22 13:25
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-10

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:35	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:35	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:35	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		01/28/22 12:00	01/28/22 18:35	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:35	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		01/28/22 12:00	01/28/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*01/28/22 12:00*	*01/28/22 18:35*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*01/28/22 12:00*	*01/28/22 18:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			02/02/22 16:52	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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 15:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 15:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*66*	*S1-*	*70 - 130*	*01/31/22 11:10*	*02/01/22 15:13*	*1*
o-Terphenyl	*76*		*70 - 130*	*01/31/22 11:10*	*02/01/22 15:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.6**		4.98		mg/Kg			02/02/22 10:49	1

Client Sample ID: BH06

Date Collected: 01/25/22 14:10
Date Received: 01/26/22 16:08
Sample Depth: 1

Lab Sample ID: 890-1876-11

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:55	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:55	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:55	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/28/22 12:00	01/28/22 18:55	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/28/22 12:00	01/28/22 18:55	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/28/22 12:00	01/28/22 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/28/22 12:00*	*01/28/22 18:55*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH06
Date Collected: 01/25/22 14:10
Date Received: 01/26/22 16:08
Sample Depth: 1

Lab Sample ID: 890-1876-11
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*01/28/22 12:00*	*01/28/22 18:55*	*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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/31/22 11:10	02/01/22 15:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/31/22 11:10	02/01/22 15:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/31/22 11:10	02/01/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*01/31/22 11:10*	*02/01/22 15:35*	*1*
o-Terphenyl	*78*		*70 - 130*	*01/31/22 11:10*	*02/01/22 15:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**601**		5.03	mg/Kg			02/01/22 20:08	1

Client Sample ID: BH06
Date Collected: 01/25/22 14:28
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-12
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/28/22 12:00	01/28/22 19:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/28/22 12:00	01/28/22 19:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/28/22 12:00	01/28/22 19:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/28/22 12:00	01/28/22 19:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/28/22 12:00	01/28/22 19:16	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/28/22 12:00	01/28/22 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*01/28/22 12:00*	*01/28/22 19:16*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/28/22 12:00*	*01/28/22 19:16*	*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			01/31/22 13:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/31/22 11:10	02/01/22 15:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/31/22 11:10	02/01/22 15:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/31/22 11:10	02/01/22 15:57	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH06

Date Collected: 01/25/22 14:28
Date Received: 01/26/22 16:08
Sample Depth: 4

Lab Sample ID: 890-1876-12

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*01/31/22 11:10*	*02/01/22 15:57*	*1*
o-Terphenyl	*86*		*70 - 130*	*01/31/22 11:10*	*02/01/22 15:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	464		4.98		mg/Kg			02/01/22 20:14	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

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)
890-1872-A-3-C MS	Matrix Spike	100	88
890-1872-A-3-D MSD	Matrix Spike Duplicate	100	90
890-1876-1	BH01	111	100
890-1876-2	BH01	117	101
890-1876-3	BH02	123	103
890-1876-4	BH02	114	101
890-1876-5	BH03	108	75
890-1876-6	BH03	121	89
890-1876-7	BH04	116	82
890-1876-8	BH04	112	99
890-1876-9	BH05	130	100
890-1876-10	BH05	123	112
890-1876-11	BH06	115	104
890-1876-12	BH06	128	89
LCS 880-17922/1-A	Lab Control Sample	100	101
LCSD 880-17922/2-A	Lab Control Sample Dup	102	97
MB 880-17922/5-A	Method Blank	111	100

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1876-1	BH01	81	90
890-1876-2	BH01	81	92
890-1876-3	BH02	79	90
890-1876-4	BH02	77	86
890-1876-5	BH03	82	93
890-1876-6	BH03	76	84
890-1876-7	BH04	91	103
890-1876-8	BH04	72	86
890-1876-9	BH05	68 S1-	76
890-1876-10	BH05	66 S1-	76
890-1876-11	BH06	69 S1-	78
890-1876-12	BH06	77	86
890-1883-A-1-C MS	Matrix Spike	69 S1-	69 S1-
890-1883-A-1-D MSD	Matrix Spike Duplicate	69 S1-	70
LCS 880-18143/2-A	Lab Control Sample	90	96
LCSD 880-18143/3-A	Lab Control Sample Dup	89	93
MB 880-18143/1-A	Method Blank	82	97

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17922/5-A
Matrix: Solid
Analysis Batch: 17974

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17922

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 11:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 11:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 11:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/28/22 07:30	01/28/22 11:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 11:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/28/22 07:30	01/28/22 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*01/28/22 07:30*	*01/28/22 11:18*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/28/22 07:30*	*01/28/22 11:18*	*1*

Lab Sample ID: LCS 880-17922/1-A
Matrix: Solid
Analysis Batch: 17974

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07650		mg/Kg		76	70 - 130		
Toluene			0.100	0.07336		mg/Kg		73	70 - 130		
Ethylbenzene			0.100	0.07414		mg/Kg		74	70 - 130		
m-Xylene & p-Xylene			0.200	0.1514		mg/Kg		76	70 - 130		
o-Xylene			0.100	0.07781		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-17922/2-A
Matrix: Solid
Analysis Batch: 17974

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17922

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08267		mg/Kg		83	70 - 130	8	35
Toluene			0.100	0.08204		mg/Kg		82	70 - 130	11	35
Ethylbenzene			0.100	0.08305		mg/Kg		83	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1720		mg/Kg		86	70 - 130	13	35
o-Xylene			0.100	0.08577		mg/Kg		86	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-1872-A-3-C MS
Matrix: Solid
Analysis Batch: 17974

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00201	U	0.0998	0.08204		mg/Kg		82	70 - 130		
Toluene	<0.00201	U	0.0998	0.07890		mg/Kg		79	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

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

Lab Sample ID: 890-1872-A-3-C MS
Matrix: Solid
Analysis Batch: 17974

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00201	U	0.0998	0.08289		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1698		mg/Kg		85	70 - 130
o-Xylene	<0.00201	U	0.0998	0.08492		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 890-1872-A-3-D MSD
Matrix: Solid
Analysis Batch: 17974

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 17922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.08226		mg/Kg		82	70 - 130	0	35
Toluene	<0.00201	U	0.0998	0.07930		mg/Kg		79	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0998	0.08132		mg/Kg		81	70 - 130	2	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1645		mg/Kg		82	70 - 130	3	35
o-Xylene	<0.00201	U	0.0998	0.08062		mg/Kg		81	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

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

Lab Sample ID: MB 880-18143/1-A
Matrix: Solid
Analysis Batch: 18225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18143

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		01/31/22 11:10	02/01/22 09:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 09:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 11:10	02/01/22 09:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*01/31/22 11:10*	*02/01/22 09:23*	*1*
o-Terphenyl	*97*		*70 - 130*	*01/31/22 11:10*	*02/01/22 09:23*	*1*

Lab Sample ID: LCS 880-18143/2-A
Matrix: Solid
Analysis Batch: 18225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18143

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	846.8		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1190		mg/Kg		119	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

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

Lab Sample ID: LCS 880-18143/2-A
Matrix: Solid
Analysis Batch: 18225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18143

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-18143/3-A
Matrix: Solid
Analysis Batch: 18225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18143

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	926.5		mg/Kg		93	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1204		mg/Kg		120	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 890-1883-A-1-C MS
Matrix: Solid
Analysis Batch: 18225

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18143

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	999	851.8		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	970.6		mg/Kg		95	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	69	S1-	70 - 130

Lab Sample ID: 890-1883-A-1-D MSD
Matrix: Solid
Analysis Batch: 18225

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18143

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	999	967.9		mg/Kg		95	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	999.6		mg/Kg		98	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	70		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18029/1-A
Matrix: Solid
Analysis Batch: 18094

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			02/01/22 17:20	1

Lab Sample ID: LCS 880-18029/2-A
Matrix: Solid
Analysis Batch: 18094

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	231.6		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-18029/3-A
Matrix: Solid
Analysis Batch: 18094

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	261.3		mg/Kg		105	90 - 110	12	20

Lab Sample ID: 890-1876-6 MS
Matrix: Solid
Analysis Batch: 18094

Client Sample ID: BH03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	2420	F1	1240	3559		mg/Kg		92	90 - 110		

Lab Sample ID: 890-1876-6 MSD
Matrix: Solid
Analysis Batch: 18094

Client Sample ID: BH03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2420	F1	1240	3183	F1	mg/Kg		62	90 - 110	11	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

GC VOA

Prep Batch: 17922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-1	BH01	Total/NA	Solid	5035	
890-1876-2	BH01	Total/NA	Solid	5035	
890-1876-3	BH02	Total/NA	Solid	5035	
890-1876-4	BH02	Total/NA	Solid	5035	
890-1876-5	BH03	Total/NA	Solid	5035	
890-1876-6	BH03	Total/NA	Solid	5035	
890-1876-7	BH04	Total/NA	Solid	5035	
890-1876-8	BH04	Total/NA	Solid	5035	
890-1876-9	BH05	Total/NA	Solid	5035	
890-1876-10	BH05	Total/NA	Solid	5035	
890-1876-11	BH06	Total/NA	Solid	5035	
890-1876-12	BH06	Total/NA	Solid	5035	
MB 880-17922/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17922/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17922/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1872-A-3-C MS	Matrix Spike	Total/NA	Solid	5035	
890-1872-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 17974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-1	BH01	Total/NA	Solid	8021B	17922
890-1876-2	BH01	Total/NA	Solid	8021B	17922
890-1876-3	BH02	Total/NA	Solid	8021B	17922
890-1876-4	BH02	Total/NA	Solid	8021B	17922
890-1876-5	BH03	Total/NA	Solid	8021B	17922
890-1876-6	BH03	Total/NA	Solid	8021B	17922
890-1876-7	BH04	Total/NA	Solid	8021B	17922
890-1876-8	BH04	Total/NA	Solid	8021B	17922
890-1876-9	BH05	Total/NA	Solid	8021B	17922
890-1876-10	BH05	Total/NA	Solid	8021B	17922
890-1876-11	BH06	Total/NA	Solid	8021B	17922
890-1876-12	BH06	Total/NA	Solid	8021B	17922
MB 880-17922/5-A	Method Blank	Total/NA	Solid	8021B	17922
LCS 880-17922/1-A	Lab Control Sample	Total/NA	Solid	8021B	17922
LCSD 880-17922/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17922
890-1872-A-3-C MS	Matrix Spike	Total/NA	Solid	8021B	17922
890-1872-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	17922

Analysis Batch: 18419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-1	BH01	Total/NA	Solid	Total BTEX	
890-1876-2	BH01	Total/NA	Solid	Total BTEX	
890-1876-3	BH02	Total/NA	Solid	Total BTEX	
890-1876-4	BH02	Total/NA	Solid	Total BTEX	
890-1876-5	BH03	Total/NA	Solid	Total BTEX	
890-1876-6	BH03	Total/NA	Solid	Total BTEX	
890-1876-7	BH04	Total/NA	Solid	Total BTEX	
890-1876-8	BH04	Total/NA	Solid	Total BTEX	
890-1876-9	BH05	Total/NA	Solid	Total BTEX	
890-1876-10	BH05	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

GC Semi VOA

Prep Batch: 18143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-1	BH01	Total/NA	Solid	8015NM Prep	
890-1876-2	BH01	Total/NA	Solid	8015NM Prep	
890-1876-3	BH02	Total/NA	Solid	8015NM Prep	
890-1876-4	BH02	Total/NA	Solid	8015NM Prep	
890-1876-5	BH03	Total/NA	Solid	8015NM Prep	
890-1876-6	BH03	Total/NA	Solid	8015NM Prep	
890-1876-7	BH04	Total/NA	Solid	8015NM Prep	
890-1876-8	BH04	Total/NA	Solid	8015NM Prep	
890-1876-9	BH05	Total/NA	Solid	8015NM Prep	
890-1876-10	BH05	Total/NA	Solid	8015NM Prep	
890-1876-11	BH06	Total/NA	Solid	8015NM Prep	
890-1876-12	BH06	Total/NA	Solid	8015NM Prep	
MB 880-18143/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18143/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18143/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1883-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1883-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-1	BH01	Total/NA	Solid	8015 NM	
890-1876-2	BH01	Total/NA	Solid	8015 NM	
890-1876-3	BH02	Total/NA	Solid	8015 NM	
890-1876-4	BH02	Total/NA	Solid	8015 NM	
890-1876-5	BH03	Total/NA	Solid	8015 NM	
890-1876-6	BH03	Total/NA	Solid	8015 NM	
890-1876-7	BH04	Total/NA	Solid	8015 NM	
890-1876-8	BH04	Total/NA	Solid	8015 NM	
890-1876-9	BH05	Total/NA	Solid	8015 NM	
890-1876-10	BH05	Total/NA	Solid	8015 NM	
890-1876-11	BH06	Total/NA	Solid	8015 NM	
890-1876-12	BH06	Total/NA	Solid	8015 NM	

Analysis Batch: 18225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-1	BH01	Total/NA	Solid	8015B NM	18143
890-1876-2	BH01	Total/NA	Solid	8015B NM	18143
890-1876-3	BH02	Total/NA	Solid	8015B NM	18143
890-1876-4	BH02	Total/NA	Solid	8015B NM	18143
890-1876-5	BH03	Total/NA	Solid	8015B NM	18143
890-1876-6	BH03	Total/NA	Solid	8015B NM	18143
890-1876-7	BH04	Total/NA	Solid	8015B NM	18143
890-1876-8	BH04	Total/NA	Solid	8015B NM	18143
890-1876-9	BH05	Total/NA	Solid	8015B NM	18143
890-1876-10	BH05	Total/NA	Solid	8015B NM	18143
890-1876-11	BH06	Total/NA	Solid	8015B NM	18143
890-1876-12	BH06	Total/NA	Solid	8015B NM	18143
MB 880-18143/1-A	Method Blank	Total/NA	Solid	8015B NM	18143
LCS 880-18143/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18143
LCSD 880-18143/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18143
890-1883-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	18143

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

GC Semi VOA (Continued)

Analysis Batch: 18225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1883-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18143

HPLC/IC

Leach Batch: 18029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-5	BH03	Soluble	Solid	DI Leach	
890-1876-6	BH03	Soluble	Solid	DI Leach	
890-1876-7	BH04	Soluble	Solid	DI Leach	
890-1876-8	BH04	Soluble	Solid	DI Leach	
890-1876-9	BH05	Soluble	Solid	DI Leach	
890-1876-10	BH05	Soluble	Solid	DI Leach	
890-1876-11	BH06	Soluble	Solid	DI Leach	
890-1876-12	BH06	Soluble	Solid	DI Leach	
MB 880-18029/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18029/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18029/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1876-6 MS	BH03	Soluble	Solid	DI Leach	
890-1876-6 MSD	BH03	Soluble	Solid	DI Leach	

Analysis Batch: 18094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1876-5	BH03	Soluble	Solid	300.0	18029
890-1876-6	BH03	Soluble	Solid	300.0	18029
890-1876-7	BH04	Soluble	Solid	300.0	18029
890-1876-8	BH04	Soluble	Solid	300.0	18029
890-1876-9	BH05	Soluble	Solid	300.0	18029
890-1876-10	BH05	Soluble	Solid	300.0	18029
890-1876-11	BH06	Soluble	Solid	300.0	18029
890-1876-12	BH06	Soluble	Solid	300.0	18029
MB 880-18029/1-A	Method Blank	Soluble	Solid	300.0	18029
LCS 880-18029/2-A	Lab Control Sample	Soluble	Solid	300.0	18029
LCSD 880-18029/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18029
890-1876-6 MS	BH03	Soluble	Solid	300.0	18029
890-1876-6 MSD	BH03	Soluble	Solid	300.0	18029

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH01
Date Collected: 01/25/22 09:10
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 14:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 11:34	AJ	XEN MID

Client Sample ID: BH01
Date Collected: 01/25/22 09:24
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 14:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 11:56	AJ	XEN MID

Client Sample ID: BH02
Date Collected: 01/25/22 09:32
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 16:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 12:18	AJ	XEN MID

Client Sample ID: BH02
Date Collected: 01/25/22 09:50
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 16:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 12:40	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH03
Date Collected: 01/25/22 10:08
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 16:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 13:02	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		5			18094	02/01/22 18:58	CH	XEN MID

Client Sample ID: BH03
Date Collected: 01/25/22 10:14
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 17:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 13:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		5			18094	02/01/22 19:04	CH	XEN MID

Client Sample ID: BH04
Date Collected: 01/25/22 10:34
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 17:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 13:46	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		5			18094	02/01/22 19:22	CH	XEN MID

Client Sample ID: BH04
Date Collected: 01/25/22 10:40
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 17:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH04
Date Collected: 01/25/22 10:40
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 14:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		5			18094	02/01/22 19:38	CH	XEN MID

Client Sample ID: BH05
Date Collected: 01/25/22 13:20
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 18:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 14:30	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		1			18094	02/01/22 19:56	CH	XEN MID

Client Sample ID: BH05
Date Collected: 01/25/22 13:25
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 18:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18419	02/02/22 16:52	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 15:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		1			18094	02/02/22 10:49	CH	XEN MID

Client Sample ID: BH06
Date Collected: 01/25/22 14:10
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 18:55	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 15:35	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Client Sample ID: BH06
Date Collected: 01/25/22 14:10
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		1			18094	02/01/22 20:08	CH	XEN MID

Client Sample ID: BH06
Date Collected: 01/25/22 14:28
Date Received: 01/26/22 16:08

Lab Sample ID: 890-1876-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	17922	01/28/22 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17974	01/28/22 19:16	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18170	01/31/22 13:14	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18143	01/31/22 11:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 15:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18029	01/28/22 10:48	CH	XEN MID
Soluble	Analysis	300.0		1			18094	02/01/22 20:14	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Laboratory: Eurofins 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.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-1876-1
SDG: Eddy

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1876-1	BH01	Solid	01/25/22 09:10	01/26/22 16:08	1
890-1876-2	BH01	Solid	01/25/22 09:24	01/26/22 16:08	4
890-1876-3	BH02	Solid	01/25/22 09:32	01/26/22 16:08	1
890-1876-4	BH02	Solid	01/25/22 09:50	01/26/22 16:08	4
890-1876-5	BH03	Solid	01/25/22 10:08	01/26/22 16:08	3
890-1876-6	BH03	Solid	01/25/22 10:14	01/26/22 16:08	4
890-1876-7	BH04	Solid	01/25/22 10:34	01/26/22 16:08	3
890-1876-8	BH04	Solid	01/25/22 10:40	01/26/22 16:08	4
890-1876-9	BH05	Solid	01/25/22 13:20	01/26/22 16:08	2
890-1876-10	BH05	Solid	01/25/22 13:25	01/26/22 16:08	4
890-1876-11	BH06	Solid	01/25/22 14:10	01/26/22 16:08	1
890-1876-12	BH06	Solid	01/25/22 14:28	01/26/22 16:08	4

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	→
Company Name:	WSP USA	Company Name:	→
Address:	3300 N A Street	Address:	→
City, State ZIP:	Midland TX 79705	City, State ZIP:	→
Phone:	251-702-2329	Email:	Anna.Byers@wsp.com

Work Order Comments

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

Project Name:	RDU 11	Turn Around	
Project Number:	31403360.031	☑ Routine ☐ Rush	
Project Location:	EDDY	Due Date:	
Sampler's Name:	Mercy Ranch	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	31403360.031		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	T-NM001	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2	1.0
Total Containers:		Corrected Temperature:	1.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BTEX (EPA 8021B)	TPH (EPA 8015 Mod)	Chloride (300.0)	Sample Comments
BH01	S	11/25/2022	0910	1'	Grab		X	X	X	
BH01	C	11/25/2022	0924	4'			X	X	X	
BH02	S	11/25/2022	0932	1'			X	X	X	
BH02	S	11/25/2022	0950	4'			X	X	X	
BH03	S	11/25/2022	1008	3'			X	X	X	
BH03	C	11/25/2022	1014	4'			X	X	X	
BH04	S	11/25/2022	1034	3'			X	X	X	
BH04	S	11/25/2022	1048	4'			X	X	X	
BH05	S	11/25/2022	1320	1'			X	X	X	
BH05	S	11/25/2022	1325	4'	↓		X	X	X	

890-1876 Chain of Custody

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: NaSO$_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins 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			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	→
Company Name:	WSP USA	Company Name:	→
Address:	3300 N A Street	Address:	→
City, State ZIP:	Midland Tx 79705	City, State ZIP:	→
Phone:	281-702-2329	Email:	Anna-Byers@wsp.com

Work Order Comments

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

Project Name:	RDU 11	Turn Around	
Project Number:	31403360.031	☑ Routine ☐ Rush	
Project Location:	Eddy	Due Date:	
Sampler's Name:	Macy Roach	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	31403360.031		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:	Slight Frost	
Total Containers:		Corrected Temperature:	Page	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX (EPA 8021B)	TPH (EPA 8015 Mod)	Chloride (EPA 300.0)	Sample Comments
BH06	S	1/25/2022	1410	1'	Grab			X	X	X	
BH06	S	1/25/2022	1428	4'	↓			X	X	X	

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

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 SiO_2 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 Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins 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 Macy	N. Clark	1/26/22 4:09	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1876-1
SDG Number: Eddy

Login Number: 1876
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1876-1
SDG Number: Eddy

Login Number: 1876
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/28/22 12:32 PM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2003-1
Laboratory Sample Delivery Group: 31403360.03
Client Project/Site: RDU 11

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

Attn: Joseph Hernandez

Authorized for release by:
3/3/2022 3:57:39 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: RDU 11

Laboratory Job ID: 890-2003-1
SDG: 31403360.03

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Eurofins Carlsbad
3/3/2022

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2003-1
Project/Site: RDU 11 SDG: 31403360.03

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Job ID: 890-2003-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2003-1

Receipt
The samples were received on 2/23/2022 11:26 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 1.6°C

GC VOA
Method 8021B: The following samples were diluted due to the nature of the sample matrix: (890-2009-A-3-I), (890-2009-A-3-G MS) and (890-2009-A-3-H MSD) at 25.0, 25.0 and 25.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20605 and analytical batch 880-20710 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH10 (890-2003-7), (LCS 880-20253/2-A) and (880-11670-A-1-D MS). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH07

Lab Sample ID: 890-2003-1
Matrix: Solid

Date Collected: 02/18/22 10:45
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 02:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 02:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 02:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/22 16:00	03/03/22 02:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 02:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/22 16:00	03/03/22 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/02/22 16:00*	*03/03/22 02:32*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/02/22 16:00*	*03/03/22 02:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/28/22 10:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**81.7**		50.0		mg/Kg			02/25/22 15:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 03:14	1
Diesel Range Organics (Over C10-C28)	**81.7**		50.0		mg/Kg		02/24/22 15:51	02/25/22 03:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/24/22 15:51*	*02/25/22 03:14*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/24/22 15:51*	*02/25/22 03:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**582**		24.9		mg/Kg			02/27/22 14:24	5

Client Sample ID: BH07

Lab Sample ID: 890-2003-2
Matrix: Solid

Date Collected: 02/18/22 10:55
Date Received: 02/23/22 11:26
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		03/02/22 16:00	03/03/22 02:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/02/22 16:00	03/03/22 02:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/02/22 16:00	03/03/22 02:59	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/02/22 16:00	03/03/22 02:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/02/22 16:00	03/03/22 02:59	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/02/22 16:00	03/03/22 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*03/02/22 16:00*	*03/03/22 02:59*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH07

Lab Sample ID: 890-2003-2
Matrix: Solid

Date Collected: 02/18/22 10:55
Date Received: 02/23/22 11:26
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/02/22 16:00*	*03/03/22 02:59*	*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			02/28/22 10:23	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			02/25/22 15:07	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	49.9		mg/Kg		02/24/22 15:51	02/25/22 03:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/22 15:51	02/25/22 03:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/22 15:51	02/25/22 03:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*96*		*70 - 130*	*02/24/22 15:51*	*02/25/22 03:35*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/24/22 15:51*	*02/25/22 03:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**510**		5.00		mg/Kg			02/27/22 14:33	1

Client Sample ID: BH08

Lab Sample ID: 890-2003-3
Matrix: Solid

Date Collected: 02/18/22 11:00
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 03:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 03:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 03:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/02/22 16:00	03/03/22 03:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 03:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/02/22 16:00	03/03/22 03:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/02/22 16:00*	*03/03/22 03:25*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/02/22 16:00*	*03/03/22 03:25*	*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			02/28/22 10:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**108**		50.0		mg/Kg			02/25/22 15:07	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH08
Date Collected: 02/18/22 11:00
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Lab Sample ID: 890-2003-3
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	50.0		mg/Kg		02/24/22 15:51	02/25/22 03:55	1
Diesel Range Organics (Over C10-C28)	**108**		50.0		mg/Kg		02/24/22 15:51	02/25/22 03:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*02/24/22 15:51*	*02/25/22 03:55*	*1*
o-Terphenyl	*74*		*70 - 130*	*02/24/22 15:51*	*02/25/22 03:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**492**		25.1		mg/Kg			02/27/22 14:42	5

Client Sample ID: BH08
Date Collected: 02/18/22 11:10
Date Received: 02/23/22 11:26
Sample Depth: 4

Lab Sample ID: 890-2003-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 03:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 03:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 03:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/22 16:00	03/03/22 03:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/22 16:00	03/03/22 03:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/22 16:00	03/03/22 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*59*	*S1-*	*70 - 130*	*03/02/22 16:00*	*03/03/22 03:52*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/02/22 16:00*	*03/03/22 03:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/28/22 10:23	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			02/25/22 15:07	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	49.9		mg/Kg		02/24/22 15:51	02/25/22 04:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/22 15:51	02/25/22 04:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/22 15:51	02/25/22 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*02/24/22 15:51*	*02/25/22 04:16*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/24/22 15:51*	*02/25/22 04:16*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH08

Lab Sample ID: 890-2003-4
Matrix: Solid
Date Collected: 02/18/22 11:10
Date Received: 02/23/22 11:26
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.9		4.98		mg/Kg			02/27/22 14:51	1

Client Sample ID: BH09

Lab Sample ID: 890-2003-5
Matrix: Solid
Date Collected: 02/18/22 12:30
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 22:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 22:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 22:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/22 08:30	03/01/22 22:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 22:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/22 08:30	03/01/22 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/01/22 08:30*	*03/01/22 22:15*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/01/22 08:30*	*03/01/22 22:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/28/22 10:23	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			02/25/22 15:07	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	49.9		mg/Kg		02/24/22 15:51	02/25/22 04:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/24/22 15:51	02/25/22 04:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/24/22 15:51	02/25/22 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*02/24/22 15:51*	*02/25/22 04:57*	*1*
o-Terphenyl	*83*		*70 - 130*	*02/24/22 15:51*	*02/25/22 04:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	365		5.05		mg/Kg			02/27/22 14:59	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH09

Lab Sample ID: 890-2003-6
Matrix: Solid
Date Collected: 02/18/22 12:45
Date Received: 02/23/22 11:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/22 08:30	03/01/22 22:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/22 08:30	03/01/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/01/22 08:30*	*03/01/22 22:36*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/22 08:30*	*03/01/22 22:36*	*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			02/28/22 10:23	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			02/25/22 15:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 05:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 05:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*02/24/22 15:51*	*02/25/22 05:17*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/24/22 15:51*	*02/25/22 05:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**347**		5.00		mg/Kg			02/27/22 15:26	1

Client Sample ID: BH10

Lab Sample ID: 890-2003-7
Matrix: Solid
Date Collected: 02/18/22 13:05
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/01/22 08:30	03/01/22 22:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 22:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/01/22 08:30	03/01/22 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/01/22 08:30*	*03/01/22 22:56*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH10

Lab Sample ID: 890-2003-7
Matrix: Solid
Date Collected: 02/18/22 13:05
Date Received: 02/23/22 11:26
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/01/22 08:30*	*03/01/22 22:56*	*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			02/28/22 10:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1660**		250	mg/Kg			02/25/22 15:07	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	<250	U	250	mg/Kg		02/24/22 15:51	02/25/22 05:38	5
Diesel Range Organics (Over C10-C28)	**1660**		250	mg/Kg		02/24/22 15:51	02/25/22 05:38	5
OII Range Organics (Over C28-C36)	<250	U	250	mg/Kg		02/24/22 15:51	02/25/22 05:38	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*54*	*S1-*	*70 - 130*	*02/24/22 15:51*	*02/25/22 05:38*	*5*
o-Terphenyl	*81*		*70 - 130*	*02/24/22 15:51*	*02/25/22 05:38*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**906**		4.99	mg/Kg			02/27/22 15:35	1

Client Sample ID: BH10

Lab Sample ID: 890-2003-8
Matrix: Solid
Date Collected: 02/18/22 13:20
Date Received: 02/23/22 11:26
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		03/01/22 08:30	03/01/22 23:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/01/22 08:30	03/01/22 23:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/01/22 08:30	03/01/22 23:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/01/22 08:30	03/01/22 23:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/01/22 08:30	03/01/22 23:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/01/22 08:30	03/01/22 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/01/22 08:30*	*03/01/22 23:16*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/01/22 08:30*	*03/01/22 23:16*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/28/22 10:23	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			02/25/22 15:07	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH10

Lab Sample ID: 890-2003-8
Matrix: Solid
Date Collected: 02/18/22 13:20
Date Received: 02/23/22 11:26
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 04:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 04:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/25/22 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/24/22 15:51*	*02/25/22 04:36*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/24/22 15:51*	*02/25/22 04:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18000**		253		mg/Kg			02/27/22 16:01	50

Client Sample ID: BH11

Lab Sample ID: 890-2003-9
Matrix: Solid
Date Collected: 02/18/22 13:30
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 23:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 23:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 23:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/22 08:30	03/01/22 23:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/22 08:30	03/01/22 23:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/22 08:30	03/01/22 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/01/22 08:30*	*03/01/22 23:37*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/01/22 08:30*	*03/01/22 23:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/28/22 10:23	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			02/25/22 15:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 17:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 17:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*02/25/22 08:25*	*02/25/22 17:05*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/25/22 08:25*	*02/25/22 17:05*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH11

Lab Sample ID: 890-2003-9
Matrix: Solid
Date Collected: 02/18/22 13:30
Date Received: 02/23/22 11:26
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	135		4.95		mg/Kg			02/27/22 16:10	1

Client Sample ID: BH11

Lab Sample ID: 890-2003-10
Matrix: Solid
Date Collected: 02/18/22 13:45
Date Received: 02/23/22 11:26
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 23:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 23:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 23:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/01/22 08:30	03/01/22 23:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 23:57	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/01/22 08:30	03/01/22 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/01/22 08:30*	*03/01/22 23:57*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/01/22 08:30*	*03/01/22 23:57*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/28/22 10:23	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			02/25/22 15:07	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 17:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 17:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*02/25/22 08:25*	*02/25/22 17:25*	*1*
o-Terphenyl	*116*		*70 - 130*	*02/25/22 08:25*	*02/25/22 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3220		25.3		mg/Kg			02/27/22 16:19	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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)
880-11907-A-1-B MS	Matrix Spike	98	106
880-11907-A-1-C MSD	Matrix Spike Duplicate	94	98
890-2003-1	BH07	88	91
890-2003-2	BH07	78	94
890-2003-3	BH08	88	95
890-2003-4	BH08	59 S1-	92
890-2003-5	BH09	111	97
890-2003-6	BH09	104	93
890-2003-7	BH10	105	102
890-2003-8	BH10	105	101
890-2003-9	BH11	100	90
890-2003-10	BH11	105	103
890-2009-A-3-G MS	Matrix Spike	72	73
890-2009-A-3-H MSD	Matrix Spike Duplicate	122	75
CB MB	Method Blank	51 S1-	99
LCS 880-20526/1-A	Lab Control Sample	98	101
LCS 880-20605/1-A	Lab Control Sample	101	124
LCSD 880-20526/2-A	Lab Control Sample Dup	101	103
LCSD 880-20605/2-A	Lab Control Sample Dup	97	102
MB 880-20526/5-A	Method Blank	97	98
MB 880-20605/5-A	Method Blank	49 S1-	101

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)
880-11670-A-1-D MS	Matrix Spike	69 S1-	73
880-11670-A-1-E MSD	Matrix Spike Duplicate	82	77
890-2003-1	BH07	88	86
890-2003-2	BH07	96	98
890-2003-3	BH08	76	74
890-2003-4	BH08	98	100
890-2003-5	BH09	81	83
890-2003-6	BH09	83	85
890-2003-7	BH10	54 S1-	81
890-2003-8	BH10	84	89
890-2003-9	BH11	89	85
890-2003-10	BH11	113	116
890-2004-A-1-E MS	Matrix Spike	94	81
890-2004-A-1-F MSD	Matrix Spike Duplicate	92	80
LCS 880-20293/2-A	Lab Control Sample	80	81
LCSD 880-20293/3-A	Lab Control Sample Dup	103	104
MB 880-20293/1-A	Method Blank	105	115

Surrogate Legend

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO2	OTPH2										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
LCS 880-20253/2-A	Lab Control Sample	132 S1+	136 S1+										
LCSD 880-20253/3-A	Lab Control Sample Dup	113	128										
MB 880-20253/1-A	Method Blank	97	102										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20526/5-A
Matrix: Solid
Analysis Batch: 20577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20526

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 13:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 13:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 13:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/22 08:30	03/01/22 13:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/22 08:30	03/01/22 13:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/22 08:30	03/01/22 13:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/01/22 08:30*	*03/01/22 13:39*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/01/22 08:30*	*03/01/22 13:39*	*1*

Lab Sample ID: LCS 880-20526/1-A
Matrix: Solid
Analysis Batch: 20577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20526

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09731		mg/Kg		97	70 - 130		
Toluene			0.100	0.09402		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09440		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.2156		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1049		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-20526/2-A
Matrix: Solid
Analysis Batch: 20577

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20526

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1030		mg/Kg		103	70 - 130	6	35
Toluene			0.100	0.09946		mg/Kg		99	70 - 130	6	35
Ethylbenzene			0.100	0.1007		mg/Kg		101	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2324		mg/Kg		116	70 - 130	7	35
o-Xylene			0.100	0.1148		mg/Kg		115	70 - 130	9	35

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

Lab Sample ID: 890-2009-A-3-G MS
Matrix: Solid
Analysis Batch: 20577

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0498	U F1	0.101	0.8104	F1	mg/Kg		804	70 - 130		
Toluene	<0.0498	U F1 F2	0.101	1.626	F1	mg/Kg		1613	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Lab Sample ID: 890-2009-A-3-G MS
Matrix: Solid
Analysis Batch: 20577

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.0498	U F1 F2	0.101	2.379	F1	mg/Kg		2360	70 - 130
m-Xylene & p-Xylene	<0.0996	U F1 F2	0.202	9.133	F1	mg/Kg		4530	70 - 130
o-Xylene	<0.0498	U F1 F2	0.101	4.163	F1	mg/Kg		4130	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*

Lab Sample ID: 890-2009-A-3-H MSD
Matrix: Solid
Analysis Batch: 20577

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20526

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0498	U F1	0.0996	0.9509	F1	mg/Kg		955	70 - 130	16	35
Toluene	<0.0498	U F1 F2	0.0996	2.505	F1 F2	mg/Kg		2515	70 - 130	43	35
Ethylbenzene	<0.0498	U F1 F2	0.0996	3.505	F1 F2	mg/Kg		3519	70 - 130	38	35
m-Xylene & p-Xylene	<0.0996	U F1 F2	0.199	15.01	F1 F2	mg/Kg		7534	70 - 130	49	35
o-Xylene	<0.0498	U F1 F2	0.0996	7.358	F1 F2	mg/Kg		7387	70 - 130	55	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*

Lab Sample ID: MB 880-20605/5-A
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20605

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/02/22 16:00	03/02/22 20:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/02/22 16:00	03/02/22 20:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/02/22 16:00	03/02/22 20:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/02/22 16:00	03/02/22 20:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/02/22 16:00	03/02/22 20:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/02/22 16:00	03/02/22 20:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*49*	*S1-*	*70 - 130*	*03/02/22 16:00*	*03/02/22 20:20*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/02/22 16:00*	*03/02/22 20:20*	*1*

Lab Sample ID: LCS 880-20605/1-A
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1224		mg/Kg		122	70 - 130
Toluene	0.100	0.1044		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1072		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2201		mg/Kg		110	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Lab Sample ID: LCS 880-20605/1-A
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20605

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.1072		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*

Lab Sample ID: LCSD 880-20605/2-A
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20605

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1058		mg/Kg		106	70 - 130	15	35
Toluene			0.100	0.09560		mg/Kg		96	70 - 130	9	35
Ethylbenzene			0.100	0.1004		mg/Kg		100	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2080		mg/Kg		104	70 - 130	6	35
o-Xylene			0.100	0.09996		mg/Kg		100	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-11907-A-1-B MS
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.101	0.07733		mg/Kg		77	70 - 130		
Toluene	<0.00200	U F1	0.101	0.06553	F1	mg/Kg		65	70 - 130		
Ethylbenzene	<0.00200	U F1	0.101	0.06954	F1	mg/Kg		69	70 - 130		
m-Xylene & p-Xylene	<0.00401	U	0.201	0.1418		mg/Kg		70	70 - 130		
o-Xylene	<0.00200	U	0.101	0.07034		mg/Kg		70	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-11907-A-1-C MSD
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20605

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.07748		mg/Kg		77	70 - 130	0	35
Toluene	<0.00200	U F1	0.100	0.06554	F1	mg/Kg		65	70 - 130	0	35
Ethylbenzene	<0.00200	U F1	0.100	0.07098		mg/Kg		71	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.201	0.1454		mg/Kg		72	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.07552		mg/Kg		75	70 - 130	7	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Lab Sample ID: 880-11907-A-1-C MSD
Matrix: Solid
Analysis Batch: 20710

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20605

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

Lab Sample ID: CB MB
Matrix: Solid
Analysis Batch: 20710

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
Toluene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			03/02/22 17:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			03/02/22 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*51*	*S1-*	*70 - 130*		*03/02/22 17:14*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*		*03/02/22 17:14*	*1*

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

Lab Sample ID: MB 880-20253/1-A
Matrix: Solid
Analysis Batch: 20195

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20253

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		02/24/22 15:51	02/24/22 21:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/24/22 21:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/24/22 15:51	02/24/22 21:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*97*		*70 - 130*	*02/24/22 15:51*	*02/24/22 21:01*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/24/22 15:51*	*02/24/22 21:01*	*1*

Lab Sample ID: LCS 880-20253/2-A
Matrix: Solid
Analysis Batch: 20195

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20253

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	808.4		mg/Kg		81	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1182		mg/Kg		118	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	*132*	*S1+*	*70 - 130*
o-Terphenyl	*136*	*S1+*	*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Lab Sample ID: LCSD 880-20253/3-A
Matrix: Solid
Analysis Batch: 20195

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20253

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	876.2		mg/Kg		88	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	1084		mg/Kg		108	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*128*		*70 - 130*

Lab Sample ID: 880-11670-A-1-D MS
Matrix: Solid
Analysis Batch: 20195

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1187		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1120		mg/Kg		112	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*69*	*S1-*	*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Lab Sample ID: 880-11670-A-1-E MSD
Matrix: Solid
Analysis Batch: 20195

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20253

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	<50.0	U	998	1007		mg/Kg		97	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1187		mg/Kg		119	70 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*82*		*70 - 130*
o-Terphenyl	*77*		*70 - 130*

Lab Sample ID: MB 880-20293/1-A
Matrix: Solid
Analysis Batch: 20308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20293

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		02/25/22 08:25	02/25/22 12:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 12:36	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/25/22 08:25	02/25/22 12:36	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Lab Sample ID: MB 880-20293/1-A
Matrix: Solid
Analysis Batch: 20308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20293

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	02/25/22 08:25	02/25/22 12:36	1
o-Terphenyl	115		70 - 130	02/25/22 08:25	02/25/22 12:36	1

Lab Sample ID: LCS 880-20293/2-A
Matrix: Solid
Analysis Batch: 20308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20293

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	797.2		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	928.5		mg/Kg		93	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: LCSD 880-20293/3-A
Matrix: Solid
Analysis Batch: 20308

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20293

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	821.5		mg/Kg		82	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1019		mg/Kg		102	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 890-2004-A-1-E MS
Matrix: Solid
Analysis Batch: 20308

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20293

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1240		mg/Kg		124	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1269		mg/Kg		127	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Lab Sample ID: 890-2004-A-1-F MSD
Matrix: Solid
Analysis Batch: 20308

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20293

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	<50.0	U	998	1205		mg/Kg		121	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1237		mg/Kg		124	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20217/1-A
Matrix: Solid
Analysis Batch: 20409

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			02/27/22 12:29	1

Lab Sample ID: LCS 880-20217/2-A
Matrix: Solid
Analysis Batch: 20409

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	252.6		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-20217/3-A
Matrix: Solid
Analysis Batch: 20409

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	252.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-2003-5 MS
Matrix: Solid
Analysis Batch: 20409

Client Sample ID: BH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	365		253	614.6		mg/Kg		99	90 - 110		

Lab Sample ID: 890-2003-5 MSD
Matrix: Solid
Analysis Batch: 20409

Client Sample ID: BH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	365		253	611.6		mg/Kg		97	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

GC VOA

Analysis Batch: 20453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Total/NA	Solid	Total BTEX	
890-2003-2	BH07	Total/NA	Solid	Total BTEX	
890-2003-3	BH08	Total/NA	Solid	Total BTEX	
890-2003-4	BH08	Total/NA	Solid	Total BTEX	
890-2003-5	BH09	Total/NA	Solid	Total BTEX	
890-2003-6	BH09	Total/NA	Solid	Total BTEX	
890-2003-7	BH10	Total/NA	Solid	Total BTEX	
890-2003-8	BH10	Total/NA	Solid	Total BTEX	
890-2003-9	BH11	Total/NA	Solid	Total BTEX	
890-2003-10	BH11	Total/NA	Solid	Total BTEX	

Prep Batch: 20526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-5	BH09	Total/NA	Solid	5035	
890-2003-6	BH09	Total/NA	Solid	5035	
890-2003-7	BH10	Total/NA	Solid	5035	
890-2003-8	BH10	Total/NA	Solid	5035	
890-2003-9	BH11	Total/NA	Solid	5035	
890-2003-10	BH11	Total/NA	Solid	5035	
MB 880-20526/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20526/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20526/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2009-A-3-G MS	Matrix Spike	Total/NA	Solid	5035	
890-2009-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-5	BH09	Total/NA	Solid	8021B	20526
890-2003-6	BH09	Total/NA	Solid	8021B	20526
890-2003-7	BH10	Total/NA	Solid	8021B	20526
890-2003-8	BH10	Total/NA	Solid	8021B	20526
890-2003-9	BH11	Total/NA	Solid	8021B	20526
890-2003-10	BH11	Total/NA	Solid	8021B	20526
MB 880-20526/5-A	Method Blank	Total/NA	Solid	8021B	20526
LCS 880-20526/1-A	Lab Control Sample	Total/NA	Solid	8021B	20526
LCSD 880-20526/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20526
890-2009-A-3-G MS	Matrix Spike	Total/NA	Solid	8021B	20526
890-2009-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20526

Prep Batch: 20605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Total/NA	Solid	5035	
890-2003-2	BH07	Total/NA	Solid	5035	
890-2003-3	BH08	Total/NA	Solid	5035	
890-2003-4	BH08	Total/NA	Solid	5035	
MB 880-20605/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20605/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20605/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11907-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-11907-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

GC VOA

Analysis Batch: 20710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Total/NA	Solid	8021B	20605
890-2003-2	BH07	Total/NA	Solid	8021B	20605
890-2003-3	BH08	Total/NA	Solid	8021B	20605
890-2003-4	BH08	Total/NA	Solid	8021B	20605
CB MB	Method Blank	Total/NA	Solid	8021B	
MB 880-20605/5-A	Method Blank	Total/NA	Solid	8021B	20605
LCS 880-20605/1-A	Lab Control Sample	Total/NA	Solid	8021B	20605
LCSD 880-20605/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20605
880-11907-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	20605
880-11907-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20605

GC Semi VOA

Analysis Batch: 20195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Total/NA	Solid	8015B NM	20253
890-2003-2	BH07	Total/NA	Solid	8015B NM	20253
890-2003-3	BH08	Total/NA	Solid	8015B NM	20253
890-2003-4	BH08	Total/NA	Solid	8015B NM	20253
890-2003-5	BH09	Total/NA	Solid	8015B NM	20253
890-2003-6	BH09	Total/NA	Solid	8015B NM	20253
890-2003-7	BH10	Total/NA	Solid	8015B NM	20253
890-2003-8	BH10	Total/NA	Solid	8015B NM	20253
MB 880-20253/1-A	Method Blank	Total/NA	Solid	8015B NM	20253
LCS 880-20253/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20253
LCSD 880-20253/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20253
880-11670-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	20253
880-11670-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20253

Prep Batch: 20253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Total/NA	Solid	8015NM Prep	
890-2003-2	BH07	Total/NA	Solid	8015NM Prep	
890-2003-3	BH08	Total/NA	Solid	8015NM Prep	
890-2003-4	BH08	Total/NA	Solid	8015NM Prep	
890-2003-5	BH09	Total/NA	Solid	8015NM Prep	
890-2003-6	BH09	Total/NA	Solid	8015NM Prep	
890-2003-7	BH10	Total/NA	Solid	8015NM Prep	
890-2003-8	BH10	Total/NA	Solid	8015NM Prep	
MB 880-20253/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20253/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20253/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11670-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11670-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 20293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-9	BH11	Total/NA	Solid	8015NM Prep	
890-2003-10	BH11	Total/NA	Solid	8015NM Prep	
MB 880-20293/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20293/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

GC Semi VOA (Continued)

Prep Batch: 20293 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-20293/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2004-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2004-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-9	BH11	Total/NA	Solid	8015B NM	20293
890-2003-10	BH11	Total/NA	Solid	8015B NM	20293
MB 880-20293/1-A	Method Blank	Total/NA	Solid	8015B NM	20293
LCS 880-20293/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20293
LCSD 880-20293/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20293
890-2004-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	20293
890-2004-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20293

Analysis Batch: 20341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Total/NA	Solid	8015 NM	
890-2003-2	BH07	Total/NA	Solid	8015 NM	
890-2003-3	BH08	Total/NA	Solid	8015 NM	
890-2003-4	BH08	Total/NA	Solid	8015 NM	
890-2003-5	BH09	Total/NA	Solid	8015 NM	
890-2003-6	BH09	Total/NA	Solid	8015 NM	
890-2003-7	BH10	Total/NA	Solid	8015 NM	
890-2003-8	BH10	Total/NA	Solid	8015 NM	
890-2003-9	BH11	Total/NA	Solid	8015 NM	
890-2003-10	BH11	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Soluble	Solid	DI Leach	
890-2003-2	BH07	Soluble	Solid	DI Leach	
890-2003-3	BH08	Soluble	Solid	DI Leach	
890-2003-4	BH08	Soluble	Solid	DI Leach	
890-2003-5	BH09	Soluble	Solid	DI Leach	
890-2003-6	BH09	Soluble	Solid	DI Leach	
890-2003-7	BH10	Soluble	Solid	DI Leach	
890-2003-8	BH10	Soluble	Solid	DI Leach	
890-2003-9	BH11	Soluble	Solid	DI Leach	
890-2003-10	BH11	Soluble	Solid	DI Leach	
MB 880-20217/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20217/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20217/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2003-5 MS	BH09	Soluble	Solid	DI Leach	
890-2003-5 MSD	BH09	Soluble	Solid	DI Leach	

Analysis Batch: 20409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-1	BH07	Soluble	Solid	300.0	20217
890-2003-2	BH07	Soluble	Solid	300.0	20217

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

HPLC/IC (Continued)

Analysis Batch: 20409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2003-3	BH08	Soluble	Solid	300.0	20217
890-2003-4	BH08	Soluble	Solid	300.0	20217
890-2003-5	BH09	Soluble	Solid	300.0	20217
890-2003-6	BH09	Soluble	Solid	300.0	20217
890-2003-7	BH10	Soluble	Solid	300.0	20217
890-2003-8	BH10	Soluble	Solid	300.0	20217
890-2003-9	BH11	Soluble	Solid	300.0	20217
890-2003-10	BH11	Soluble	Solid	300.0	20217
MB 880-20217/1-A	Method Blank	Soluble	Solid	300.0	20217
LCS 880-20217/2-A	Lab Control Sample	Soluble	Solid	300.0	20217
LCSD 880-20217/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20217
890-2003-5 MS	BH09	Soluble	Solid	300.0	20217
890-2003-5 MSD	BH09	Soluble	Solid	300.0	20217

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH07
Date Collected: 02/18/22 10:45
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20605	03/02/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20710	03/03/22 02:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 03:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		5			20409	02/27/22 14:24	CH	XEN MID

Client Sample ID: BH07
Date Collected: 02/18/22 10:55
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	20605	03/02/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20710	03/03/22 02:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 03:35	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			20409	02/27/22 14:33	CH	XEN MID

Client Sample ID: BH08
Date Collected: 02/18/22 11:00
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20605	03/02/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20710	03/03/22 03:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 03:55	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		5			20409	02/27/22 14:42	CH	XEN MID

Client Sample ID: BH08
Date Collected: 02/18/22 11:10
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20605	03/02/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20710	03/03/22 03:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH08
Date Collected: 02/18/22 11:10
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 04:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			20409	02/27/22 14:51	CH	XEN MID

Client Sample ID: BH09
Date Collected: 02/18/22 12:30
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20577	03/01/22 22:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 04:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			20409	02/27/22 14:59	CH	XEN MID

Client Sample ID: BH09
Date Collected: 02/18/22 12:45
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20577	03/01/22 22:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 05:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			20409	02/27/22 15:26	CH	XEN MID

Client Sample ID: BH10
Date Collected: 02/18/22 13:05
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20577	03/01/22 22:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		5			20195	02/25/22 05:38	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Client Sample ID: BH10
Date Collected: 02/18/22 13:05
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			20409	02/27/22 15:35	CH	XEN MID

Client Sample ID: BH10
Date Collected: 02/18/22 13:20
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20577	03/01/22 23:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20253	02/24/22 15:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20195	02/25/22 04:36	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		50			20409	02/27/22 16:01	CH	XEN MID

Client Sample ID: BH11
Date Collected: 02/18/22 13:30
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20577	03/01/22 23:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20293	02/25/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20308	02/25/22 17:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			20409	02/27/22 16:10	CH	XEN MID

Client Sample ID: BH11
Date Collected: 02/18/22 13:45
Date Received: 02/23/22 11:26

Lab Sample ID: 890-2003-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	20526	03/01/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20577	03/01/22 23:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20453	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20341	02/25/22 15:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20293	02/25/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20308	02/25/22 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	20217	02/24/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		5			20409	02/27/22 16:19	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Laboratory: Eurofins 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.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2003-1
SDG: 31403360.03

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2003-1	BH07	Solid	02/18/22 10:45	02/23/22 11:26	0.5
890-2003-2	BH07	Solid	02/18/22 10:55	02/23/22 11:26	4
890-2003-3	BH08	Solid	02/18/22 11:00	02/23/22 11:26	0.5
890-2003-4	BH08	Solid	02/18/22 11:10	02/23/22 11:26	4
890-2003-5	BH09	Solid	02/18/22 12:30	02/23/22 11:26	0.5
890-2003-6	BH09	Solid	02/18/22 12:45	02/23/22 11:26	4
890-2003-7	BH10	Solid	02/18/22 13:05	02/23/22 11:26	0.5
890-2003-8	BH10	Solid	02/18/22 13:20	02/23/22 11:26	4
890-2003-9	BH11	Solid	02/18/22 13:30	02/23/22 11:26	0.5
890-2003-10	BH11	Solid	02/18/22 13:45	02/23/22 11:26	4

Chain of Custody

Work Order No: _____

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)
www.xenco.com

Project Manager:	Joseph Hernandez	Bill to: (if different)	Joseph Hernandez
Company Name:	WSP USA	Company Name:	WSP
Address:	3300 N A Street	Address:	3300 N A Street
City, State ZIP:	Midland, TX, 79705	City, State ZIP:	Midland, TX, 79705
Phone:	281-702-2329	Email:	Address: Anna.Byers@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:	RDU 11	Turn Around	
Project Number:	31403360.03	Routine	✓
P.O. Number:	Napp2200728755	Rush:	
Sampler's Name:	Gilbert Moreno	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.8/1.6	Thermometer ID	TUM007
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

CC:1137631001
API:PA.2021.04159.EXP.01

890-2003 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 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH07	S	02/18/22	10:45	0.5'	1	X	X	X	Discrete
BH07	S	02/18/22	10:55	4'	1	X	X	X	Discrete
BH08	S	02/18/22	11:00	0.5'	1	X	X	X	Discrete
BH08	S	02/18/22	11:10	4'	1	X	X	X	Discrete
BH09	S	02/18/22	12:30	0.5'	1	X	X	X	Discrete
BH09	S	02/18/22	12:45	4'	1	X	X	X	Discrete
BH10	S	02/18/22	13:05	0.5'	1	X	X	X	Discrete
BH10	S	02/18/22	13:20	4'	1	X	X	X	Discrete
BH11	S	2/18/2022	13:30	0.5'	1	X	X	X	Discrete
BH11	S	2/18/2022	13:45	4'	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

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

Revised Date 051418 Rev. 2018.1

Eurofins 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: 890-639 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2003-1
Address: 1211 W Florida Ave,	Due Date Requested: 3/1/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDU 11	Project #: 89000048			
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 Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note.
Preservation Code:													
BH07 (890-2003-1)	2/18/22	10 45 Mountain		Solid			X	X	X	X	X	1	
BH07 (890-2003-2)	2/18/22	10 55 Mountain		Solid			X	X	X	X	X	1	
BH08 (890-2003-3)	2/18/22	11 00 Mountain		Solid			X	X	X	X	X	1	
BH08 (890-2003-4)	2/18/22	11 10 Mountain		Solid			X	X	X	X	X	1	
BH09 (890-2003-5)	2/18/22	12 30 Mountain		Solid			X	X	X	X	X	1	
BH09 (890-2003-6)	2/18/22	12 45 Mountain		Solid			X	X	X	X	X	1	
BH10 (890-2003-7)	2/18/22	13 05 Mountain		Solid			X	X	X	X	X	1	
BH10 (890-2003-8)	2/18/22	13 20 Mountain		Solid			X	X	X	X	X	1	
BH11 (890-2003-9)	2/18/22	13 30 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, 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 Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central 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:	Company	Received by:	Date/Time:	Company
Relinquished by: Cue Cup 2-23-22	Date/Time:	Company	Received by:	Date/Time: 2/24/22	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 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: 890-639 2
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2003-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 3/1/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDU 11	Project #: 89000048			
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)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
BH11 (890-2003-10)	2/18/22	13 45 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, 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 Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central, 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	Company	Received by	Date/Time	Company
1	Clue Cole 2.2322					
2	Relinquished by	Date/Time	Company	Received by	Date/Time: 2/24/22	Company
3	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: 890-2003-1
SDG Number: 31403360.03

Login Number: 2003
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2003-1
SDG Number: 31403360.03

Login Number: 2003
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 02/24/22 12:49 PM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2030-1
Laboratory Sample Delivery Group: 31403360.031
Client Project/Site: RDU 11

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

Attn: Joseph Hernandez

Authorized for release by:
3/7/2022 9:27:48 PM

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

Client: WSP USA Inc.
Project/Site: RDU 11

Laboratory Job ID: 890-2030-1
SDG: 31403360.031

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2030-1
Project/Site: RDU 11 SDG: 31403360.031

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Job ID: 890-2030-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2030-1

Receipt
The samples were received on 3/1/2022 8:50 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
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH12

Lab Sample ID: 890-2030-1
Matrix: Solid
Date Collected: 02/28/22 10:30
Date Received: 03/01/22 08:50
Sample Depth: 2

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		03/06/22 11:15	03/06/22 16:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 16:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 16:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 16:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 16:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/06/22 11:15*	*03/06/22 16:21*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*03/06/22 11:15*	*03/06/22 16:21*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 02:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 02:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/02/22 08:11*	*03/03/22 02:31*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/02/22 08:11*	*03/03/22 02:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1610**		25.0		mg/Kg			03/05/22 15:30	5

Client Sample ID: BH12

Lab Sample ID: 890-2030-2
Matrix: Solid
Date Collected: 02/28/22 10:33
Date Received: 03/01/22 08:50
Sample Depth: 4

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		03/06/22 11:15	03/06/22 16:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 16:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 16:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 16:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 16:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*9*	*S1-*	*70 - 130*	*03/06/22 11:15*	*03/06/22 16:48*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH12

Lab Sample ID: 890-2030-2
Matrix: Solid

Date Collected: 02/28/22 10:33
Date Received: 03/01/22 08:50
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/06/22 11:15*	*03/06/22 16:48*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 03:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 03:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/02/22 08:11*	*03/03/22 03:34*	*1*
o-Terphenyl	*103*		*70 - 130*	*03/02/22 08:11*	*03/03/22 03:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1360**		25.0		mg/Kg			03/05/22 16:06	5

Client Sample ID: BH13

Lab Sample ID: 890-2030-3
Matrix: Solid

Date Collected: 02/28/22 11:20
Date Received: 03/01/22 08:50
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/06/22 11:15	03/06/22 17:15	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/06/22 11:15	03/06/22 17:15	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/06/22 11:15	03/06/22 17:15	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/06/22 11:15	03/06/22 17:15	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/06/22 11:15	03/06/22 17:15	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/06/22 11:15	03/06/22 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/06/22 11:15*	*03/06/22 17:15*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*03/06/22 11:15*	*03/06/22 17:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/22 12:29	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH13

Lab Sample ID: 890-2030-3
Matrix: Solid
Date Collected: 02/28/22 11:20
Date Received: 03/01/22 08:50
Sample Depth: 2

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		03/02/22 08:11	03/03/22 03:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/22 08:11	03/03/22 03:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/22 08:11	03/03/22 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/02/22 08:11*	*03/03/22 03:55*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/02/22 08:11*	*03/03/22 03:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4430**		49.7		mg/Kg			03/05/22 16:18	10

Client Sample ID: BH13

Lab Sample ID: 890-2030-4
Matrix: Solid
Date Collected: 02/28/22 11:25
Date Received: 03/01/22 08:50
Sample Depth: 4

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		03/06/22 11:15	03/06/22 17:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 17:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 17:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 17:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 17:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*8*	*S1-*	*70 - 130*	*03/06/22 11:15*	*03/06/22 17:41*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/06/22 11:15*	*03/06/22 17:41*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 04:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/22 08:11	03/03/22 04:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/22 08:11	03/03/22 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*03/02/22 08:11*	*03/03/22 04:15*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/02/22 08:11*	*03/03/22 04:15*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH13

Lab Sample ID: 890-2030-4
Matrix: Solid
Date Collected: 02/28/22 11:25
Date Received: 03/01/22 08:50
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7260		49.8		mg/Kg			03/05/22 16:30	10

Client Sample ID: BH14

Lab Sample ID: 890-2030-5
Matrix: Solid
Date Collected: 02/28/22 11:30
Date Received: 03/01/22 08:50
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 18:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 18:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 18:08	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/06/22 11:15	03/06/22 18:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 18:08	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/06/22 11:15	03/06/22 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/06/22 11:15*	*03/06/22 18:08*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*03/06/22 11:15*	*03/06/22 18:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 04:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 04:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/02/22 08:11*	*03/03/22 04:36*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/02/22 08:11*	*03/03/22 04:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	464		5.00		mg/Kg			03/05/22 16:41	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH14

Lab Sample ID: 890-2030-6
Matrix: Solid
Date Collected: 02/28/22 11:35
Date Received: 03/01/22 08:50
Sample Depth: 4

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		03/06/22 11:15	03/06/22 18:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 18:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 18:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/06/22 11:15	03/06/22 18:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 18:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/06/22 11:15	03/06/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/06/22 11:15*	*03/06/22 18:35*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*03/06/22 11:15*	*03/06/22 18:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 04:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 04:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*03/02/22 08:11*	*03/03/22 04:57*	*1*
o-Terphenyl	*120*		*70 - 130*	*03/02/22 08:11*	*03/03/22 04:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**115**		4.99		mg/Kg			03/05/22 16:53	1

Client Sample ID: BH15

Lab Sample ID: 890-2030-7
Matrix: Solid
Date Collected: 02/28/22 11:40
Date Received: 03/01/22 08:50
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:15	03/06/22 19:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:15	03/06/22 19:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:15	03/06/22 19:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/06/22 11:15	03/06/22 19:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/06/22 11:15	03/06/22 19:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/06/22 11:15	03/06/22 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*170*	*S1+*	*70 - 130*	*03/06/22 11:15*	*03/06/22 19:02*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH15

Lab Sample ID: 890-2030-7
Matrix: Solid
Date Collected: 02/28/22 11:40
Date Received: 03/01/22 08:50
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/06/22 11:15*	*03/06/22 19:02*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 05:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 05:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/02/22 08:11*	*03/03/22 05:18*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/02/22 08:11*	*03/03/22 05:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**77.5**		5.00		mg/Kg			03/05/22 17:05	1

Client Sample ID: BH15

Lab Sample ID: 890-2030-8
Matrix: Solid
Date Collected: 02/28/22 11:50
Date Received: 03/01/22 08:50
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 20:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 20:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 20:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/06/22 11:15	03/06/22 20:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 20:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/06/22 11:15	03/06/22 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*03/06/22 11:15*	*03/06/22 20:48*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/06/22 11:15*	*03/06/22 20:48*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH15

Lab Sample ID: 890-2030-8
Matrix: Solid
Date Collected: 02/28/22 11:50
Date Received: 03/01/22 08:50
Sample Depth: 4

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		03/02/22 08:11	03/03/22 05:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 05:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/02/22 08:11*	*03/03/22 05:38*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/02/22 08:11*	*03/03/22 05:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.4**		4.98		mg/Kg			03/05/22 17:41	1

Client Sample ID: BH16

Lab Sample ID: 890-2030-9
Matrix: Solid
Date Collected: 02/28/22 13:20
Date Received: 03/01/22 08:50
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 21:15	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 21:15	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 21:15	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/06/22 11:15	03/06/22 21:15	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 21:15	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/06/22 11:15	03/06/22 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*03/06/22 11:15*	*03/06/22 21:15*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/06/22 11:15*	*03/06/22 21:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 05:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 05:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/02/22 08:11*	*03/03/22 05:59*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/02/22 08:11*	*03/03/22 05:59*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH16

Lab Sample ID: 890-2030-9
Matrix: Solid
Date Collected: 02/28/22 13:20
Date Received: 03/01/22 08:50
Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1940		24.8		mg/Kg			03/05/22 17:53	5

Client Sample ID: BH16

Lab Sample ID: 890-2030-10
Matrix: Solid
Date Collected: 02/28/22 13:25
Date Received: 03/01/22 08:50
Sample Depth: 4

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		03/06/22 11:15	03/06/22 21:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 21:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 21:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 21:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 21:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*03/06/22 11:15*	*03/06/22 21:42*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/06/22 11:15*	*03/06/22 21:42*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 06:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 06:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*03/02/22 08:11*	*03/03/22 06:19*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/02/22 08:11*	*03/03/22 06:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4650		50.1		mg/Kg			03/05/22 18:28	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH17

Lab Sample ID: 890-2030-11
Matrix: Solid
Date Collected: 02/28/22 14:15
Date Received: 03/01/22 08:50
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 22:09	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 22:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 22:09	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/06/22 11:15	03/06/22 22:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/06/22 11:15	03/06/22 22:09	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/06/22 11:15	03/06/22 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/06/22 11:15*	*03/06/22 22:09*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/06/22 11:15*	*03/06/22 22:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 07:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/22 08:11	03/03/22 07:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/22 08:11	03/03/22 07:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/02/22 08:11*	*03/03/22 07:01*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/02/22 08:11*	*03/03/22 07:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1090**		24.9		mg/Kg			03/05/22 18:40	5

Client Sample ID: BH17

Lab Sample ID: 890-2030-12
Matrix: Solid
Date Collected: 02/28/22 14:20
Date Received: 03/01/22 08:50
Sample Depth: 4

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		03/06/22 11:15	03/06/22 22:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 22:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 22:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 22:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/06/22 11:15	03/06/22 22:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/06/22 11:15	03/06/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/06/22 11:15*	*03/06/22 22:36*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH17
Date Collected: 02/28/22 14:20
Date Received: 03/01/22 08:50
Sample Depth: 4

Lab Sample ID: 890-2030-12
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/06/22 11:15*	*03/06/22 22:36*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/07/22 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 12:29	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		03/02/22 08:11	03/03/22 07:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 07:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/02/22 08:11*	*03/03/22 07:21*	*1*
o-Terphenyl	*103*		*70 - 130*	*03/02/22 08:11*	*03/03/22 07:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8280**		100		mg/Kg			03/05/22 18:52	20

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

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)
880-11719-A-1-J MS	Matrix Spike	89	123
880-11719-A-1-K MSD	Matrix Spike Duplicate	94	124
890-2030-1	BH12	101	114
890-2030-2	BH12	9 S1-	101
890-2030-3	BH13	102	118
890-2030-4	BH13	8 S1-	108
890-2030-5	BH14	87	116
890-2030-6	BH14	106	119
890-2030-7	BH15	170 S1+	85
890-2030-8	BH15	94	110
890-2030-9	BH16	83	105
890-2030-10	BH16	89	108
890-2030-11	BH17	99	106
890-2030-12	BH17	101	108
LCS 880-20687/1-A	Lab Control Sample	82	116
LCSD 880-20687/2-A	Lab Control Sample Dup	84	111
MB 880-20687/5-A	Method Blank	51 S1-	108

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)
890-2030-1	BH12	100	104
890-2030-1 MS	BH12	94	100
890-2030-1 MSD	BH12	99	95
890-2030-2	BH12	99	103
890-2030-3	BH13	108	112
890-2030-4	BH13	95	97
890-2030-5	BH14	104	106
890-2030-6	BH14	118	120
890-2030-7	BH15	97	99
890-2030-8	BH15	108	111
890-2030-9	BH16	93	92
890-2030-10	BH16	105	106
890-2030-11	BH17	96	97
890-2030-12	BH17	99	103
LCS 880-20658/2-A	Lab Control Sample	107	106
LCSD 880-20658/3-A	Lab Control Sample Dup	106	105
MB 880-20658/1-A	Method Blank	112	117

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20687/5-A
Matrix: Solid
Analysis Batch: 20977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20687

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 14:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 14:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 14:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/06/22 11:15	03/06/22 14:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/06/22 11:15	03/06/22 14:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/06/22 11:15	03/06/22 14:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*51*	*S1-*	*70 - 130*	*03/06/22 11:15*	*03/06/22 14:35*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/06/22 11:15*	*03/06/22 14:35*	*1*

Lab Sample ID: LCS 880-20687/1-A
Matrix: Solid
Analysis Batch: 20977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20687

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08533		mg/Kg		85	70 - 130		
Toluene			0.100	0.08536		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.09079		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1854		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09200		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-20687/2-A
Matrix: Solid
Analysis Batch: 20977

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20687

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09073		mg/Kg		91	70 - 130	6	35
Toluene			0.100	0.08702		mg/Kg		87	70 - 130	2	35
Ethylbenzene			0.100	0.09419		mg/Kg		94	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1931		mg/Kg		97	70 - 130	4	35
o-Xylene			0.100	0.09334		mg/Kg		93	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-11719-A-1-J MS
Matrix: Solid
Analysis Batch: 20977

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20687

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.0998	0.1035		mg/Kg		104	70 - 130		
Toluene	<0.00199	U	0.0998	0.09757		mg/Kg		98	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

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

Lab Sample ID: 880-11719-A-1-J MS
Matrix: Solid
Analysis Batch: 20977

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20687

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.0998	0.1035		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2115		mg/Kg		106	70 - 130
o-Xylene	<0.00199	U	0.0998	0.1057		mg/Kg		106	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*

Lab Sample ID: 880-11719-A-1-K MSD
Matrix: Solid
Analysis Batch: 20977

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20687

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.1073		mg/Kg		106	70 - 130	4	35
Toluene	<0.00199	U	0.101	0.1009		mg/Kg		100	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.101	0.1083		mg/Kg		107	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.2216		mg/Kg		110	70 - 130	5	35
o-Xylene	<0.00199	U	0.101	0.1086		mg/Kg		107	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*

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

Lab Sample ID: MB 880-20658/1-A
Matrix: Solid
Analysis Batch: 20655

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20658

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		03/02/22 08:11	03/03/22 01:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 01:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 08:11	03/03/22 01:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/02/22 08:11*	*03/03/22 01:28*	*1*
o-Terphenyl	*117*		*70 - 130*	*03/02/22 08:11*	*03/03/22 01:28*	*1*

Lab Sample ID: LCS 880-20658/2-A
Matrix: Solid
Analysis Batch: 20655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	930.2		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	852.2		mg/Kg		85	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

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

Lab Sample ID: LCS 880-20658/2-A
Matrix: Solid
Analysis Batch: 20655

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20658

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-20658/3-A
Matrix: Solid
Analysis Batch: 20655

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20658

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	971.8		mg/Kg		97	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	874.2		mg/Kg		87	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: 890-2030-1 MS
Matrix: Solid
Analysis Batch: 20655

Client Sample ID: BH12
Prep Type: Total/NA
Prep Batch: 20658

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1077		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	943.7		mg/Kg		94	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 890-2030-1 MSD
Matrix: Solid
Analysis Batch: 20655

Client Sample ID: BH12
Prep Type: Total/NA
Prep Batch: 20658

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	<50.0	U	998	1086		mg/Kg		106	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	910.9		mg/Kg		91	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	95		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20681/1-A
Matrix: Solid
Analysis Batch: 20963

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			03/05/22 13:14	1

Lab Sample ID: LCS 880-20681/2-A
Matrix: Solid
Analysis Batch: 20963

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-20681/3-A
Matrix: Solid
Analysis Batch: 20963

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	257.4		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-2030-7 MS
Matrix: Solid
Analysis Batch: 20963

Client Sample ID: BH15
Prep Type: Soluble

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

Lab Sample ID: 890-2030-7 MSD
Matrix: Solid
Analysis Batch: 20963

Client Sample ID: BH15
Prep Type: Soluble

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

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

GC VOA

Prep Batch: 20687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Total/NA	Solid	5035	
890-2030-2	BH12	Total/NA	Solid	5035	
890-2030-3	BH13	Total/NA	Solid	5035	
890-2030-4	BH13	Total/NA	Solid	5035	
890-2030-5	BH14	Total/NA	Solid	5035	
890-2030-6	BH14	Total/NA	Solid	5035	
890-2030-7	BH15	Total/NA	Solid	5035	
890-2030-8	BH15	Total/NA	Solid	5035	
890-2030-9	BH16	Total/NA	Solid	5035	
890-2030-10	BH16	Total/NA	Solid	5035	
890-2030-11	BH17	Total/NA	Solid	5035	
890-2030-12	BH17	Total/NA	Solid	5035	
MB 880-20687/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20687/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20687/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11719-A-1-J MS	Matrix Spike	Total/NA	Solid	5035	
880-11719-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Total/NA	Solid	8021B	20687
890-2030-2	BH12	Total/NA	Solid	8021B	20687
890-2030-3	BH13	Total/NA	Solid	8021B	20687
890-2030-4	BH13	Total/NA	Solid	8021B	20687
890-2030-5	BH14	Total/NA	Solid	8021B	20687
890-2030-6	BH14	Total/NA	Solid	8021B	20687
890-2030-7	BH15	Total/NA	Solid	8021B	20687
890-2030-8	BH15	Total/NA	Solid	8021B	20687
890-2030-9	BH16	Total/NA	Solid	8021B	20687
890-2030-10	BH16	Total/NA	Solid	8021B	20687
890-2030-11	BH17	Total/NA	Solid	8021B	20687
890-2030-12	BH17	Total/NA	Solid	8021B	20687
MB 880-20687/5-A	Method Blank	Total/NA	Solid	8021B	20687
LCS 880-20687/1-A	Lab Control Sample	Total/NA	Solid	8021B	20687
LCSD 880-20687/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20687
880-11719-A-1-J MS	Matrix Spike	Total/NA	Solid	8021B	20687
880-11719-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20687

Analysis Batch: 21059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Total/NA	Solid	Total BTEX	
890-2030-2	BH12	Total/NA	Solid	Total BTEX	
890-2030-3	BH13	Total/NA	Solid	Total BTEX	
890-2030-4	BH13	Total/NA	Solid	Total BTEX	
890-2030-5	BH14	Total/NA	Solid	Total BTEX	
890-2030-6	BH14	Total/NA	Solid	Total BTEX	
890-2030-7	BH15	Total/NA	Solid	Total BTEX	
890-2030-8	BH15	Total/NA	Solid	Total BTEX	
890-2030-9	BH16	Total/NA	Solid	Total BTEX	
890-2030-10	BH16	Total/NA	Solid	Total BTEX	
890-2030-11	BH17	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

GC VOA (Continued)

Analysis Batch: 21059 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-12	BH17	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 20655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Total/NA	Solid	8015B NM	20658
890-2030-2	BH12	Total/NA	Solid	8015B NM	20658
890-2030-3	BH13	Total/NA	Solid	8015B NM	20658
890-2030-4	BH13	Total/NA	Solid	8015B NM	20658
890-2030-5	BH14	Total/NA	Solid	8015B NM	20658
890-2030-6	BH14	Total/NA	Solid	8015B NM	20658
890-2030-7	BH15	Total/NA	Solid	8015B NM	20658
890-2030-8	BH15	Total/NA	Solid	8015B NM	20658
890-2030-9	BH16	Total/NA	Solid	8015B NM	20658
890-2030-10	BH16	Total/NA	Solid	8015B NM	20658
890-2030-11	BH17	Total/NA	Solid	8015B NM	20658
890-2030-12	BH17	Total/NA	Solid	8015B NM	20658
MB 880-20658/1-A	Method Blank	Total/NA	Solid	8015B NM	20658
LCS 880-20658/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20658
LCSD 880-20658/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20658
890-2030-1 MS	BH12	Total/NA	Solid	8015B NM	20658
890-2030-1 MSD	BH12	Total/NA	Solid	8015B NM	20658

Prep Batch: 20658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Total/NA	Solid	8015NM Prep	
890-2030-2	BH12	Total/NA	Solid	8015NM Prep	
890-2030-3	BH13	Total/NA	Solid	8015NM Prep	
890-2030-4	BH13	Total/NA	Solid	8015NM Prep	
890-2030-5	BH14	Total/NA	Solid	8015NM Prep	
890-2030-6	BH14	Total/NA	Solid	8015NM Prep	
890-2030-7	BH15	Total/NA	Solid	8015NM Prep	
890-2030-8	BH15	Total/NA	Solid	8015NM Prep	
890-2030-9	BH16	Total/NA	Solid	8015NM Prep	
890-2030-10	BH16	Total/NA	Solid	8015NM Prep	
890-2030-11	BH17	Total/NA	Solid	8015NM Prep	
890-2030-12	BH17	Total/NA	Solid	8015NM Prep	
MB 880-20658/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20658/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20658/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2030-1 MS	BH12	Total/NA	Solid	8015NM Prep	
890-2030-1 MSD	BH12	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Total/NA	Solid	8015 NM	
890-2030-2	BH12	Total/NA	Solid	8015 NM	
890-2030-3	BH13	Total/NA	Solid	8015 NM	
890-2030-4	BH13	Total/NA	Solid	8015 NM	
890-2030-5	BH14	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

GC Semi VOA (Continued)

Analysis Batch: 20812 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-6	BH14	Total/NA	Solid	8015 NM	
890-2030-7	BH15	Total/NA	Solid	8015 NM	
890-2030-8	BH15	Total/NA	Solid	8015 NM	
890-2030-9	BH16	Total/NA	Solid	8015 NM	
890-2030-10	BH16	Total/NA	Solid	8015 NM	
890-2030-11	BH17	Total/NA	Solid	8015 NM	
890-2030-12	BH17	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Soluble	Solid	DI Leach	
890-2030-2	BH12	Soluble	Solid	DI Leach	
890-2030-3	BH13	Soluble	Solid	DI Leach	
890-2030-4	BH13	Soluble	Solid	DI Leach	
890-2030-5	BH14	Soluble	Solid	DI Leach	
890-2030-6	BH14	Soluble	Solid	DI Leach	
890-2030-7	BH15	Soluble	Solid	DI Leach	
890-2030-8	BH15	Soluble	Solid	DI Leach	
890-2030-9	BH16	Soluble	Solid	DI Leach	
890-2030-10	BH16	Soluble	Solid	DI Leach	
890-2030-11	BH17	Soluble	Solid	DI Leach	
890-2030-12	BH17	Soluble	Solid	DI Leach	
MB 880-20681/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20681/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20681/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2030-7 MS	BH15	Soluble	Solid	DI Leach	
890-2030-7 MSD	BH15	Soluble	Solid	DI Leach	

Analysis Batch: 20963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2030-1	BH12	Soluble	Solid	300.0	20681
890-2030-2	BH12	Soluble	Solid	300.0	20681
890-2030-3	BH13	Soluble	Solid	300.0	20681
890-2030-4	BH13	Soluble	Solid	300.0	20681
890-2030-5	BH14	Soluble	Solid	300.0	20681
890-2030-6	BH14	Soluble	Solid	300.0	20681
890-2030-7	BH15	Soluble	Solid	300.0	20681
890-2030-8	BH15	Soluble	Solid	300.0	20681
890-2030-9	BH16	Soluble	Solid	300.0	20681
890-2030-10	BH16	Soluble	Solid	300.0	20681
890-2030-11	BH17	Soluble	Solid	300.0	20681
890-2030-12	BH17	Soluble	Solid	300.0	20681
MB 880-20681/1-A	Method Blank	Soluble	Solid	300.0	20681
LCS 880-20681/2-A	Lab Control Sample	Soluble	Solid	300.0	20681
LCSD 880-20681/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20681
890-2030-7 MS	BH15	Soluble	Solid	300.0	20681
890-2030-7 MSD	BH15	Soluble	Solid	300.0	20681

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH12
Date Collected: 02/28/22 10:30
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 16:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 02:31	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		5			20963	03/05/22 15:30	SC	XEN MID

Client Sample ID: BH12
Date Collected: 02/28/22 10:33
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 16:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 03:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		5			20963	03/05/22 16:06	SC	XEN MID

Client Sample ID: BH13
Date Collected: 02/28/22 11:20
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 17:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 03:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		10			20963	03/05/22 16:18	SC	XEN MID

Client Sample ID: BH13
Date Collected: 02/28/22 11:25
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 17:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH13

Date Collected: 02/28/22 11:25
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 04:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		10			20963	03/05/22 16:30	SC	XEN MID

Client Sample ID: BH14

Date Collected: 02/28/22 11:30
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 18:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 04:36	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		1			20963	03/05/22 16:41	SC	XEN MID

Client Sample ID: BH14

Date Collected: 02/28/22 11:35
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 18:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 04:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		1			20963	03/05/22 16:53	SC	XEN MID

Client Sample ID: BH15

Date Collected: 02/28/22 11:40
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 19:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 05:18	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH15
Date Collected: 02/28/22 11:40
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		1			20963	03/05/22 17:05	SC	XEN MID

Client Sample ID: BH15
Date Collected: 02/28/22 11:50
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 20:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 05:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		1			20963	03/05/22 17:41	SC	XEN MID

Client Sample ID: BH16
Date Collected: 02/28/22 13:20
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 21:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 05:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		5			20963	03/05/22 17:53	SC	XEN MID

Client Sample ID: BH16
Date Collected: 02/28/22 13:25
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 21:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 06:19	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		10			20963	03/05/22 18:28	SC	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Client Sample ID: BH17

Date Collected: 02/28/22 14:15
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 22:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 07:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		5			20963	03/05/22 18:40	SC	XEN MID

Client Sample ID: BH17

Date Collected: 02/28/22 14:20
Date Received: 03/01/22 08:50

Lab Sample ID: 890-2030-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20687	03/06/22 11:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20977	03/06/22 22:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21059	03/07/22 21:30	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20812	03/03/22 12:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20658	03/02/22 08:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20655	03/03/22 07:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20681	03/02/22 10:50	CH	XEN MID
Soluble	Analysis	300.0		20			20963	03/05/22 18:52	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Laboratory: Eurofins 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.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2030-1
SDG: 31403360.031

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2030-1	BH12	Solid	02/28/22 10:30	03/01/22 08:50	2
890-2030-2	BH12	Solid	02/28/22 10:33	03/01/22 08:50	4
890-2030-3	BH13	Solid	02/28/22 11:20	03/01/22 08:50	2
890-2030-4	BH13	Solid	02/28/22 11:25	03/01/22 08:50	4
890-2030-5	BH14	Solid	02/28/22 11:30	03/01/22 08:50	0.5
890-2030-6	BH14	Solid	02/28/22 11:35	03/01/22 08:50	4
890-2030-7	BH15	Solid	02/28/22 11:40	03/01/22 08:50	0.5
890-2030-8	BH15	Solid	02/28/22 11:50	03/01/22 08:50	4
890-2030-9	BH16	Solid	02/28/22 13:20	03/01/22 08:50	2
890-2030-10	BH16	Solid	02/28/22 13:25	03/01/22 08:50	4
890-2030-11	BH17	Solid	02/28/22 14:15	03/01/22 08:50	2
890-2030-12	BH17	Solid	02/28/22 14:20	03/01/22 08:50	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: _____

www.xenco.com Page 1 of 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name	WPX Energy
Address:	3300 North A Street	Address	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP	Carlsbad, NM 88220
Phone	281-702-2329	Email	Anna.Byers@wsp.com,

Work Order Comments

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

Project Name:	RDU 11	Turn Around	
Project Number:	31403360.031	Routine ☑	
Incident ID:	nAPP2200728755	Rush:	
Sampler's Name:	Gilbert Moreno	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.2/1.0	Thermometer ID	TNM-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

890-2030 Chain of Custody

Work Order Notes

CC 1137631001
AFE
API: PA.2021.04159.EXP.01

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

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (Feet)	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH12	S	2.28.22	10:30	2	1	X	X	X
BH12	S	2.28.22	10:33	4	1	X	X	X
BH13	S	2.28.22	11:20	2	1	X	X	X
BH13	S	2.28.22	11:25	4	1	X	X	X
BH14	S	2.28.22	11:30	0.5	1	X	X	X
BH14	S	2.28.22	11:35	4	1	X	X	X
BH15	S	2.28.22	11:40	0.5	1	X	X	X
BH15	S	2.28.22	11:50	4	1	X	X	X
BH16	S	2.28.22	13:20	2	1	X	X	X
BH16	S	2.28.22	13:25	4	1	X	X	X

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			3.1.22 0852	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 2

3/7/2022

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name	WPX Energy
Address:	3300 North A Street	Address	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP	Carlsbad, NM 88220
Phone	281-702-2329 Email		Anna.Byers@wsp.com,

Work Order Comments

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

Project Name:	RDU 11	Turn Around	
Project Number:	31403360.031	Routine ☑	
Incident ID:	nAPP2200728755	Rush:	
Sampler's Name:	Gilbert Moreno	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (Feet)	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
BH17	S	2.28.22	14:15	2	1	X	X	X
BH17	S	2.28.22	14:20	4	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

CC 1137631001
AFE
API: PA.2021.04159.EXP.01

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

Sample Comments

3.1.22

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		3.1.22 0850	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2030-1
SDG Number: 31403360.031

Login Number: 2030
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2030-1
SDG Number: 31403360.031

Login Number: 2030
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/02/22 11:22 AM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2040-1
Laboratory SDG: 31403360.036,31403360.035
Client Project/Site: RDU 11

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

Attn: Joseph Hernandez

Authorized for release by:
3/14/2022 1:37:54 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: RDU 11

Laboratory Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2040-1
Project/Site: RDU 11 SDG: 31403360.036.31403360.035

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Job ID: 890-2040-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2040-1

Receipt
The samples were received on 3/3/2022 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

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

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-20924 and analytical batch 880-21381 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH04 (890-2040-7), BH08 (890-2040-16), BH09 (890-2040-17), BH10 (890-2040-19) and BH10 (890-2040-20). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-21026 and analytical batch 880-21137 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: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH01

Lab Sample ID: 890-2040-1
Matrix: Solid
Date Collected: 03/03/22 11:05
Date Received: 03/03/22 15:10
Sample Depth: 2

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		03/07/22 12:57	03/09/22 23:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/09/22 23:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/09/22 23:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/09/22 23:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/09/22 23:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/09/22 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/07/22 12:57*	*03/09/22 23:03*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/09/22 23:03*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/11/22 22:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/11/22 22:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/11/22 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/04/22 15:08*	*03/11/22 22:14*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/04/22 15:08*	*03/11/22 22:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8700**		99.8		mg/Kg			03/09/22 01:31	20

Client Sample ID: BH01

Lab Sample ID: 890-2040-2
Matrix: Solid
Date Collected: 03/03/22 11:07
Date Received: 03/03/22 15:10
Sample Depth: 4

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		03/07/22 12:57	03/09/22 23:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 23:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 23:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/09/22 23:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 23:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/09/22 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/07/22 12:57*	*03/09/22 23:24*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH01

Lab Sample ID: 890-2040-2
Matrix: Solid
Date Collected: 03/03/22 11:07
Date Received: 03/03/22 15:10
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/07/22 12:57*	*03/09/22 23:24*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/11/22 23:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/11/22 23:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/11/22 23:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*118*		*70 - 130*	*03/04/22 15:08*	*03/11/22 23:18*	*1*
o-Terphenyl	*123*		*70 - 130*	*03/04/22 15:08*	*03/11/22 23:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9220**		99.2		mg/Kg			03/09/22 12:55	20

Client Sample ID: BH02

Lab Sample ID: 890-2040-3
Matrix: Solid
Date Collected: 03/03/22 11:10
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/09/22 23:44	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/09/22 23:44	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/09/22 23:44	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/07/22 12:57	03/09/22 23:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/09/22 23:44	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/07/22 12:57	03/09/22 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/07/22 12:57*	*03/09/22 23:44*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/07/22 12:57*	*03/09/22 23:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 12:12	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH02

Date Collected: 03/03/22 11:10
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Lab Sample ID: 890-2040-3
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		03/04/22 15:08	03/11/22 23:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		03/04/22 15:08	03/11/22 23:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:08	03/11/22 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*03/04/22 15:08*	*03/11/22 23:39*	*1*
o-Terphenyl	*79*		*70 - 130*	*03/04/22 15:08*	*03/11/22 23:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4300**		49.8		mg/Kg			03/09/22 09:22	10

Client Sample ID: BH02

Date Collected: 03/03/22 11:20
Date Received: 03/03/22 15:10
Sample Depth: 4

Lab Sample ID: 890-2040-4
Matrix: Solid

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		03/07/22 12:57	03/10/22 00:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 00:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 00:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 00:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 00:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 12:57*	*03/10/22 00:05*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/07/22 12:57*	*03/10/22 00:05*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 00:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		03/04/22 15:08	03/12/22 00:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:08	03/12/22 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*03/04/22 15:08*	*03/12/22 00:01*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/04/22 15:08*	*03/12/22 00:01*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH02

Lab Sample ID: 890-2040-4
Matrix: Solid
Date Collected: 03/03/22 11:20
Date Received: 03/03/22 15:10
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8350		100		mg/Kg			03/09/22 09:31	20

Client Sample ID: BH03

Lab Sample ID: 890-2040-5
Matrix: Solid
Date Collected: 03/03/22 11:37
Date Received: 03/03/22 15:10
Sample Depth: 2

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		03/07/22 12:57	03/10/22 00:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 00:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 00:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/10/22 00:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 00:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/10/22 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 12:57*	*03/10/22 00:25*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/07/22 12:57*	*03/10/22 00:25*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 00:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 00:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*03/04/22 15:08*	*03/12/22 00:22*	*1*
o-Terphenyl	*78*		*70 - 130*	*03/04/22 15:08*	*03/12/22 00:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3310		49.7		mg/Kg			03/09/22 09:40	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH03

Lab Sample ID: 890-2040-6
Matrix: Solid
Date Collected: 03/03/22 11:40
Date Received: 03/03/22 15:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 00:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 00:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 00:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/07/22 12:57	03/10/22 00:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 00:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/07/22 12:57	03/10/22 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 12:57*	*03/10/22 00:46*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 00:46*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 00:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 00:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*03/04/22 15:08*	*03/12/22 00:44*	*1*
o-Terphenyl	*83*		*70 - 130*	*03/04/22 15:08*	*03/12/22 00:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12600**		99.0		mg/Kg			03/09/22 10:06	20

Client Sample ID: BH04

Lab Sample ID: 890-2040-7
Matrix: Solid
Date Collected: 03/03/22 09:25
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 01:06	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 01:06	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 01:06	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/07/22 12:57	03/10/22 01:06	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 01:06	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/07/22 12:57	03/10/22 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/07/22 12:57*	*03/10/22 01:06*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH04

Date Collected: 03/03/22 09:25
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Lab Sample ID: 890-2040-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/07/22 12:57*	*03/10/22 01:06*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 01:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 01:05	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 01:05*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 01:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.3**	**F1**	4.96		mg/Kg			03/09/22 16:05	1

Client Sample ID: BH04

Date Collected: 03/03/22 09:30
Date Received: 03/03/22 15:10
Sample Depth: 4

Lab Sample ID: 890-2040-8

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		03/07/22 12:57	03/10/22 01:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 01:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 01:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/07/22 12:57	03/10/22 01:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 01:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/07/22 12:57	03/10/22 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/07/22 12:57*	*03/10/22 01:26*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/07/22 12:57*	*03/10/22 01:26*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH04

Lab Sample ID: 890-2040-8
Matrix: Solid
Date Collected: 03/03/22 09:30
Date Received: 03/03/22 15:10
Sample Depth: 4

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		03/04/22 15:08	03/12/22 01:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 01:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*03/04/22 15:08*	*03/12/22 01:26*	*1*
o-Terphenyl	*81*		*70 - 130*	*03/04/22 15:08*	*03/12/22 01:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.1**		5.00		mg/Kg			03/09/22 16:23	1

Client Sample ID: BH05

Lab Sample ID: 890-2040-9
Matrix: Solid
Date Collected: 03/03/22 09:35
Date Received: 03/03/22 15:10
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		03/07/22 12:57	03/10/22 01:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 01:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 01:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/10/22 01:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 01:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/10/22 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*302*	*S1+*	*70 - 130*	*03/07/22 12:57*	*03/10/22 01:47*	*1*
1,4-Difluorobenzene (Surr)	*273*	*S1+*	*70 - 130*	*03/07/22 12:57*	*03/10/22 01:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 01:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 01:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*03/04/22 15:08*	*03/12/22 01:48*	*1*
o-Terphenyl	*72*		*70 - 130*	*03/04/22 15:08*	*03/12/22 01:48*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH05

Lab Sample ID: 890-2040-9
Matrix: Solid
Date Collected: 03/03/22 09:35
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.80		4.98		mg/Kg			03/09/22 16:29	1

Client Sample ID: BH05

Lab Sample ID: 890-2040-10
Matrix: Solid
Date Collected: 03/03/22 09:40
Date Received: 03/03/22 15:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 02:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 02:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 02:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/07/22 12:57	03/10/22 02:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 02:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/07/22 12:57	03/10/22 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 12:57*	*03/10/22 02:07*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 02:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 02:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 02:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*03/04/22 15:08*	*03/12/22 02:10*	*1*
o-Terphenyl	*73*		*70 - 130*	*03/04/22 15:08*	*03/12/22 02:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.6		5.00		mg/Kg			03/09/22 16:52	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH06

Date Collected: 03/03/22 09:45
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Lab Sample ID: 890-2040-11
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 03:29	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 03:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 03:29	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/07/22 12:57	03/10/22 03:29	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 03:29	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/07/22 12:57	03/10/22 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 12:57*	*03/10/22 03:29*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/07/22 12:57*	*03/10/22 03:29*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 02:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 02:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*03/04/22 15:08*	*03/12/22 02:52*	*1*
o-Terphenyl	*77*		*70 - 130*	*03/04/22 15:08*	*03/12/22 02:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			03/09/22 16:58	1

Client Sample ID: BH06

Date Collected: 03/03/22 09:50
Date Received: 03/03/22 15:10
Sample Depth: 4

Lab Sample ID: 890-2040-12
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 03:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 03:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 03:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/07/22 12:57	03/10/22 03:50	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 03:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/07/22 12:57	03/10/22 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 12:57*	*03/10/22 03:50*	*1*

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Client Sample Results

Client: WSP USA Inc. Job ID: 890-2040-1
Project/Site: RDU 11 SDG: 31403360.036.31403360.035

Client Sample ID: BH06 Lab Sample ID: 890-2040-12

Date Collected: 03/03/22 09:50 **Matrix: Solid**
Date Received: 03/03/22 15:10
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 03:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 03:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		03/04/22 15:08	03/12/22 03:14	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:08	03/12/22 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*75*		*70 - 130*	*03/04/22 15:08*	*03/12/22 03:14*	*1*
o-Terphenyl	*78*		*70 - 130*	*03/04/22 15:08*	*03/12/22 03:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.4**		5.04		mg/Kg			03/09/22 17:16	1

Client Sample ID: BH07 Lab Sample ID: 890-2040-13

Date Collected: 03/03/22 09:55 **Matrix: Solid**
Date Received: 03/03/22 15:10
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		03/07/22 12:57	03/10/22 04:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 04:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 04:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 04:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 04:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 04:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/07/22 12:57*	*03/10/22 04:10*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/07/22 12:57*	*03/10/22 04:10*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH07

Date Collected: 03/03/22 09:55
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Lab Sample ID: 890-2040-13

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	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 03:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 03:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*03/04/22 15:08*	*03/12/22 03:35*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/04/22 15:08*	*03/12/22 03:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.01**		4.98		mg/Kg			03/09/22 17:21	1

Client Sample ID: BH07

Date Collected: 03/03/22 10:00
Date Received: 03/03/22 15:10
Sample Depth: 4

Lab Sample ID: 890-2040-14

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 04:31	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 04:31	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 04:31	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/07/22 12:57	03/10/22 04:31	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/07/22 12:57	03/10/22 04:31	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/07/22 12:57	03/10/22 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 12:57*	*03/10/22 04:31*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 04:31*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 03:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 03:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/04/22 15:08*	*03/12/22 03:57*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/04/22 15:08*	*03/12/22 03:57*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH07

Lab Sample ID: 890-2040-14
Matrix: Solid
Date Collected: 03/03/22 10:00
Date Received: 03/03/22 15:10
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		5.01		mg/Kg			03/09/22 17:27	1

Client Sample ID: BH08

Lab Sample ID: 890-2040-15
Matrix: Solid
Date Collected: 03/03/22 10:05
Date Received: 03/03/22 15:10
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		03/07/22 12:57	03/10/22 04:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 04:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 04:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/07/22 12:57	03/10/22 04:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 04:51	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/07/22 12:57	03/10/22 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 12:57*	*03/10/22 04:51*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 04:51*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 04:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		03/04/22 15:08	03/12/22 04:18	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:08	03/12/22 04:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*03/04/22 15:08*	*03/12/22 04:18*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/04/22 15:08*	*03/12/22 04:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.90		4.99		mg/Kg			03/09/22 17:33	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH08

Lab Sample ID: 890-2040-16
Matrix: Solid
Date Collected: 03/03/22 10:10
Date Received: 03/03/22 15:10
Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 05:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 05:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 05:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/07/22 12:57	03/10/22 05:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/07/22 12:57	03/10/22 05:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/07/22 12:57	03/10/22 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/07/22 12:57*	*03/10/22 05:11*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 05:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 04:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 04:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.4*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 04:40*	*1*
o-Terphenyl	*2*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 04:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**57.1**		4.95		mg/Kg			03/09/22 17:39	1

Client Sample ID: BH09

Lab Sample ID: 890-2040-17
Matrix: Solid
Date Collected: 03/03/22 10:15
Date Received: 03/03/22 15:10
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		03/07/22 12:57	03/10/22 05:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 05:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 05:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/07/22 12:57	03/10/22 05:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/10/22 05:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/07/22 12:57	03/10/22 05:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/07/22 12:57*	*03/10/22 05:32*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH09

Lab Sample ID: 890-2040-17
Matrix: Solid
Date Collected: 03/03/22 10:15
Date Received: 03/03/22 15:10
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/07/22 12:57*	*03/10/22 05:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 05:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		03/04/22 15:08	03/12/22 05:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:08	03/12/22 05:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 05:01*	*1*
o-Terphenyl	*58*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 05:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.4**		5.00		mg/Kg			03/09/22 17:45	1

Client Sample ID: BH09

Lab Sample ID: 890-2040-18
Matrix: Solid
Date Collected: 03/03/22 10:25
Date Received: 03/03/22 15:10
Sample Depth: 4

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		03/07/22 12:57	03/10/22 05:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 05:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 05:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 05:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 05:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 05:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*03/07/22 12:57*	*03/10/22 05:52*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 05:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 12:12	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH09

Lab Sample ID: 890-2040-18
Matrix: Solid
Date Collected: 03/03/22 10:25
Date Received: 03/03/22 15:10
Sample Depth: 4

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		03/04/22 15:08	03/12/22 05:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8		mg/Kg		03/04/22 15:08	03/12/22 05:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/04/22 15:08	03/12/22 05:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*03/04/22 15:08*	*03/12/22 05:23*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/04/22 15:08*	*03/12/22 05:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**174**		5.05		mg/Kg			03/09/22 18:03	1

Client Sample ID: BH10

Lab Sample ID: 890-2040-19
Matrix: Solid
Date Collected: 03/03/22 10:30
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 06:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 06:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 06:13	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/07/22 12:57	03/10/22 06:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 12:57	03/10/22 06:13	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/07/22 12:57	03/10/22 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/07/22 12:57*	*03/10/22 06:13*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 06:13*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 05:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		03/04/22 15:08	03/12/22 05:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 05:45*	*1*
o-Terphenyl	*62*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 05:45*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH10

Lab Sample ID: 890-2040-19
Matrix: Solid
Date Collected: 03/03/22 10:30
Date Received: 03/03/22 15:10
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.95**		4.97		mg/Kg			03/09/22 18:09	1

Client Sample ID: BH10

Lab Sample ID: 890-2040-20
Matrix: Solid
Date Collected: 03/03/22 10:35
Date Received: 03/03/22 15:10
Sample Depth: 4

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		03/07/22 12:57	03/10/22 06:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 06:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 06:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 06:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 12:57	03/10/22 06:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 12:57	03/10/22 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/07/22 12:57*	*03/10/22 06:33*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 12:57*	*03/10/22 06:33*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/10/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**70.6**		50.0		mg/Kg			03/14/22 12:12	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		03/04/22 15:08	03/12/22 06:06	1
Diesel Range Organics (Over C10-C28)	**70.6**	***-**	50.0		mg/Kg		03/04/22 15:08	03/12/22 06:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/12/22 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.03*	*S1-*	*70 - 130*	*03/04/22 15:08*	*03/12/22 06:06*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/04/22 15:08*	*03/12/22 06:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.6**		4.98		mg/Kg			03/09/22 18:26	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

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)										
890-2040-1	BH01	103	98										
890-2040-1 MS	BH01	100	99										
890-2040-1 MSD	BH01	101	99										
890-2040-2	BH01	105	97										
890-2040-3	BH02	101	96										
890-2040-4	BH02	109	101										
890-2040-5	BH03	108	99										
890-2040-6	BH03	108	98										
890-2040-7	BH04	107	99										
890-2040-8	BH04	110	101										
890-2040-9	BH05	302 S1+	273 S1+										
890-2040-10	BH05	108	98										
890-2040-11	BH06	109	100										
890-2040-12	BH06	108	98										
890-2040-13	BH07	105	97										
890-2040-14	BH07	109	98										
890-2040-15	BH08	108	98										
890-2040-16	BH08	106	98										
890-2040-17	BH09	110	102										
890-2040-18	BH09	112	98										
890-2040-19	BH10	103	98										
890-2040-20	BH10	104	98										
LCS 880-20908/1-A	Lab Control Sample	99	100										
LCSD 880-20908/2-A	Lab Control Sample Dup	99	100										
MB 880-20906/5-A	Method Blank	99	93										
MB 880-20908/5-A	Method Blank	95	93										

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)										
890-2040-1	BH01	98	105										
890-2040-1 MS	BH01	108	107										
890-2040-1 MSD	BH01	112	107										
890-2040-2	BH01	118	123										
890-2040-3	BH02	74	79										
890-2040-4	BH02	82	86										
890-2040-5	BH03	72	78										
890-2040-6	BH03	77	83										
890-2040-7	BH04	65 S1-	65 S1-										
890-2040-8	BH04	80	81										
890-2040-9	BH05	78	72										
890-2040-10	BH05	70	73										
890-2040-11	BH06	79	77										

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2040-1
Project/Site: RDU 11 SDG: 31403360.036.31403360.035

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-2040-12	BH06	75	78								
890-2040-13	BH07	87	91								
890-2040-14	BH07	98	101								
890-2040-15	BH08	85	88								
890-2040-16	BH08	0.4 S1-	2 S1-								
890-2040-17	BH09	61 S1-	58 S1-								
890-2040-18	BH09	87	90								
890-2040-19	BH10	61 S1-	62 S1-								
890-2040-20	BH10	0.03 S1-	91								
LCS 880-20924/2-A	Lab Control Sample	101	103								
LCSD 880-20924/3-A	Lab Control Sample Dup	113	115								
MB 880-20924/1-A	Method Blank	101	109								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20906/5-A
Matrix: Solid
Analysis Batch: 21187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/09/22 08:00	03/09/22 10:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/09/22 08:00	03/09/22 10:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/09/22 08:00	03/09/22 10:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/09/22 08:00	03/09/22 10:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/09/22 08:00	03/09/22 10:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/09/22 08:00	03/09/22 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/09/22 08:00*	*03/09/22 10:58*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/09/22 08:00*	*03/09/22 10:58*	*1*

Lab Sample ID: MB 880-20908/5-A
Matrix: Solid
Analysis Batch: 21187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 22:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 22:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 22:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/09/22 22:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 12:57	03/09/22 22:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 12:57	03/09/22 22:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*03/07/22 12:57*	*03/09/22 22:41*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/07/22 12:57*	*03/09/22 22:41*	*1*

Lab Sample ID: LCS 880-20908/1-A
Matrix: Solid
Analysis Batch: 21187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20908

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1006		mg/Kg		101	70 - 130
Toluene	0.100	0.09711		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.09592		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1986		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09573		mg/Kg		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-20908/2-A
Matrix: Solid
Analysis Batch: 21187

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20908

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1030		mg/Kg		103	70 - 130	2	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

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

Lab Sample ID: LCSD 880-20908/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21187 — **Prep Batch: 20908**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.09990		mg/Kg		100	70 - 130	3	35
Ethylbenzene			0.100	0.09791		mg/Kg		98	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2036		mg/Kg		102	70 - 130	2	35
o-Xylene			0.100	0.09864		mg/Kg		99	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2040-1 MS — **Client Sample ID: BH01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21187 — **Prep Batch: 20908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0990	0.1074		mg/Kg		108	70 - 130
Toluene	<0.00199	U	0.0990	0.1038		mg/Kg		105	70 - 130
Ethylbenzene	<0.00199	U	0.0990	0.1022		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.198	0.2108		mg/Kg		106	70 - 130
o-Xylene	<0.00199	U	0.0990	0.1024		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-2040-1 MSD — **Client Sample ID: BH01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21187 — **Prep Batch: 20908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.1022		mg/Kg		103	70 - 130	5	35
Toluene	<0.00199	U	0.0994	0.09897		mg/Kg		100	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0994	0.09699		mg/Kg		98	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2012		mg/Kg		101	70 - 130	5	35
o-Xylene	<0.00199	U	0.0994	0.09863		mg/Kg		99	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-20924/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21381 — **Prep Batch: 20924**

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		03/04/22 15:08	03/11/22 21:09	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

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

Lab Sample ID: MB 880-20924/1-A
Matrix: Solid
Analysis Batch: 21381

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/11/22 21:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:08	03/11/22 21:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/04/22 15:08*	*03/11/22 21:09*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/04/22 15:08*	*03/11/22 21:09*	*1*

Lab Sample ID: LCS 880-20924/2-A
Matrix: Solid
Analysis Batch: 21381

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	962.5		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	686.5	*-	mg/Kg		69	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: LCSD 880-20924/3-A
Matrix: Solid
Analysis Batch: 21381

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1041		mg/Kg		104	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	768.2		mg/Kg		77	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Lab Sample ID: 890-2040-1 MS
Matrix: Solid
Analysis Batch: 21381

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 20924

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1019		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *-	1000	801.0		mg/Kg		78	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

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

Lab Sample ID: 890-2040-1 MSD
Matrix: Solid
Analysis Batch: 21381

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 20924

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	<50.0	U	998	1099		mg/Kg		107	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<50.0	U *-	998	821.3		mg/Kg		80	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21026/1-A
Matrix: Solid
Analysis Batch: 21137

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			03/09/22 15:48	1

Lab Sample ID: LCS 880-21026/2-A
Matrix: Solid
Analysis Batch: 21137

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	231.2		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-21026/3-A
Matrix: Solid
Analysis Batch: 21137

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	243.8		mg/Kg		98	90 - 110	5	20

Lab Sample ID: 890-2040-7 MS
Matrix: Solid
Analysis Batch: 21137

Client Sample ID: BH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	45.3	F1	248	261.4	F1	mg/Kg		87	90 - 110

Lab Sample ID: 890-2040-7 MSD
Matrix: Solid
Analysis Batch: 21137

Client Sample ID: BH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	45.3	F1	248	262.7	F1	mg/Kg		88	90 - 110	1	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2040-17 MS
Matrix: Solid
Analysis Batch: 21137

Client Sample ID: BH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.4		250	281.4		mg/Kg		108	90 - 110

Lab Sample ID: 890-2040-17 MSD
Matrix: Solid
Analysis Batch: 21137

Client Sample ID: BH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.4		250	273.4		mg/Kg		105	90 - 110	3	20

Lab Sample ID: MB 880-21025/1-A
Matrix: Solid
Analysis Batch: 21139

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			03/09/22 01:05	1

Lab Sample ID: LCS 880-21025/2-A
Matrix: Solid
Analysis Batch: 21139

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	254.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-21025/3-A
Matrix: Solid
Analysis Batch: 21139

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	252.3		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-2040-1 MS
Matrix: Solid
Analysis Batch: 21139

Client Sample ID: BH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8700		4990	13740		mg/Kg		101	90 - 110

Lab Sample ID: 890-2040-1 MSD
Matrix: Solid
Analysis Batch: 21139

Client Sample ID: BH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8700		4990	13490		mg/Kg		96	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

GC VOA

Prep Batch: 20906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20906/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 20908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Total/NA	Solid	5035	
890-2040-2	BH01	Total/NA	Solid	5035	
890-2040-3	BH02	Total/NA	Solid	5035	
890-2040-4	BH02	Total/NA	Solid	5035	
890-2040-5	BH03	Total/NA	Solid	5035	
890-2040-6	BH03	Total/NA	Solid	5035	
890-2040-7	BH04	Total/NA	Solid	5035	
890-2040-8	BH04	Total/NA	Solid	5035	
890-2040-9	BH05	Total/NA	Solid	5035	
890-2040-10	BH05	Total/NA	Solid	5035	
890-2040-11	BH06	Total/NA	Solid	5035	
890-2040-12	BH06	Total/NA	Solid	5035	
890-2040-13	BH07	Total/NA	Solid	5035	
890-2040-14	BH07	Total/NA	Solid	5035	
890-2040-15	BH08	Total/NA	Solid	5035	
890-2040-16	BH08	Total/NA	Solid	5035	
890-2040-17	BH09	Total/NA	Solid	5035	
890-2040-18	BH09	Total/NA	Solid	5035	
890-2040-19	BH10	Total/NA	Solid	5035	
890-2040-20	BH10	Total/NA	Solid	5035	
MB 880-20908/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20908/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20908/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2040-1 MS	BH01	Total/NA	Solid	5035	
890-2040-1 MSD	BH01	Total/NA	Solid	5035	

Analysis Batch: 21187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Total/NA	Solid	8021B	20908
890-2040-2	BH01	Total/NA	Solid	8021B	20908
890-2040-3	BH02	Total/NA	Solid	8021B	20908
890-2040-4	BH02	Total/NA	Solid	8021B	20908
890-2040-5	BH03	Total/NA	Solid	8021B	20908
890-2040-6	BH03	Total/NA	Solid	8021B	20908
890-2040-7	BH04	Total/NA	Solid	8021B	20908
890-2040-8	BH04	Total/NA	Solid	8021B	20908
890-2040-9	BH05	Total/NA	Solid	8021B	20908
890-2040-10	BH05	Total/NA	Solid	8021B	20908
890-2040-11	BH06	Total/NA	Solid	8021B	20908
890-2040-12	BH06	Total/NA	Solid	8021B	20908
890-2040-13	BH07	Total/NA	Solid	8021B	20908
890-2040-14	BH07	Total/NA	Solid	8021B	20908
890-2040-15	BH08	Total/NA	Solid	8021B	20908
890-2040-16	BH08	Total/NA	Solid	8021B	20908
890-2040-17	BH09	Total/NA	Solid	8021B	20908
890-2040-18	BH09	Total/NA	Solid	8021B	20908
890-2040-19	BH10	Total/NA	Solid	8021B	20908

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

GC VOA (Continued)

Analysis Batch: 21187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-20	BH10	Total/NA	Solid	8021B	20908
MB 880-20906/5-A	Method Blank	Total/NA	Solid	8021B	20906
MB 880-20908/5-A	Method Blank	Total/NA	Solid	8021B	20908
LCS 880-20908/1-A	Lab Control Sample	Total/NA	Solid	8021B	20908
LCSD 880-20908/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20908
890-2040-1 MS	BH01	Total/NA	Solid	8021B	20908
890-2040-1 MSD	BH01	Total/NA	Solid	8021B	20908

Analysis Batch: 21336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Total/NA	Solid	Total BTEX	
890-2040-2	BH01	Total/NA	Solid	Total BTEX	
890-2040-3	BH02	Total/NA	Solid	Total BTEX	
890-2040-4	BH02	Total/NA	Solid	Total BTEX	
890-2040-5	BH03	Total/NA	Solid	Total BTEX	
890-2040-6	BH03	Total/NA	Solid	Total BTEX	
890-2040-7	BH04	Total/NA	Solid	Total BTEX	
890-2040-8	BH04	Total/NA	Solid	Total BTEX	
890-2040-9	BH05	Total/NA	Solid	Total BTEX	
890-2040-10	BH05	Total/NA	Solid	Total BTEX	
890-2040-11	BH06	Total/NA	Solid	Total BTEX	
890-2040-12	BH06	Total/NA	Solid	Total BTEX	
890-2040-13	BH07	Total/NA	Solid	Total BTEX	
890-2040-14	BH07	Total/NA	Solid	Total BTEX	
890-2040-15	BH08	Total/NA	Solid	Total BTEX	
890-2040-16	BH08	Total/NA	Solid	Total BTEX	
890-2040-17	BH09	Total/NA	Solid	Total BTEX	
890-2040-18	BH09	Total/NA	Solid	Total BTEX	
890-2040-19	BH10	Total/NA	Solid	Total BTEX	
890-2040-20	BH10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Total/NA	Solid	8015NM Prep	
890-2040-2	BH01	Total/NA	Solid	8015NM Prep	
890-2040-3	BH02	Total/NA	Solid	8015NM Prep	
890-2040-4	BH02	Total/NA	Solid	8015NM Prep	
890-2040-5	BH03	Total/NA	Solid	8015NM Prep	
890-2040-6	BH03	Total/NA	Solid	8015NM Prep	
890-2040-7	BH04	Total/NA	Solid	8015NM Prep	
890-2040-8	BH04	Total/NA	Solid	8015NM Prep	
890-2040-9	BH05	Total/NA	Solid	8015NM Prep	
890-2040-10	BH05	Total/NA	Solid	8015NM Prep	
890-2040-11	BH06	Total/NA	Solid	8015NM Prep	
890-2040-12	BH06	Total/NA	Solid	8015NM Prep	
890-2040-13	BH07	Total/NA	Solid	8015NM Prep	
890-2040-14	BH07	Total/NA	Solid	8015NM Prep	
890-2040-15	BH08	Total/NA	Solid	8015NM Prep	
890-2040-16	BH08	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

GC Semi VOA (Continued)

Prep Batch: 20924 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-17	BH09	Total/NA	Solid	8015NM Prep	
890-2040-18	BH09	Total/NA	Solid	8015NM Prep	
890-2040-19	BH10	Total/NA	Solid	8015NM Prep	
890-2040-20	BH10	Total/NA	Solid	8015NM Prep	
MB 880-20924/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20924/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20924/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2040-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-2040-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Total/NA	Solid	8015B NM	20924
890-2040-2	BH01	Total/NA	Solid	8015B NM	20924
890-2040-3	BH02	Total/NA	Solid	8015B NM	20924
890-2040-4	BH02	Total/NA	Solid	8015B NM	20924
890-2040-5	BH03	Total/NA	Solid	8015B NM	20924
890-2040-6	BH03	Total/NA	Solid	8015B NM	20924
890-2040-7	BH04	Total/NA	Solid	8015B NM	20924
890-2040-8	BH04	Total/NA	Solid	8015B NM	20924
890-2040-9	BH05	Total/NA	Solid	8015B NM	20924
890-2040-10	BH05	Total/NA	Solid	8015B NM	20924
890-2040-11	BH06	Total/NA	Solid	8015B NM	20924
890-2040-12	BH06	Total/NA	Solid	8015B NM	20924
890-2040-13	BH07	Total/NA	Solid	8015B NM	20924
890-2040-14	BH07	Total/NA	Solid	8015B NM	20924
890-2040-15	BH08	Total/NA	Solid	8015B NM	20924
890-2040-16	BH08	Total/NA	Solid	8015B NM	20924
890-2040-17	BH09	Total/NA	Solid	8015B NM	20924
890-2040-18	BH09	Total/NA	Solid	8015B NM	20924
890-2040-19	BH10	Total/NA	Solid	8015B NM	20924
890-2040-20	BH10	Total/NA	Solid	8015B NM	20924
MB 880-20924/1-A	Method Blank	Total/NA	Solid	8015B NM	20924
LCS 880-20924/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20924
LCSD 880-20924/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20924
890-2040-1 MS	BH01	Total/NA	Solid	8015B NM	20924
890-2040-1 MSD	BH01	Total/NA	Solid	8015B NM	20924

Analysis Batch: 21529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Total/NA	Solid	8015 NM	
890-2040-2	BH01	Total/NA	Solid	8015 NM	
890-2040-3	BH02	Total/NA	Solid	8015 NM	
890-2040-4	BH02	Total/NA	Solid	8015 NM	
890-2040-5	BH03	Total/NA	Solid	8015 NM	
890-2040-6	BH03	Total/NA	Solid	8015 NM	
890-2040-7	BH04	Total/NA	Solid	8015 NM	
890-2040-8	BH04	Total/NA	Solid	8015 NM	
890-2040-9	BH05	Total/NA	Solid	8015 NM	
890-2040-10	BH05	Total/NA	Solid	8015 NM	
890-2040-11	BH06	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

GC Semi VOA (Continued)

Analysis Batch: 21529 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-12	BH06	Total/NA	Solid	8015 NM	
890-2040-13	BH07	Total/NA	Solid	8015 NM	
890-2040-14	BH07	Total/NA	Solid	8015 NM	
890-2040-15	BH08	Total/NA	Solid	8015 NM	
890-2040-16	BH08	Total/NA	Solid	8015 NM	
890-2040-17	BH09	Total/NA	Solid	8015 NM	
890-2040-18	BH09	Total/NA	Solid	8015 NM	
890-2040-19	BH10	Total/NA	Solid	8015 NM	
890-2040-20	BH10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Soluble	Solid	DI Leach	
890-2040-2	BH01	Soluble	Solid	DI Leach	
890-2040-3	BH02	Soluble	Solid	DI Leach	
890-2040-4	BH02	Soluble	Solid	DI Leach	
890-2040-5	BH03	Soluble	Solid	DI Leach	
890-2040-6	BH03	Soluble	Solid	DI Leach	
MB 880-21025/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21025/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21025/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2040-1 MS	BH01	Soluble	Solid	DI Leach	
890-2040-1 MSD	BH01	Soluble	Solid	DI Leach	

Leach Batch: 21026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-7	BH04	Soluble	Solid	DI Leach	
890-2040-8	BH04	Soluble	Solid	DI Leach	
890-2040-9	BH05	Soluble	Solid	DI Leach	
890-2040-10	BH05	Soluble	Solid	DI Leach	
890-2040-11	BH06	Soluble	Solid	DI Leach	
890-2040-12	BH06	Soluble	Solid	DI Leach	
890-2040-13	BH07	Soluble	Solid	DI Leach	
890-2040-14	BH07	Soluble	Solid	DI Leach	
890-2040-15	BH08	Soluble	Solid	DI Leach	
890-2040-16	BH08	Soluble	Solid	DI Leach	
890-2040-17	BH09	Soluble	Solid	DI Leach	
890-2040-18	BH09	Soluble	Solid	DI Leach	
890-2040-19	BH10	Soluble	Solid	DI Leach	
890-2040-20	BH10	Soluble	Solid	DI Leach	
MB 880-21026/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21026/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21026/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2040-7 MS	BH04	Soluble	Solid	DI Leach	
890-2040-7 MSD	BH04	Soluble	Solid	DI Leach	
890-2040-17 MS	BH09	Soluble	Solid	DI Leach	
890-2040-17 MSD	BH09	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

HPLC/IC

Analysis Batch: 21137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-7	BH04	Soluble	Solid	300.0	21026
890-2040-8	BH04	Soluble	Solid	300.0	21026
890-2040-9	BH05	Soluble	Solid	300.0	21026
890-2040-10	BH05	Soluble	Solid	300.0	21026
890-2040-11	BH06	Soluble	Solid	300.0	21026
890-2040-12	BH06	Soluble	Solid	300.0	21026
890-2040-13	BH07	Soluble	Solid	300.0	21026
890-2040-14	BH07	Soluble	Solid	300.0	21026
890-2040-15	BH08	Soluble	Solid	300.0	21026
890-2040-16	BH08	Soluble	Solid	300.0	21026
890-2040-17	BH09	Soluble	Solid	300.0	21026
890-2040-18	BH09	Soluble	Solid	300.0	21026
890-2040-19	BH10	Soluble	Solid	300.0	21026
890-2040-20	BH10	Soluble	Solid	300.0	21026
MB 880-21026/1-A	Method Blank	Soluble	Solid	300.0	21026
LCS 880-21026/2-A	Lab Control Sample	Soluble	Solid	300.0	21026
LCSD 880-21026/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21026
890-2040-7 MS	BH04	Soluble	Solid	300.0	21026
890-2040-7 MSD	BH04	Soluble	Solid	300.0	21026
890-2040-17 MS	BH09	Soluble	Solid	300.0	21026
890-2040-17 MSD	BH09	Soluble	Solid	300.0	21026

Analysis Batch: 21139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2040-1	BH01	Soluble	Solid	300.0	21025
890-2040-2	BH01	Soluble	Solid	300.0	21025
890-2040-3	BH02	Soluble	Solid	300.0	21025
890-2040-4	BH02	Soluble	Solid	300.0	21025
890-2040-5	BH03	Soluble	Solid	300.0	21025
890-2040-6	BH03	Soluble	Solid	300.0	21025
MB 880-21025/1-A	Method Blank	Soluble	Solid	300.0	21025
LCS 880-21025/2-A	Lab Control Sample	Soluble	Solid	300.0	21025
LCSD 880-21025/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21025
890-2040-1 MS	BH01	Soluble	Solid	300.0	21025
890-2040-1 MSD	BH01	Soluble	Solid	300.0	21025

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH01
Date Collected: 03/03/22 11:05
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/09/22 23:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/11/22 22:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		20			21139	03/09/22 01:31	CH	XEN MID

Client Sample ID: BH01
Date Collected: 03/03/22 11:07
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/09/22 23:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/11/22 23:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		20			21139	03/09/22 12:55	CH	XEN MID

Client Sample ID: BH02
Date Collected: 03/03/22 11:10
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/09/22 23:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/11/22 23:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		10			21139	03/09/22 09:22	CH	XEN MID

Client Sample ID: BH02
Date Collected: 03/03/22 11:20
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 00:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH02
Date Collected: 03/03/22 11:20
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 00:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		20			21139	03/09/22 09:31	CH	XEN MID

Client Sample ID: BH03
Date Collected: 03/03/22 11:37
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 00:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 00:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		10			21139	03/09/22 09:40	CH	XEN MID

Client Sample ID: BH03
Date Collected: 03/03/22 11:40
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 00:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 00:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		20			21139	03/09/22 10:06	CH	XEN MID

Client Sample ID: BH04
Date Collected: 03/03/22 09:25
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 01:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 01:05	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH04
Date Collected: 03/03/22 09:25
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 16:05	CH	XEN MID

Client Sample ID: BH04
Date Collected: 03/03/22 09:30
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 01:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 01:26	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 16:23	CH	XEN MID

Client Sample ID: BH05
Date Collected: 03/03/22 09:35
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 01:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 01:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 16:29	CH	XEN MID

Client Sample ID: BH05
Date Collected: 03/03/22 09:40
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 02:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 02:10	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 16:52	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH06
Date Collected: 03/03/22 09:45
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 03:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 02:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 16:58	CH	XEN MID

Client Sample ID: BH06
Date Collected: 03/03/22 09:50
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 03:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 03:14	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 17:16	CH	XEN MID

Client Sample ID: BH07
Date Collected: 03/03/22 09:55
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 04:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 03:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 17:21	CH	XEN MID

Client Sample ID: BH07
Date Collected: 03/03/22 10:00
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 04:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH07

Date Collected: 03/03/22 10:00
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 03:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 17:27	CH	XEN MID

Client Sample ID: BH08

Date Collected: 03/03/22 10:05
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 04:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 04:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 17:33	CH	XEN MID

Client Sample ID: BH08

Date Collected: 03/03/22 10:10
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 05:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 04:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 17:39	CH	XEN MID

Client Sample ID: BH09

Date Collected: 03/03/22 10:15
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 05:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 05:01	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Client Sample ID: BH09
Date Collected: 03/03/22 10:15
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 17:45	CH	XEN MID

Client Sample ID: BH09
Date Collected: 03/03/22 10:25
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 05:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 05:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 18:03	CH	XEN MID

Client Sample ID: BH10
Date Collected: 03/03/22 10:30
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 06:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 05:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 18:09	CH	XEN MID

Client Sample ID: BH10
Date Collected: 03/03/22 10:35
Date Received: 03/03/22 15:10

Lab Sample ID: 890-2040-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	20908	03/07/22 12:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21187	03/10/22 06:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21336	03/10/22 16:12	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21529	03/14/22 12:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20924	03/04/22 15:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21381	03/12/22 06:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21026	03/07/22 10:38	CH	XEN MID
Soluble	Analysis	300.0		1			21137	03/09/22 18:26	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2040-1
Project/Site: RDU 11 SDG: 31403360.036.31403360.035

Laboratory: Eurofins 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: 890-2040-1
Project/Site: RDU 11 SDG: 31403360.036.31403360.035

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: RDU 11

Job ID: 890-2040-1
SDG: 31403360.036.31403360.035

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2040-1	BH01	Solid	03/03/22 11:05	03/03/22 15:10	2
890-2040-2	BH01	Solid	03/03/22 11:07	03/03/22 15:10	4
890-2040-3	BH02	Solid	03/03/22 11:10	03/03/22 15:10	0.5
890-2040-4	BH02	Solid	03/03/22 11:20	03/03/22 15:10	4
890-2040-5	BH03	Solid	03/03/22 11:37	03/03/22 15:10	2
890-2040-6	BH03	Solid	03/03/22 11:40	03/03/22 15:10	4
890-2040-7	BH04	Solid	03/03/22 09:25	03/03/22 15:10	0.5
890-2040-8	BH04	Solid	03/03/22 09:30	03/03/22 15:10	4
890-2040-9	BH05	Solid	03/03/22 09:35	03/03/22 15:10	0.5
890-2040-10	BH05	Solid	03/03/22 09:40	03/03/22 15:10	4
890-2040-11	BH06	Solid	03/03/22 09:45	03/03/22 15:10	0.5
890-2040-12	BH06	Solid	03/03/22 09:50	03/03/22 15:10	4
890-2040-13	BH07	Solid	03/03/22 09:55	03/03/22 15:10	0.5
890-2040-14	BH07	Solid	03/03/22 10:00	03/03/22 15:10	4
890-2040-15	BH08	Solid	03/03/22 10:05	03/03/22 15:10	0.5
890-2040-16	BH08	Solid	03/03/22 10:10	03/03/22 15:10	4
890-2040-17	BH09	Solid	03/03/22 10:15	03/03/22 15:10	0.5
890-2040-18	BH09	Solid	03/03/22 10:25	03/03/22 15:10	4
890-2040-19	BH10	Solid	03/03/22 10:30	03/03/22 15:10	0.5
890-2040-20	BH10	Solid	03/03/22 10:35	03/03/22 15:10	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: _____

www.xenco.com Page 1 of 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name	WPX Energy
Address:	3300 North A Street	Address	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP	Carlsbad, NM 88220
Phone	281-702-2329	Email	Anna.Byers@wsp.com,

Work Order Comments

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

Project Name:	RDU 11	Turn Around	
Project Number:	31403360.036, 31403360.035	Routine	X
Incident ID:	nAB1728553778,nAB1728551205	Rush:	
Sampler's Name:	Gilbert Moreno	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.7 1.0	Thermometer ID	T-NM-002	
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 (Feet)	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH01	S	3.2.22	11:05	2	1	X	X	X
BH01	S	3.2.22	11:07	4	1	X	X	X
BH02	S	3.2.22	11:10	0.5	1	X	X	X
BH02	S	3.2.22	11:20	4	1	X	X	X
BH03	S	3.2.22	11:37	2	1	X	X	X
BH03	S	3.2.22	11:40	4	1	X	X	X
BH04	S	3.3.22	9:25	0.5	1	X	X	X
BH04	S	3.3.22	9:30	4	1	X	X	X
BH05	S	3.3.22	9:35	0.5	1	X	X	X
BH05	S	3.3.22	9:40	4	1	X	X	X

890-2040 Chain of Custody

Work Order Notes

CC: 113763001
AFE
API: PA.2021.04159.EXP.01

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

Sample Comments

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		3/3/22 3:40			
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 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name	WPX Energy
Address:	3300 North A Street	Address	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP	Carlsbad, NM 88220
Phone	281-702-2329	Email	Anna.Byers@wsp.com,

Work Order Comments

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

Project Name:	RDU 11	Turn Around	
Project Number:	31403360.036, 31403360.035	Routine	☒
Incident ID:	nAB1728553778,nAB1728551205	Rush:	
Sampler's Name:	Gilbert Moreno	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (Feet)	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH06	S	3.3.22	9:45	0.5	1	X	X	X
BH06	S	3.3.22	9:50	4	1	X	X	X
BH07	S	3.3.22	9:55	0.5	1	X	X	X
BH07	S	3.3.22	10:00	4	1	X	X	X
BH08	S	3.3.22	10:05	0.5	1	X	X	X
BH08	S	3.3.22	10:10	4	1	X	X	X
BH09	S	3.3.22	10:15	0.5	1	X	X	X
BH09	S	3.3.22	10:25	4	1	X	X	X
BH10	S	3.3.22	10:30	0.5	1	X	X	X
BH10	S	3.3.22	10:35	4	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

CC 113763100
AFE
API: PA.2021.04159.EXP.01

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

Sample Comments

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			3/3/22 3:19	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

Eurofins 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: 890-652 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 3
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2040-1
Address: 1211 W Florida Ave,	Due Date Requested: 3/9/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDU 11	Project #: 88000203			
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	8015MOD_NM/8015NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
BH01 (890-2040-1)	3/3/22	11 05 Mountain		Solid			X	X	X	X	X	1	
BH01 (890-2040-2)	3/3/22	11 07 Mountain		Solid			X	X	X	X	X	1	
BH02 (890-2040-3)	3/3/22	11 10 Mountain		Solid			X	X	X	X	X	1	
BH02 (890-2040-4)	3/3/22	11 20 Mountain		Solid			X	X	X	X	X	1	
BH03 (890-2040-5)	3/3/22	11 37 Mountain		Solid			X	X	X	X	X	1	
BH03 (890-2040-8)	3/3/22	11 40 Mountain		Solid			X	X	X	X	X	1	
BH04 (890-2040-7)	3/3/22	09 25 Mountain		Solid			X	X	X	X	X	1	
BH04 (890-2040-8)	3/3/22	09 30 Mountain		Solid			X	X	X	X	X	1	
BH05 (890-2040-9)	3/3/22	09 35 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central 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 Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central 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: KF 3.4.22

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Olan Cup 3 4 22			KF	3.4.22 13:00	Xenco
Relinquished by	Date/Time	Company	Received by	Date/Time 13:15	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 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: 890-652 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 2 of 3
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2040-1
Address: 1211 W Florida Ave	Due Date Requested: 3/9/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDU 11	Project #: 88000203			
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	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
BH05 (890-2040-10)	3/3/22	09 40 Mountain		Solid			X	X	X	X	X	1	
BH06 (890-2040-11)	3/3/22	09 45 Mountain		Solid			X	X	X	X	X	1	
BH06 (890-2040-12)	3/3/22	09 50 Mountain		Solid			X	X	X	X	X	1	
BH07 (890-2040-13)	3/3/22	09 55 Mountain		Solid			X	X	X	X	X	1	
BH07 (890-2040-14)	3/3/22	10 00 Mountain		Solid			X	X	X	X	X	1	
BH08 (890-2040-15)	3/3/22	10 05 Mountain		Solid			X	X	X	X	X	1	
BH08 (890-2040-16)	3/3/22	10 10 Mountain		Solid			X	X	X	X	X	1	
BH09 (890-2040-17)	3/3/22	10 15 Mountain		Solid			X	X	X	X	X	1	
BH09 (890-2040-18)	3/3/22	10 25 Mountain		Solid			X	X	X	X	X	1	

Note. Since laboratory accreditations are subject to change Eurofins Environment Testing South Central 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 Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central 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: Clive Cuff 3422	Date/Time	Company	Received by:	Date/Time: 3/4/22 13:15	Company: Xenco
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 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: 890-652 3
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 3 of 3
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2040-1
Address: 1211 W Florida Ave,	Due Date Requested: 3/9/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: RDU 11	Project #: 88000203			
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	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
BH10 (890-2040-19)	3/3/22	10 30 Mountain		Solid			X	X	X	X	X	1	
BH10 (890-2040-20)	3/3/22	10 35 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, 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 Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central 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	Company	Received by	Date/Time	Company
1	Clae Cap 3422				3422 1315	XENCO
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2040-1
SDG Number: 31403360.036.31403360.035

Login Number: 2040
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2040-1
SDG Number: 31403360.036.31403360.035

Login Number: 2040
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 03/04/22 01:21 PM

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

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 95617

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 95617
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and less than 100 mg/kg for TPH. Samples must be analyzed for the constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. At this time, the largest variance the OCD can grant is 500 ft2 for confirmation samples. Sidewall and floor samples should represent no more than 500 ft2. The work will need to occur in 90 days after the work plan has been approved.	5/4/2022