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	nAPP2124531124
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)* nAPP2124531124
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

Latitude 32.0196648 Longitude 103.888366
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX FEDERAL 28 #012	Site Type: Oil Production Facility
Date Release Discovered: Aug 30th, 2021	API# *(if applicable)* 30-015-42110

Unit Letter	Section	Township	Range	County
C	28	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) 1	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 60	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: Header on produced water gathering line failed. Allowing for release of fluids along gathering system ROW.

$$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^3)}{4.21\left(\frac{ft^3}{bbl\ equivalent}\right)} * estimated\ soil\ porosity(\%) + \text{recovered fluids (bbl)}$$

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2124531124
District RP	
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? Volume exceeded 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc) Notification made via email 8/31/2021 to Mike Bratcher and Emily Hernanadez.	

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: ___09/02/2021_____

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

OCD Only

Received by: _____Ramona Marcus_____ Date: 9/7/2021

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2124531124
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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2124531124
District RP	
Facility ID	
Application ID	

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

Printed Name: James Raley Title: Environmental Specialist

Signature: Date: 11/24/2021

email: jim.raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: Date:

Incident ID	nAPP2124521124
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 3/22/2022

email: jim.raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Jennifer Nobui Date: 04/20/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

ENSOLUM

CLOSURE REQUEST REPORT

Site Location:

RDX Federal 28 #012
Eddy County, New Mexico
Incident Number: nAPP2124531124

March 20, 2022
Ensolum Project No. 03A1987001

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

Received by OCD: 3/21/2022 1:35:04 PM

ENSOLUM

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Site Description & Release Background 1
1.2 Site Characterization 1
1.3 Project Objective 1
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2.1 Excavation Activities 2
2.2 Delineation Activities 2
2.3 Waste Handling ..... 2&3
3.0 SOIL SAMPLING RESULTS 3
4.0 FINDINGS AND CONCLUSIONS ..... 3&4

APPENDICES

Appendix A: Figure 1 – Topographic Map
Figure 2 – Site Map
Figure 2A – 2C – Excavation Soil Sample Locations
Figure 3 – Delineation Soil Sample Locations

Appendix B: Photographic Documentation

Appendix C: Lithologic Soil Sampling Logs

Appendix D: Tables

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

Appendix F: Correspondence Emails

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1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared this Closure Request Report (CRR) to document remediation corrective actions performed by WPX Permian Energy, LLC (WPX) at the RDX Federal 28 #012 (hereinafter referred to as the "Site") in Unit C, Section 28, Township 26 South, Range 30 East, in Eddy County, New Mexico. The corrective actions have been completed in accordance with a Remediation Work Plan authored by WSP USA Inc. (WSP), which was approved by the New Mexico Oil and Conservation Division (NMOCD) on December 21, 2021.

1.1 Site Description and Release Background

The Site is located within Eddy County, New Mexico (32.0196648° N, 103.888366° 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)**.

On August 30, 2021, the header of the produced water gathering line failed and resulted in the release of approximately 60 bbls of produced water and 1 bbl of crude oil on the caliche well pad and adjacent pasture. No fluids were able to be recovered immediately. **See Figure 2 in Appendix A** depicting the release extent. WPX reported the release to the NMOCD via email on August 31, 2021 and with a subsquent Corrective Action Form C-141 (Form C-141) September 2, 2021. The release was assigned Incident Number nAPP2124531124.

1.2 Site Characterization

A detailed Site Characterization can be referenced in the approved Remediation Work Plan report, submitted by WSP on December 21, 2021. Based on the desktop review of nearby receptors and depth to groundwater determination at the Site, the following NMOCD Table 1 Closure Criteria were applied:

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

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, NMAC 19.15.29.13. D (1) for the top 4 feet of areas that will be reclaimed following remediation.

1.3 Project Objective

The primary objectives of Ensolum's scope of services were to document that response actions performed at the Site were completed in accordance with the applicable NMOCD regulatory guidelines and to document those concentrations of COCs in soil remaining on-Site were less than the applicable reclamation requirements and/or Closure Criteria for the Site.

2.0 REMEDIATION ACTIONS

WPX conducted remediation by excavating impacted soil for off-Site disposal.

2.1 Excavation Activities

Between October 1, 2021 and March 2, 2022, excavation activities were conducted by WSP to remove impacted soil associated with the subject release via heavy equipment and/or hydrovac. WPX implemented safety precautions such as de-energizing active electrical and power lines on site for safety of personnel before commencing disturbance activities on-Site. Excavation activites were directed by referencing delineation laboratory analytical results and by field sceening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector and chloride using Hach® chloride QuanTab® test strips.

Following removal of impacted soil, WSP collected composite soil samples at a sampling frequency of 1,000 square feet from the sidewalls and floor of the excavation to confirm impacted soil above reclamation and/or Closure Criteria was successfully removed. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 through SW20 were collected from the sidewalls of the excavation at depths ranging from the ground surface to approximately 4 feet bgs. Composite soil sample collection of SW03, SW04, and SW17 contained soil from the well pad boundary and not of the pasture. Composite soil samples FS01 through FS68, FS70 through FS82 and FS84 through FS100 were collected from the floor of the excavation at depths ranging from the 0.5 foot bgs to approximately 4 feet bgs. Confirmation soil samples FS69 and FS83 were collected from release areas with de minimis impacted soil at 0.5 foot bgs.

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.

The approximate extent of excavation and excavation soil sample locations is provided on **Figure 2A, 2B and 2C in Appendix A**. Photographic documentation of remediation activities is included in **Appendix B**.

2.2 Delineation Activities

The Remediation Work Plan presented results from original samples collected to delineate lateral and vertical extent of the release. Samples were collected from boreholes BH01 thorugh BH09 and from potholes PH01 through PH05. On March 2, 2022, additional delineation activities were conducted by WSP to confirm the presence or absence of impacted soil in areas that were not excavated or within and around the subject release area. Delineation samples were collected either in potholes advanced with a backhoe (samples designated PH) or in boreholes advanced with a hand auger (samples designated BH). Delineation activites were directed by field sceening soil for VOCs utilizing a calibrated photoionization detector and chloride using Hach® chloride QuanTab® test strips. A total of two soil samples were collected from each delineation soil sample location (PH06 and BH10 through BH12): the sample with the highest observed field screening (ranging from 0.5 foot bgs to 1 foot bgs) and the greatest depth

(ranging from 1 foot bgs to 4 feet bgs). The location of the delineation samples are shown in **Figure 3 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.

2.3 Waste Handling

At the completion of remediation action activities, approximately 8,260 cy of impacted soil were excavated under WPX approved manifests. The excavated impacted soil was transported for disposal to a R360 Environmental Solutions, LLC Facility in accordance with state and federal regulations

3.0 SOIL SAMPLING RESULTS

Final confirmation excavation soil sample laboratory analytical results indicated concentrations were below the reclamation standard requirement and/or Closure Criteria. Laboratory analytical data from the most recent delineation samples futher supports the absence impacted of additional release areas and/or confirms lateral delineation. Laboratory analytical results are summarized in the **Table 1** included in **Appendix D**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix E**. **Appendix F** provides correspondence email notification receipts associated with the release.

4.0 FINDINGS AND CONCLUSIONS

The primary objectives of Ensolum's scope of services were to document that response actions performed at the Site were completed in accordance with the applicable NMOCD regulatory guidelines and to document concentrations of COCs in soil remaining on-Site were less than the applicable reclamation requirements and/or Closure Criteria for the Site. Based on the results documented in this report, the following findings and conclusions regarding the Site are presented:

- Approximately 8,260 cy of impacted soil were excavated and removed from the Site for disposal in accordance with state and federal regulations;
- Based on laboratory analytical results associated with final confirmation excavation soil samples, concentrations of COCs greater than the NMOCD applicable reclamation standard requirement and/or Closure Criteria were not identified in soil remaining on-Site; and
- Delineation soil samples on pad (PH01 through PH05) were previously collected to confirm horizontal delineation to COCs of chloride less than than 600 mg/kg and TPH less than 100 mg/kg; additional delineation samples (PH06 and BH06 through BH10) were collected within and around the release footprint and confirmed COCs were below the applicable reclamation standard requirements.

Subsequent to the completion of excavation and receipt of soil confirmation sample results documenting that impacted soil had been removed, the excavation will be backfilled with clean, imported soil and restored to "as close to its original state" as possible.

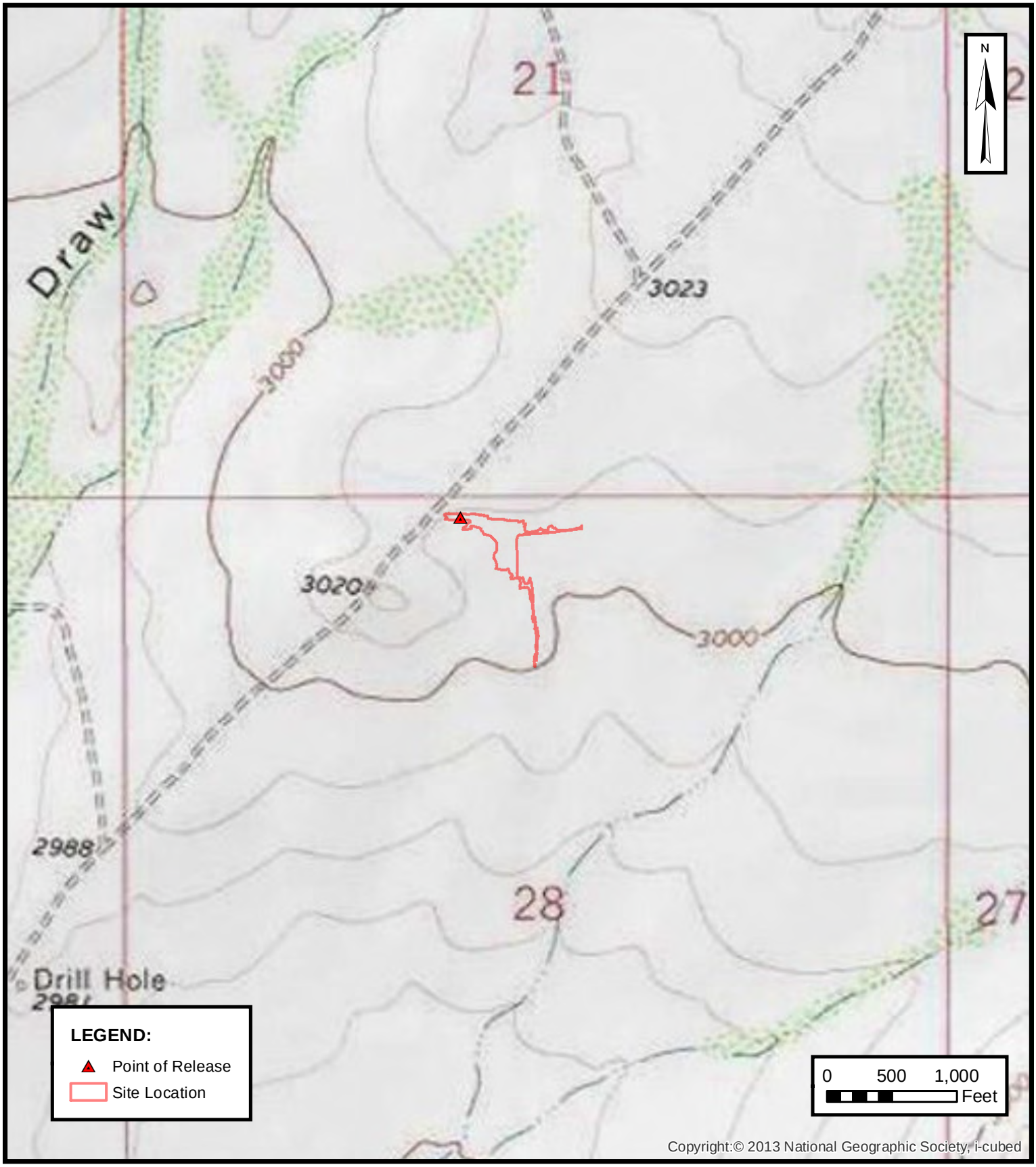
Based on the findings and conclusions of this report No Further Action appears warranted at this time and the Site should be respectfully considered for closure by the NMOCD. Previous project summary and field activity details can be found in the original Remediation Work Plan.

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APPENDIX A

ENSOLUM

Figures

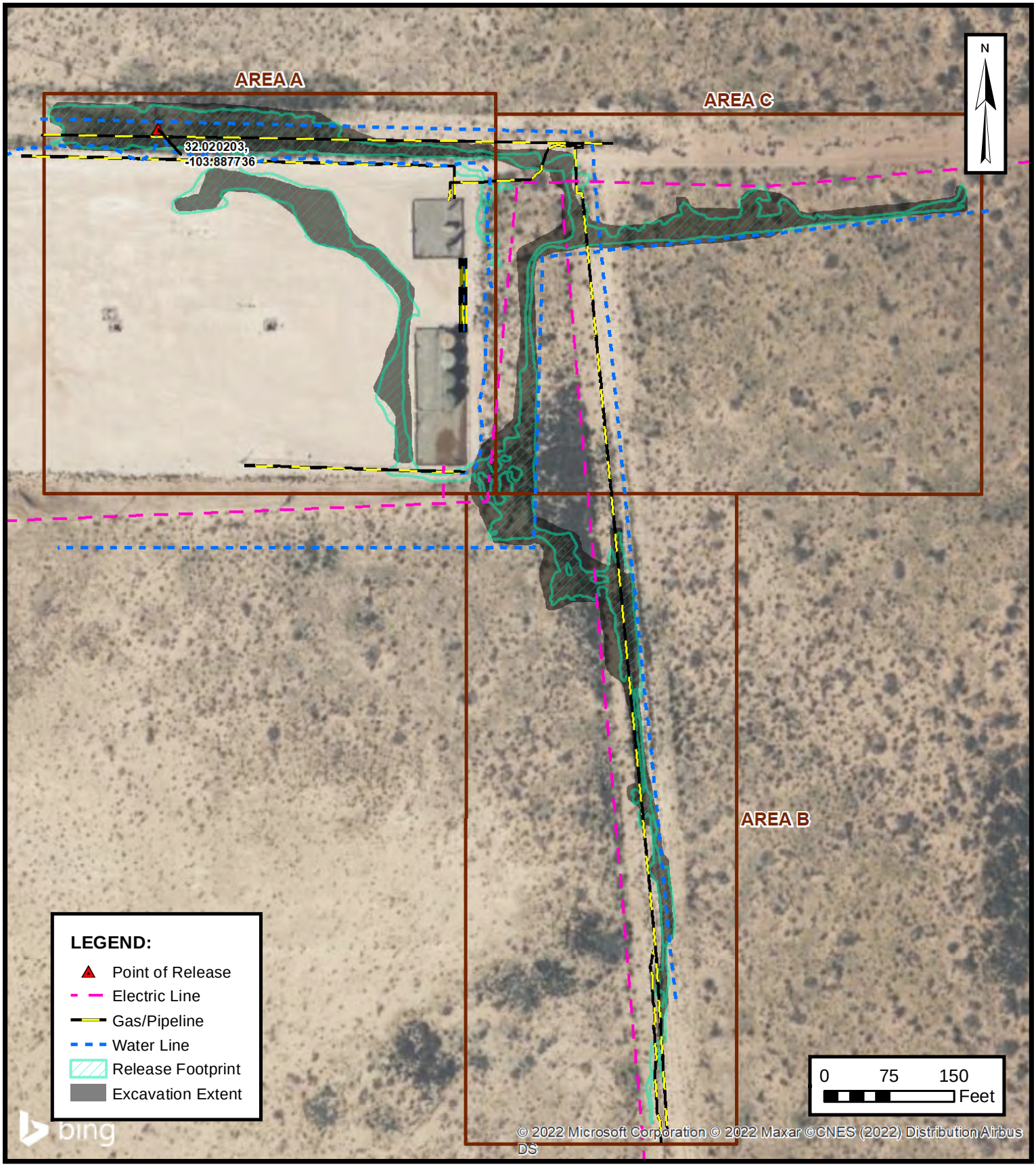


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TOPOGRAPHIC MAP

WPX ENERGY PERMIAN, LLC
RDX FEDERAL 28 #012
Incident Number: nAPP2124531124
Unit C, Sec 28, T26S, R30E Eddy County, New Mexico
32.020203° N, 103.887736° W
PROJECT NUMBER: 03A1987001

FIGURE
1



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SITE MAP

WPX ENERGY PERMIAN, LLC
RDX FEDERAL 28 #012
Incident Number: nAPP2124531124
Unit C, Sec 28, T26S, R30E Eddy County, New Mexico
32.020203° N, 103.887736° W
PROJECT NUMBER: 03A1987001

FIGURE
2



LEGEND:

- Point of Release
- Excavation Floor Soil Sample
- Excavation Sidewall Soil Sample
- Release Footprint
- Excavation Extent
- Electric Line
- Gas/Pipeline
- Water Line

NOTES:
Soil sample in green are in compliance with applicable Closure Criteria.

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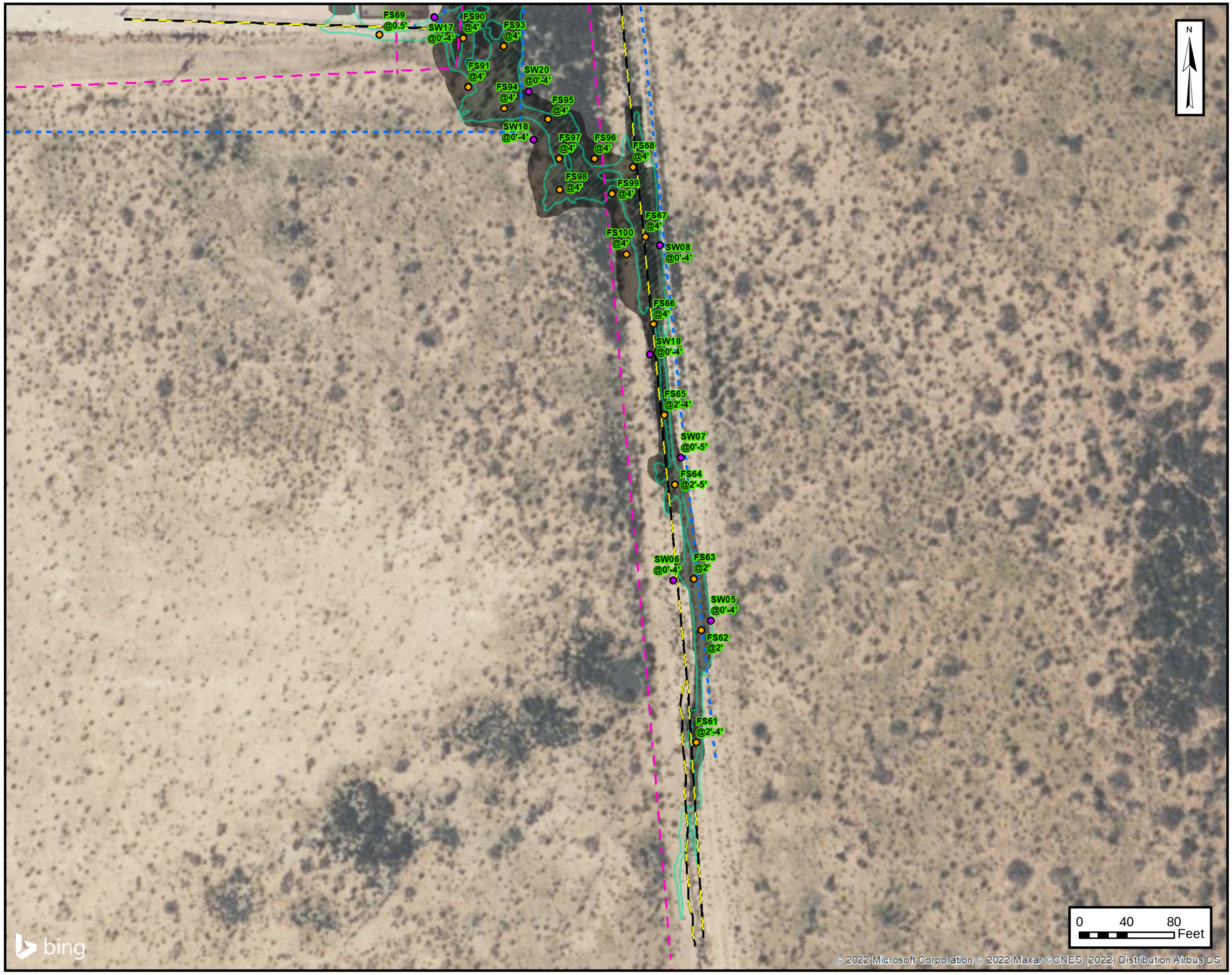
EXCAVATION SOIL SAMPLE LOCATIONS
AREA A

WPX ENERGY PERMIAN, LLC
RDX FEDERAL 28 #012

Incident Number: nAPP2124531124
Unit C, Sec 28, T26S, R30E Eddy County, New Mexico
32.020203° N, 103.887736° W

FIGURE
2A

PROJECT NUMBER: 03A1987001



LEGEND:

- Excavation Floor Soil Sample
- Excavation Sidewall Soil Sample
- Release Footprint
- Excavation Extent
- Electric Line
- Gas/Pipeline
- Water Line

NOTES:
Soil samples in green are in compliance with applicable Closure Criteria.

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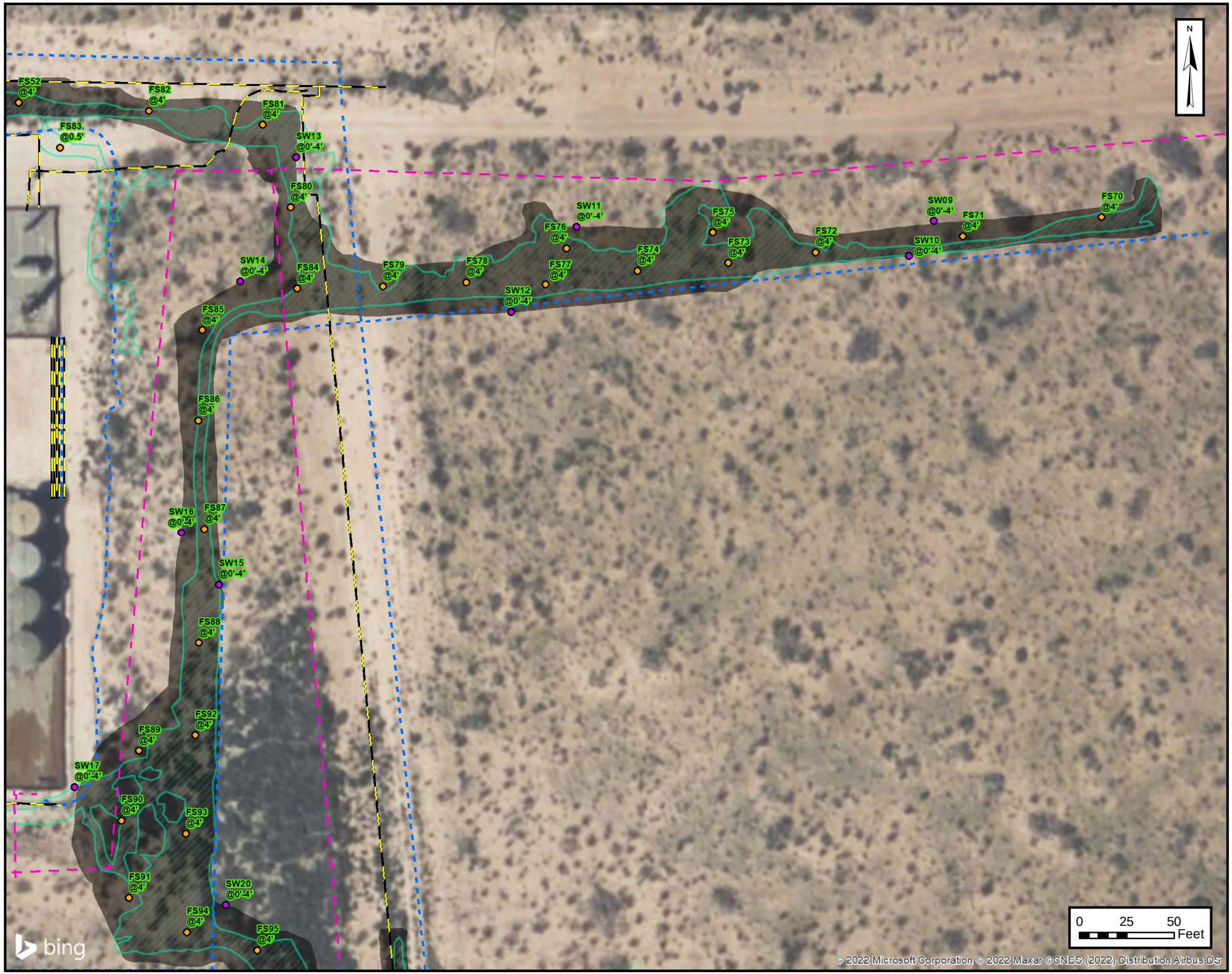
EXCAVATION SOIL SAMPLE LOCATIONS
AREA B

WPX ENERGY PERMIAN, LLC
RDX FEDERAL 28 #012

Incident Number: nAPP2124531124
Unit C, Sec 28, T26S, R30E Eddy County, New Mexico
32.020203° N, 103.887736° W

FIGURE
2B

PROJECT NUMBER: 03A1987001



LEGEND:

- Excavation Floor Soil Sample
- Excavation Sidewall Soil Sample
- Release Footprint
- Excavation Extent
- Electric Line
- Gas/Pipeline
- Water Line

NOTES:
Soil samples in green are in compliance with applicable Closure Criteria.

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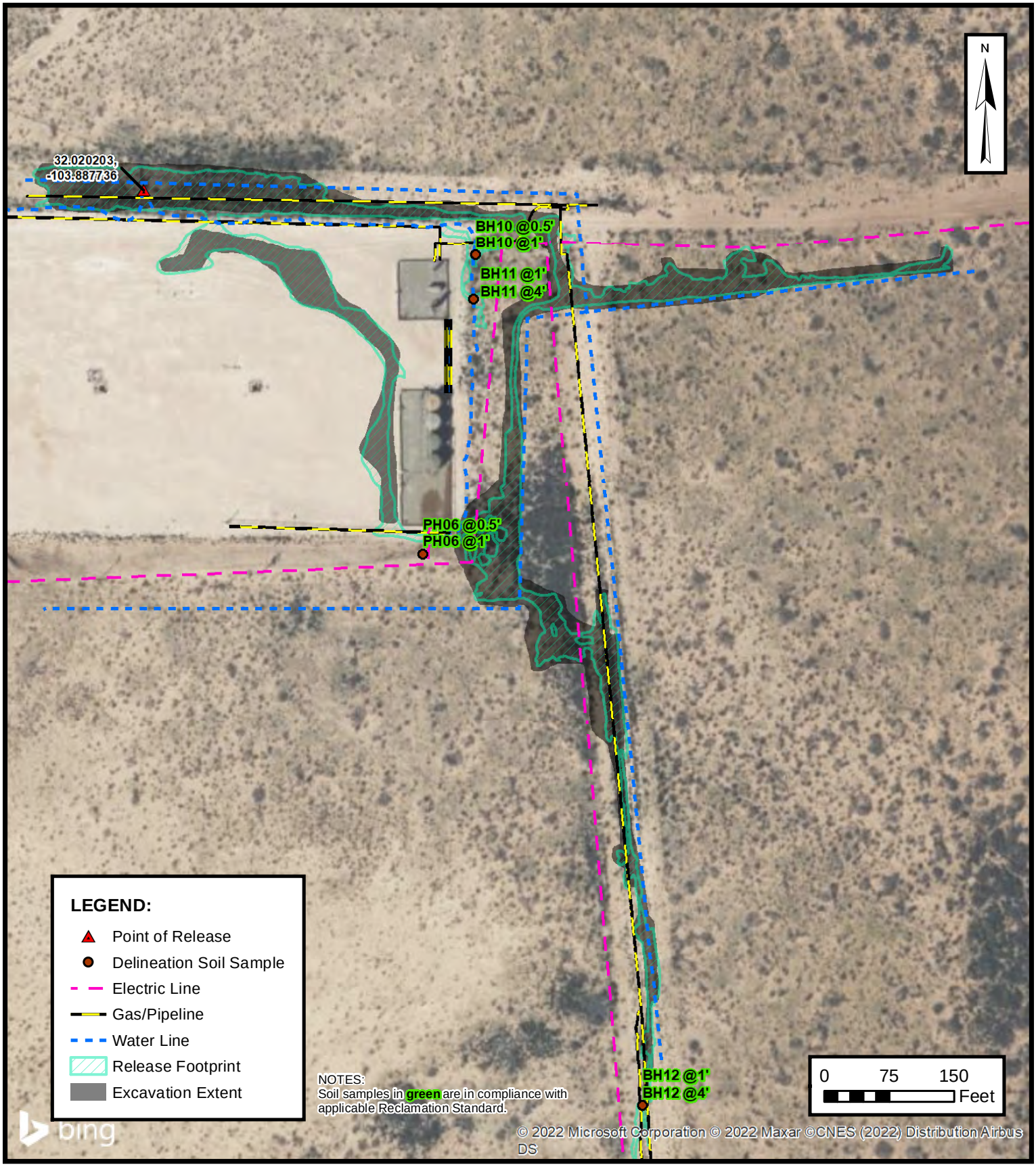
EXCAVATION SOIL SAMPLE LOCATIONS
AREA C

WPX ENERGY PERMIAN, LLC
RDX FEDERAL 28 #012

Incident Number: nAPP2124531124
Unit C, Sec 28, T26S, R30E Eddy County, New Mexico
32.020203° N, 103.887736° W

FIGURE
2C

PROJECT NUMBER: 03A1987001



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DELINEATION SOIL SAMPLE LOCATIONS

WPX ENERGY PERMIAN, LLC
RDX FEDERAL 28 #012
Incident Number: nAPP2124531124
Unit C, Sec 28, T26S, R30E Eddy County, New Mexico
32.020203° N, 103.887736° W
PROJECT NUMBER: 03A1987001

FIGURE

3

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APPENDIX B

Photographic Documentation

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Photographic Log
WPX Energy Permian, LLC.
RDX Federal 28 #012
Incident Number nAPP2124521124
Ensolum Job Number: 03A1987001



Photograph 1
Date: September 29, 2021
Description: Southeastern view of on pad excavation



Photograph 2
Date: September 29, 2021
Description: Northwestern view of on pad excavation



Photograph 3
Date: January 31, 2022
Description: Excavation activities associated with pipeline Right-of-Way (ROW)



Photograph 4
Date: February 10, 2022
Description: Excavation activities associated with pipeline ROW

ENSOLUM

Photographic Log
WPX Energy Permian, LLC.
RDX Federal 28 #012
Incident Number nAPP2124521124
Ensolum Job Number: 03A1987001



Photograph 5
Date: March 1, 2022
Description: Northwestern view of Site during Excavation Activities



Photograph 6
Date: March 1, 2022
Description: Excavation activities associated with pipeline ROW



Photograph 7
Date: March 1, 2022
Description: Excavation activities associated with pipeline ROW



Photograph 8
Date: March 1, 2022
Description: Excavation activities associated with pipeline ROW

ENSOLUM

Photographic Log
WPX Energy Permian, LLC.
RDX Federal 28 #012
Incident Number nAPP2124521124
Ensolum Job Number: 03A1987001



Photograph 9
Date: March 1, 2022
Description: Excavation activities associated with pipeline ROW



Photograph 10
Date: February 17, 2022
Description: Excavation activities associated with pipeline ROW



Photograph 11
Date: March 2, 2022
Description: Vegetation around BH10 and BH11 locations



Photograph 12
Date: March 2, 2022
Description: Delineation activities at BH10 location

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APPENDIX C

Lithologic Soil Sampling Logs

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	Sample Name: PH06	Date: 3/2/2022
	Site Name: RDX Federal 28 #012	
	Incident Number: nAPP2124521124	
	Job Number: 03A1987001	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Shovel
Coordinates: 32.019228, -103.886853	Hole Diameter: 0.5'	Total Depth: 1'

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
Dry			No			0		0 - 1' : dry brown with poorly-graded sand (m.), no odor, no cohesiveness, no plasticity, trace roots
Dry	BDL	0	No	PH06	0.5	0.5	SP	
Dry	BDL	0	No	PH06	1	1	SP	TOT Depth

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	Sample Name: BH10	Date: 3/2/2022
	Site Name: RDX Federal 28 #012	
	Incident Number: nAPP2124521124	
	Job Number: 03A1987001	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Auger
Coordinates: 32.020030, -103.886687	Hole Diameter: 2.5"	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
Dry			No			0		0 - 2.5' : dry brown with poorly-graded sand (m.), no odor, no cohesiveness, no plasticity, trace roots
Dry	BDL	0	No	BH10	1	1	SP	2.5 - 4' : dry off-white caliche, moderately cemented, no odor
Dry	BDL	0	No			2	SP	
Dry	BDL	0	No			3	CCHE	
Dry	BDL	0	No	BH10	4	4	CCHE	TOT Depth

ENSOLUM

	Sample Name: BH11	Date: 3/2/2022
	Site Name: RDX Federal 28 #012	
	Incident Number: nAPP2124521124	
	Job Number: 03A1987001	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Auger
Coordinates: 32.019910, -103.886693	Hole Diameter: 2.5"	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
Dry			No			0		0 - 2.5' : dry brown with poorly-graded sand (m.), no odor, no cohesiveness, no plasticity, trace roots
Dry	BDL	0	No	BH11	1	1	SP	2.5 - 4' : dry off-white caliche, moderately cemented, no odor
Dry	BDL	0	No			2	SP	
Dry	BDL	0	No			3	CCHE	
Dry	BDL	0	No	BH11	4	4	CCHE	TOT Depth

ENSOLUM

	Sample Name: BH12	Date: 3/2/2022
	Site Name: RDX Federal 28 #012	
	Incident Number: nAPP2124521124	
	Job Number: 03A1987001	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Anna Byers	Method: Hand Auger
Coordinates: 32.017750, -103.886159	Hole Diameter: 2.5"	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
Dry			No			0		0 - 3.5' : dry brown with poorly-graded sand (m.), no odor, no cohesiveness, no plasticity, trace roots
Dry	BDL	0	No	BH12	1	1	SP	3.5 - 4' : dry off-white caliche, moderately cemented, no odor
Dry	BDL	0	No			2	SP	
Dry	BDL	0	No			3	SP	
Dry	BDL	0	No	BH12	4	4	CCHE	TOT Depth

ENSOLUM

APPENDIX D

Tables

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - RDX Federal 28 #012
Eddy County, New Mexico

Ensolum Project No. 03A1987001

Sample I.D.	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**
Excavation Floor Soil Sample Analytical Results										
FS01	10/1/2021	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	5,310
FS02	10/1/2021	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	7,000
FS03	10/1/2021	0.5	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	8,040
FS04	10/1/2021	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	7,220
FS05	10/1/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	5,020
FS06	10/1/2021	0.5	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	8,140
FS07	10/1/2021	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	7,630
FS08	10/1/2021	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	5,490
FS09	10/1/2021	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	6,080
FS10	10/1/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,500
FS11	10/1/2021	0.5	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	6,410
FS12	10/1/2021	0.5	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	11,400
FS13	10/1/2021	0.5	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	9,380
FS14	10/1/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	10,300
FS15	10/1/2021	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	5,930
FS16	10/1/2021	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	3,310
FS17	10/1/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	2,510
FS18	10/1/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	4,560
FS19	10/1/2021	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	5,050
FS20	10/1/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	5,390
FS21	10/1/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	8,000
FS22	10/1/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,220
FS23	10/1/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,200
FS24	10/1/2021	0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	4,530
FS25	10/1/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	4,230
FS26	10/1/2021	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	2,390
FS27	10/1/2021	0.5	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	2,490
FS28	10/1/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,280
FS29	10/1/2021	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,790

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - RDX Federal 28 #012
Eddy County, New Mexico

Ensolum Project No. 03A1987001

Sample I.D.	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**
FS30	10/1/2021	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,250
FS31	10/1/2021	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	3,030
FS32	10/1/2021	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,540
FS33	10/1/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	2,460
FS34	10/1/2021	0.5	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	1,650
FS35	10/1/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,260
FS36	10/1/2021	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	560
FS37	10/1/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,410
FS38	10/1/2021	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,210
FS39	10/1/2021	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	1,790
FS40	10/1/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,680
FS41	10/1/2021	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	1,770
FS42	10/1/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	3,880
FS43	10/1/2021	0.5	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	1,380
FS44	10/1/2021	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	3,070
FS45	10/1/2021	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2,250
FS46	10/1/2021	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	964
FS47	10/1/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,440
FS48	10/1/2021	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	2,300
FS49	1/31/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,170
FS50	1/31/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,720
FS51	1/31/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5,630
FS52	2/9/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,640
FS53	2/9/2022	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	9,090
FS54	2/9/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	9,000
FS55	2/9/2022	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	4,940
FS56	2/9/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5,190
FS57	2/9/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	9,020
FS58	2/9/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	7,890
FS59	2/9/2022	4	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	5,450

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - RDX Federal 28 #012
Eddy County, New Mexico

Ensolum Project No. 03A1987001

Sample I.D.	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**
FS60	2/9/2022	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	5,720
FS61	2/9/2022	2 - 4	<0.00199	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.1	163
FS62	2/9/2022	2	<0.00199	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	78.2
FS63	2/9/2022	2	<0.00199	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	128
FS64	2/11/2022	2 - 5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	17.40
FS65	2/11/2022	2 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7.89
FS66	2/11/2022	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	44.1
FS67	2/11/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,440
FS68	2/11/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,850
FS69	2/16/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7,280
FS70	2/16/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,270
FS71	2/16/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	804
FS72	2/16/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	6,750
FS73	2/16/2022	4	<0.00199	<0.00398	260	<49.9	<49.9	260	260	5,270
FS74	2/16/2022	4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	9,100
FS75	3/2/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	7,780
FS76	3/2/2022	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	3,920
FS77	3/2/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	10,400
FS78	3/2/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	1,090
FS79	3/2/2022	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	842
FS80	3/2/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	2,060
FS81	3/2/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	35.5
FS82	3/2/2022	4	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	748
FS83	3/2/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,370
FS84	3/2/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,050
FS85	3/2/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	514
FS86	3/2/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	567
FS87	3/2/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	406
FS88	3/2/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	222
FS89	3/2/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	7,300

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - RDX Federal 28 #012
Eddy County, New Mexico

Ensolum Project No. 03A1987001

Sample I.D.	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**
FS90	3/2/2022	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,040
FS91	3/2/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	516
FS92	3/2/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	427
FS93	3/2/2022	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,630
FS94	3/2/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	365
FS95	3/2/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,020
FS96	3/2/2022	4	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	378
FS97	3/2/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	943
FS98	3/2/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	2,290
FS99	3/2/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	2,410
FS100	3/2/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,190
Excavation Sidewall Soil Sample Analytical Results										
SW01	2/9/2022	0 - 4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	25.8
SW02	2/9/2022	0 - 4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	76.5
SW03	2/9/2022	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,430
SW04	2/9/2022	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,470
SW05	2/9/2022	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	38.0
SW06	2/9/2022	0 - 4	<0.00198	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	50.8
SW07	2/11/2022	0 - 5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	11.9
SW08	2/11/2022	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	89.9
SW09	2/16/2022	0 - 4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	85.6
SW10	2/16/2022	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	35.6
SW11	3/2/2022	0 - 4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	11.5
SW12	3/2/2022	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	49.6
SW13	3/2/2022	0 - 4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	<5.00
SW14	3/2/2022	0 - 4	<0.00199	0.00652	<49.9	<49.9	<49.9	<49.9	<49.9	41.8
SW15	3/2/2022	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	96.2
SW16	3/2/2022	0 - 4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	16.2
SW17	3/2/2022	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	8,780
SW18	3/2/2022	0 - 4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	55.8

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC. - RDX Federal 28 #012
Eddy County, New Mexico

Ensolum Project No. 03A1987001

Sample I.D.	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**
SW19	3/2/2022	0 - 4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	53.9
SW20	3/2/2022	0 - 4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	12.7
Delineation Soil Sample Analytical Results										
PH06	3/2/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	546
PH06	3/2/2022	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	5.98
BH10	3/2/2022	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	21.6
BH10	3/2/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	<5.04
BH11	3/2/2022	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	6.49
BH11	3/2/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	19.2
BH12	3/2/2022	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	44.1
BH12	3/2/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	19.3

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 for Soils Impacted by a Release*

ENSOLUM

APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 890-1352-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: RDX Federal 28-12h

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
10/13/2021 5:25:20 PM

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

LINKS

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Have a Question? Ask The Expert

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www.eurofinsus.com/Env

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

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

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1352-1
Project/Site: RDX Federal 28-12h SDG: Eddy County

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.
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.
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
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

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Job ID: 890-1352-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1352-1

Receipt
The samples were received on 10/4/2021 11:34 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 2.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8908 and analytical batch 880-9114 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS01 (890-1352-1), FS05 (890-1352-5), FS06 (890-1352-6), FS07 (890-1352-7), FS08 (890-1352-8), FS10 (890-1352-10), FS11 (890-1352-11), FS12 (890-1352-12), FS13 (890-1352-13), FS14 (890-1352-14), FS15 (890-1352-15), FS16 (890-1352-16), FS17 (890-1352-17), FS18 (890-1352-18), FS19 (890-1352-19), FS20 (890-1352-20), FS22 (890-1352-22), FS23 (890-1352-23), FS24 (890-1352-24), FS25 (890-1352-25), FS26 (890-1352-26), FS27 (890-1352-27), FS28 (890-1352-28), FS31 (890-1352-31), FS32 (890-1352-32), FS33 (890-1352-33), FS34 (890-1352-34), FS35 (890-1352-35), FS37 (890-1352-37), FS38 (890-1352-38), FS39 (890-1352-39), FS40 (890-1352-40), (890-1352-A-21-D MS) and (890-1352-A-21-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-8972 and analytical batch 880-8955 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 sample was outside control limits: (MB 880-8972/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS47 (890-1352-47) and (MB 880-8981/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-9091 and analytical batch 880-9084 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 sample was outside control limits: (LCS 880-9091/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9093/1-A). 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 880-9101 and analytical batch 880-9188 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9103 and analytical batch 880-9218 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because

Case Narrative

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Job ID: 890-1352-1 (Continued)

Laboratory: Eurofins Xenco, Carlsbad (Continued)

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: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS01

Lab Sample ID: 890-1352-1
Matrix: Solid
Date Collected: 10/01/21 12:00
Date Received: 10/04/21 11:34
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 F2 F1	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:39	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:39	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:39	1
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.00399		mg/Kg		10/05/21 11:09	10/09/21 09:39	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:39	1
Xylenes, Total	<0.00399	U F2 F1	0.00399		mg/Kg		10/05/21 11:09	10/09/21 09:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*248*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 09:39*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*10/05/21 11:09*	*10/09/21 09:39*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 16:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		10/08/21 08:27	10/08/21 16:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*10/08/21 08:27*	*10/08/21 16:04*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/08/21 08:27*	*10/08/21 16:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5310**		49.7		mg/Kg			10/11/21 13:11	10

Client Sample ID: FS02

Lab Sample ID: 890-1352-2
Matrix: Solid
Date Collected: 10/01/21 12:02
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 10:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 10:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 10:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 10:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 10:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 10:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*10/05/21 11:09*	*10/09/21 10:05*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS02

Lab Sample ID: 890-1352-2
Matrix: Solid
Date Collected: 10/01/21 12:02
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*10/05/21 11:09*	*10/09/21 10:05*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		10/08/21 08:27	10/08/21 16:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*98*		*70 - 130*	*10/08/21 08:27*	*10/08/21 16:26*	*1*
o-Terphenyl	*108*		*70 - 130*	*10/08/21 08:27*	*10/08/21 16:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7000**		50.0		mg/Kg			10/11/21 13:17	10

Client Sample ID: FS03

Lab Sample ID: 890-1352-3
Matrix: Solid
Date Collected: 10/01/21 12:04
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 10:31	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 10:31	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 10:31	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/05/21 11:09	10/09/21 10:31	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 10:31	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/05/21 11:09	10/09/21 10:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*10/05/21 11:09*	*10/09/21 10:31*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/05/21 11:09*	*10/09/21 10:31*	*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			10/11/21 15:20	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			10/07/21 09:11	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS03

Lab Sample ID: 890-1352-3
Matrix: Solid
Date Collected: 10/01/21 12:04
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 16:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8		mg/Kg		10/08/21 08:27	10/08/21 16:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*10/08/21 08:27*	*10/08/21 16:48*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/08/21 08:27*	*10/08/21 16:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8040**		49.9		mg/Kg			10/11/21 13:24	10

Client Sample ID: FS04

Lab Sample ID: 890-1352-4
Matrix: Solid
Date Collected: 10/01/21 12:06
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 10:57	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 10:57	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 10:57	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/05/21 11:09	10/09/21 10:57	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 10:57	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/05/21 11:09	10/09/21 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*10/05/21 11:09*	*10/09/21 10:57*	*1*
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*10/05/21 11:09*	*10/09/21 10:57*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 17:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		10/08/21 08:27	10/08/21 17:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:27	10/08/21 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*10/08/21 08:27*	*10/08/21 17:11*	*1*
o-Terphenyl	*93*		*70 - 130*	*10/08/21 08:27*	*10/08/21 17:11*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS04

Lab Sample ID: 890-1352-4
Matrix: Solid
Date Collected: 10/01/21 12:06
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7220		49.5		mg/Kg			10/11/21 13:30	10

Client Sample ID: FS05

Lab Sample ID: 890-1352-5
Matrix: Solid
Date Collected: 10/01/21 12:08
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 11:23	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 11:23	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 11:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 11:23	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 11:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*164*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 11:23*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*10/05/21 11:09*	*10/09/21 11:23*	*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			10/11/21 15:20	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			10/07/21 09:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 17:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8		mg/Kg		10/08/21 08:27	10/08/21 17:33	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*10/08/21 08:27*	*10/08/21 17:33*	*1*
o-Terphenyl	*94*		*70 - 130*	*10/08/21 08:27*	*10/08/21 17:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5020		25.1		mg/Kg			10/11/21 13:36	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS06

Lab Sample ID: 890-1352-6
Matrix: Solid
Date Collected: 10/01/21 12:10
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 11:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 11:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 11:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 11:49	1
o-Xylene	**0.00300**		0.00200		mg/Kg		10/05/21 11:09	10/09/21 11:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*199*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 11:49*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*10/05/21 11:09*	*10/09/21 11:49*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 18:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		10/08/21 08:27	10/08/21 18:18	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:27	10/08/21 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*10/08/21 08:27*	*10/08/21 18:18*	*1*
o-Terphenyl	*90*		*70 - 130*	*10/08/21 08:27*	*10/08/21 18:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8140**		49.7		mg/Kg			10/11/21 13:42	10

Client Sample ID: FS07

Lab Sample ID: 890-1352-7
Matrix: Solid
Date Collected: 10/01/21 12:20
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 12:15	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:09	10/09/21 12:15	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:09	10/09/21 12:15	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/05/21 11:09	10/09/21 12:15	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:09	10/09/21 12:15	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/05/21 11:09	10/09/21 12:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*302*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 12:15*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS07

Lab Sample ID: 890-1352-7
Matrix: Solid
Date Collected: 10/01/21 12:20
Date Received: 10/04/21 11:34
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*	*10/05/21 11:09*	*10/09/21 12:15*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 18:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		10/08/21 08:27	10/08/21 18:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*10/08/21 08:27*	*10/08/21 18:40*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/08/21 08:27*	*10/08/21 18:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7630**		50.4		mg/Kg			10/11/21 13:49	10

Client Sample ID: FS08

Lab Sample ID: 890-1352-8
Matrix: Solid
Date Collected: 10/01/21 12:22
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 12:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 12:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 12:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/05/21 11:09	10/09/21 12:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 12:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/05/21 11:09	10/09/21 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*155*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 12:41*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*10/05/21 11:09*	*10/09/21 12:41*	*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			10/11/21 15:20	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			10/07/21 09:11	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS08

Lab Sample ID: 890-1352-8
Matrix: Solid
Date Collected: 10/01/21 12:22
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/08/21 08:27	10/08/21 19:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		10/08/21 08:27	10/08/21 19:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:27	10/08/21 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*10/08/21 08:27*	*10/08/21 19:01*	*1*
o-Terphenyl	*93*		*70 - 130*	*10/08/21 08:27*	*10/08/21 19:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5490**		50.0		mg/Kg			10/13/21 15:18	10

Client Sample ID: FS09

Lab Sample ID: 890-1352-9
Matrix: Solid
Date Collected: 10/01/21 12:24
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 13:07	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:09	10/09/21 13:07	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:09	10/09/21 13:07	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/05/21 11:09	10/09/21 13:07	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:09	10/09/21 13:07	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/05/21 11:09	10/09/21 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*10/05/21 11:09*	*10/09/21 13:07*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*10/05/21 11:09*	*10/09/21 13:07*	*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			10/11/21 15:20	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			10/07/21 09:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 19:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8		mg/Kg		10/08/21 08:27	10/08/21 19:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/08/21 08:27*	*10/08/21 19:23*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/08/21 08:27*	*10/08/21 19:23*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS09

Lab Sample ID: 890-1352-9
Matrix: Solid
Date Collected: 10/01/21 12:24
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6080		49.9		mg/Kg			10/13/21 15:24	10

Client Sample ID: FS10

Lab Sample ID: 890-1352-10
Matrix: Solid
Date Collected: 10/01/21 12:26
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 13:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 13:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 13:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 13:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 13:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 13:33*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*10/05/21 11:09*	*10/09/21 13:33*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 19:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		10/08/21 08:27	10/08/21 19:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/08/21 08:27*	*10/08/21 19:44*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/08/21 08:27*	*10/08/21 19:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3500		24.9		mg/Kg			10/13/21 12:34	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS11

Lab Sample ID: 890-1352-11
Matrix: Solid
Date Collected: 10/01/21 12:28
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 15:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 15:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 15:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 15:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 15:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*430*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 15:18*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/05/21 11:09*	*10/09/21 15:18*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 20:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		10/08/21 08:27	10/08/21 20:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:27	10/08/21 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/08/21 08:27*	*10/08/21 20:05*	*1*
o-Terphenyl	*102*		*70 - 130*	*10/08/21 08:27*	*10/08/21 20:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6410**		49.5		mg/Kg			10/13/21 15:30	10

Client Sample ID: FS12

Lab Sample ID: 890-1352-12
Matrix: Solid
Date Collected: 10/01/21 12:30
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 15:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 15:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 15:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/05/21 11:09	10/09/21 15:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 15:45	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/05/21 11:09	10/09/21 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*352*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 15:45*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS12

Lab Sample ID: 890-1352-12
Matrix: Solid
Date Collected: 10/01/21 12:30
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*10/05/21 11:09*	*10/09/21 15:45*	*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			10/11/21 15:20	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			10/07/21 09:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 20:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8		mg/Kg		10/08/21 08:27	10/08/21 20:27	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/08/21 08:27*	*10/08/21 20:27*	*1*
o-Terphenyl	*100*		*70 - 130*	*10/08/21 08:27*	*10/08/21 20:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11400**		49.5		mg/Kg			10/13/21 15:37	10

Client Sample ID: FS13

Lab Sample ID: 890-1352-13
Matrix: Solid
Date Collected: 10/01/21 12:40
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 16:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:09	10/09/21 16:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:09	10/09/21 16:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/05/21 11:09	10/09/21 16:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:09	10/09/21 16:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/05/21 11:09	10/09/21 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*239*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 16:11*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*10/05/21 11:09*	*10/09/21 16:11*	*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			10/11/21 15:20	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			10/07/21 09:11	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS13

Lab Sample ID: 890-1352-13
Matrix: Solid
Date Collected: 10/01/21 12:40
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 20:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8		mg/Kg		10/08/21 08:27	10/08/21 20:47	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:27	10/08/21 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*10/08/21 08:27*	*10/08/21 20:47*	*1*
o-Terphenyl	*99*		*70 - 130*	*10/08/21 08:27*	*10/08/21 20:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9380**		50.2		mg/Kg			10/13/21 15:43	10

Client Sample ID: FS14

Lab Sample ID: 890-1352-14
Matrix: Solid
Date Collected: 10/01/21 12:42
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 16:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 16:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 16:37	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/05/21 11:09	10/09/21 16:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 16:37	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/05/21 11:09	10/09/21 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*164*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 16:37*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*10/05/21 11:09*	*10/09/21 16:37*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 21:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		10/08/21 08:27	10/08/21 21:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*10/08/21 08:27*	*10/08/21 21:08*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/08/21 08:27*	*10/08/21 21:08*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS14

Lab Sample ID: 890-1352-14
Matrix: Solid
Date Collected: 10/01/21 12:42
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10300		49.8		mg/Kg			10/13/21 15:49	10

Client Sample ID: FS15

Lab Sample ID: 890-1352-15
Matrix: Solid
Date Collected: 10/01/21 12:44
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 17:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:09	10/09/21 17:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:09	10/09/21 17:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/05/21 11:09	10/09/21 17:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:09	10/09/21 17:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/05/21 11:09	10/09/21 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*195*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 17:04*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*10/05/21 11:09*	*10/09/21 17:04*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:27	10/08/21 21:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		10/08/21 08:27	10/08/21 21:29	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:27	10/08/21 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*10/08/21 08:27*	*10/08/21 21:29*	*1*
o-Terphenyl	*95*		*70 - 130*	*10/08/21 08:27*	*10/08/21 21:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5930		49.5		mg/Kg			10/13/21 15:56	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS16

Lab Sample ID: 890-1352-16
Matrix: Solid
Date Collected: 10/01/21 12:46
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 17:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 17:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 17:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/05/21 11:09	10/09/21 17:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 17:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/05/21 11:09	10/09/21 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*223*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 17:30*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*10/05/21 11:09*	*10/09/21 17:30*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:34	10/08/21 15:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 15:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*10/08/21 08:34*	*10/08/21 15:57*	*1*
o-Terphenyl	*96*		*70 - 130*	*10/08/21 08:34*	*10/08/21 15:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3310**		25.0		mg/Kg			10/13/21 13:25	5

Client Sample ID: FS17

Lab Sample ID: 890-1352-17
Matrix: Solid
Date Collected: 10/01/21 12:48
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 17:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 17:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 17:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/05/21 11:09	10/09/21 17:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 17:57	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/05/21 11:09	10/09/21 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*162*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 17:57*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS17

Lab Sample ID: 890-1352-17
Matrix: Solid
Date Collected: 10/01/21 12:48
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*10/05/21 11:09*	*10/09/21 17:57*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:34	10/08/21 16:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 16:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*10/08/21 08:34*	*10/08/21 16:19*	*1*
o-Terphenyl	*92*		*70 - 130*	*10/08/21 08:34*	*10/08/21 16:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2510**		25.0		mg/Kg			10/13/21 13:31	5

Client Sample ID: FS18

Lab Sample ID: 890-1352-18
Matrix: Solid
Date Collected: 10/01/21 12:50
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 18:23	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 18:23	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 18:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 18:23	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 18:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*160*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 18:23*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*10/05/21 11:09*	*10/09/21 18:23*	*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			10/11/21 15:20	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			10/07/21 09:11	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS18

Lab Sample ID: 890-1352-18
Matrix: Solid
Date Collected: 10/01/21 12:50
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 16:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 16:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/08/21 08:34*	*10/08/21 16:41*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/08/21 08:34*	*10/08/21 16:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4560**		25.3		mg/Kg			10/13/21 13:37	5

Client Sample ID: FS19

Lab Sample ID: 890-1352-19
Matrix: Solid
Date Collected: 10/01/21 13:00
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 18:49	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 18:49	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 18:49	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/05/21 11:09	10/09/21 18:49	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:09	10/09/21 18:49	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/05/21 11:09	10/09/21 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*249*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 18:49*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*10/05/21 11:09*	*10/09/21 18:49*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:34	10/08/21 17:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 17:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/08/21 08:34*	*10/08/21 17:03*	*1*
o-Terphenyl	*102*		*70 - 130*	*10/08/21 08:34*	*10/08/21 17:03*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS19

Lab Sample ID: 890-1352-19
Matrix: Solid
Date Collected: 10/01/21 13:00
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5050		24.8		mg/Kg			10/13/21 13:56	5

Client Sample ID: FS20

Lab Sample ID: 890-1352-20
Matrix: Solid
Date Collected: 10/01/21 13:02
Date Received: 10/04/21 11:34
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		10/05/21 11:09	10/09/21 19:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 19:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 19:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 19:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:09	10/09/21 19:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:09	10/09/21 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*171*	*S1+*	*70 - 130*	*10/05/21 11:09*	*10/09/21 19:16*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*10/05/21 11:09*	*10/09/21 19:16*	*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			10/11/21 15:20	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			10/07/21 09:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 17:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 17:26	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/08/21 08:34*	*10/08/21 17:26*	*1*
o-Terphenyl	*99*		*70 - 130*	*10/08/21 08:34*	*10/08/21 17:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5390		25.2		mg/Kg			10/13/21 14:02	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS21

Lab Sample ID: 890-1352-21
Matrix: Solid
Date Collected: 10/01/21 13:04
Date Received: 10/04/21 11:34
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 F1 F2	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:12	1
Toluene	<0.00199	U F1 F2	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:12	1
Ethylbenzene	<0.00199	U F1 F2	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:12	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		10/05/21 11:12	10/09/21 23:12	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:12	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		10/05/21 11:12	10/09/21 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*10/05/21 11:12*	*10/09/21 23:12*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*10/05/21 11:12*	*10/09/21 23:12*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:34	10/08/21 18:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 18:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*10/08/21 08:34*	*10/08/21 18:10*	*1*
o-Terphenyl	*94*		*70 - 130*	*10/08/21 08:34*	*10/08/21 18:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8000**		49.5		mg/Kg			10/13/21 16:02	10

Client Sample ID: FS22

Lab Sample ID: 890-1352-22
Matrix: Solid
Date Collected: 10/01/21 13:06
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/09/21 23:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/09/21 23:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/09/21 23:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/09/21 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*222*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/09/21 23:38*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS22

Lab Sample ID: 890-1352-22
Matrix: Solid
Date Collected: 10/01/21 13:06
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*10/05/21 11:12*	*10/09/21 23:38*	*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			10/11/21 15:20	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			10/07/21 09:11	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		10/08/21 08:34	10/08/21 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 18:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/08/21 08:34*	*10/08/21 18:33*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/08/21 08:34*	*10/08/21 18:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4220**		24.8		mg/Kg			10/13/21 14:28	5

Client Sample ID: FS23

Lab Sample ID: 890-1352-23
Matrix: Solid
Date Collected: 10/01/21 13:08
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 00:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 00:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 00:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 00:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 00:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*151*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 00:04*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*10/05/21 11:12*	*10/10/21 00:04*	*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			10/11/21 15:20	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			10/07/21 09:18	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS23

Lab Sample ID: 890-1352-23
Matrix: Solid
Date Collected: 10/01/21 13:08
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 18:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 18:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*10/08/21 08:34*	*10/08/21 18:55*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/08/21 08:34*	*10/08/21 18:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4200**		24.8		mg/Kg			10/13/21 14:34	5

Client Sample ID: FS24

Lab Sample ID: 890-1352-24
Matrix: Solid
Date Collected: 10/01/21 13:10
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 00:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 00:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 00:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:12	10/10/21 00:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 00:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:12	10/10/21 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*183*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 00:30*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*10/05/21 11:12*	*10/10/21 00:30*	*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			10/11/21 15:20	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			10/07/21 09:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 19:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 19:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*10/08/21 08:34*	*10/08/21 19:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/08/21 08:34*	*10/08/21 19:16*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS24

Lab Sample ID: 890-1352-24
Matrix: Solid
Date Collected: 10/01/21 13:10
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4530		24.9		mg/Kg			10/13/21 14:40	5

Client Sample ID: FS25

Lab Sample ID: 890-1352-25
Matrix: Solid
Date Collected: 10/01/21 13:30
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 00:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 00:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 00:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/05/21 11:12	10/10/21 00:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 00:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/05/21 11:12	10/10/21 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 00:56*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*10/05/21 11:12*	*10/10/21 00:56*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:34	10/08/21 19:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 19:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*10/08/21 08:34*	*10/08/21 19:38*	*1*
o-Terphenyl	*105*		*70 - 130*	*10/08/21 08:34*	*10/08/21 19:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4230		24.8		mg/Kg			10/13/21 14:47	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS26

Lab Sample ID: 890-1352-26
Matrix: Solid
Date Collected: 10/01/21 13:32
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 01:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:12	10/10/21 01:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:12	10/10/21 01:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/05/21 11:12	10/10/21 01:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/05/21 11:12	10/10/21 01:22	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/05/21 11:12	10/10/21 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*171*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 01:22*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*10/05/21 11:12*	*10/10/21 01:22*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:34	10/08/21 20:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 20:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*10/08/21 08:34*	*10/08/21 20:00*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/08/21 08:34*	*10/08/21 20:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2390**		25.1		mg/Kg			10/13/21 14:53	5

Client Sample ID: FS27

Lab Sample ID: 890-1352-27
Matrix: Solid
Date Collected: 10/01/21 13:34
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 01:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 01:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 01:47	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/05/21 11:12	10/10/21 01:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 01:47	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/05/21 11:12	10/10/21 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*167*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 01:47*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS27

Lab Sample ID: 890-1352-27
Matrix: Solid
Date Collected: 10/01/21 13:34
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*10/05/21 11:12*	*10/10/21 01:47*	*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			10/11/21 15:20	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			10/07/21 09:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 20:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 20:21	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*10/08/21 08:34*	*10/08/21 20:21*	*1*
o-Terphenyl	*103*		*70 - 130*	*10/08/21 08:34*	*10/08/21 20:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2490**		24.9		mg/Kg			10/13/21 14:59	5

Client Sample ID: FS28

Lab Sample ID: 890-1352-28
Matrix: Solid
Date Collected: 10/01/21 13:36
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 02:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 02:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 02:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 02:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 02:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 02:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*171*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 02:13*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*10/05/21 11:12*	*10/10/21 02:13*	*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			10/11/21 15:20	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			10/07/21 09:18	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS28

Lab Sample ID: 890-1352-28
Matrix: Solid
Date Collected: 10/01/21 13:36
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 20:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 20:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:34	10/08/21 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*10/08/21 08:34*	*10/08/21 20:43*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/08/21 08:34*	*10/08/21 20:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1280**		4.96		mg/Kg			10/11/21 14:44	1

Client Sample ID: FS29

Lab Sample ID: 890-1352-29
Matrix: Solid
Date Collected: 10/01/21 13:38
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 02:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 02:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 02:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/05/21 11:12	10/10/21 02:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 02:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/05/21 11:12	10/10/21 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*286*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 02:39*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*10/05/21 11:12*	*10/10/21 02:39*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:34	10/08/21 21:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 21:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*10/08/21 08:34*	*10/08/21 21:04*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/08/21 08:34*	*10/08/21 21:04*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS29

Lab Sample ID: 890-1352-29
Matrix: Solid
Date Collected: 10/01/21 13:38
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1790		25.2		mg/Kg			10/11/21 15:03	5

Client Sample ID: FS30

Lab Sample ID: 890-1352-30
Matrix: Solid
Date Collected: 10/01/21 13:40
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 03:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 03:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 03:05	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/05/21 11:12	10/10/21 03:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 03:05	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/05/21 11:12	10/10/21 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*10/05/21 11:12*	*10/10/21 03:05*	*1*
1,4-Difluorobenzene (Surr)	*52*	*S1-*	*70 - 130*	*10/05/21 11:12*	*10/10/21 03:05*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:34	10/08/21 21:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 21:25	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:34	10/08/21 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*10/08/21 08:34*	*10/08/21 21:25*	*1*
o-Terphenyl	*104*		*70 - 130*	*10/08/21 08:34*	*10/08/21 21:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1250		4.99		mg/Kg			10/11/21 15:09	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS31

Lab Sample ID: 890-1352-31
Matrix: Solid
Date Collected: 10/01/21 13:50
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 04:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:12	10/10/21 04:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:12	10/10/21 04:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/05/21 11:12	10/10/21 04:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:12	10/10/21 04:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/05/21 11:12	10/10/21 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*10/05/21 11:12*	*10/10/21 04:49*	*1*
1,4-Difluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*10/05/21 11:12*	*10/10/21 04:49*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:35	10/08/21 15:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 15:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*10/08/21 08:35*	*10/08/21 15:57*	*1*
o-Terphenyl	*115*		*70 - 130*	*10/08/21 08:35*	*10/08/21 15:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3030**		24.9		mg/Kg			10/11/21 15:16	5

Client Sample ID: FS32

Lab Sample ID: 890-1352-32
Matrix: Solid
Date Collected: 10/01/21 13:52
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 05:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:12	10/10/21 05:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:12	10/10/21 05:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/05/21 11:12	10/10/21 05:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/05/21 11:12	10/10/21 05:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/05/21 11:12	10/10/21 05:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*10/05/21 11:12*	*10/10/21 05:15*	*1*

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS32

Lab Sample ID: 890-1352-32
Matrix: Solid
Date Collected: 10/01/21 13:52
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*49*	*S1-*	*70 - 130*	*10/05/21 11:12*	*10/10/21 05:15*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:35	10/08/21 16:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 16:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*10/08/21 08:35*	*10/08/21 16:19*	*1*
o-Terphenyl	*118*		*70 - 130*	*10/08/21 08:35*	*10/08/21 16:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1540**		24.8		mg/Kg			10/11/21 15:22	5

Client Sample ID: FS33

Lab Sample ID: 890-1352-33
Matrix: Solid
Date Collected: 10/01/21 13:54
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 05:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 05:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 05:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 05:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 05:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 05:41*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*10/05/21 11:12*	*10/10/21 05:41*	*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			10/11/21 15:20	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			10/07/21 09:18	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS33

Lab Sample ID: 890-1352-33
Matrix: Solid
Date Collected: 10/01/21 13:54
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 16:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 16:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*10/08/21 08:35*	*10/08/21 16:41*	*1*
o-Terphenyl	*132*	*S1+*	*70 - 130*	*10/08/21 08:35*	*10/08/21 16:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2460**		25.3		mg/Kg			10/11/21 15:41	5

Client Sample ID: FS34

Lab Sample ID: 890-1352-34
Matrix: Solid
Date Collected: 10/01/21 13:56
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 06:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 06:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 06:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:12	10/10/21 06:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 06:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:12	10/10/21 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*168*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 06:07*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*10/05/21 11:12*	*10/10/21 06:07*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:35	10/08/21 17:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 17:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*10/08/21 08:35*	*10/08/21 17:03*	*1*
o-Terphenyl	*119*		*70 - 130*	*10/08/21 08:35*	*10/08/21 17:03*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS34

Lab Sample ID: 890-1352-34
Matrix: Solid
Date Collected: 10/01/21 13:56
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		24.9		mg/Kg			10/11/21 15:47	5

Client Sample ID: FS35

Lab Sample ID: 890-1352-35
Matrix: Solid
Date Collected: 10/01/21 13:58
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 06:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 06:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 06:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 06:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 06:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*170*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 06:33*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*10/05/21 11:12*	*10/10/21 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			10/11/21 15:20	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			10/07/21 09:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 17:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 17:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*10/08/21 08:35*	*10/08/21 17:26*	*1*
o-Terphenyl	*118*		*70 - 130*	*10/08/21 08:35*	*10/08/21 17:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1260		4.95		mg/Kg			10/11/21 15:53	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS36

Lab Sample ID: 890-1352-36
Matrix: Solid
Date Collected: 10/01/21 14:00
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 07:01	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 07:01	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 07:01	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/05/21 11:12	10/10/21 07:01	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 07:01	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/05/21 11:12	10/10/21 07:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*10/05/21 11:12*	*10/10/21 07:01*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*10/05/21 11:12*	*10/10/21 07:01*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:35	10/08/21 18:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 18:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*10/08/21 08:35*	*10/08/21 18:10*	*1*
o-Terphenyl	*113*		*70 - 130*	*10/08/21 08:35*	*10/08/21 18:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**560**		4.99		mg/Kg			10/11/21 15:59	1

Client Sample ID: FS37

Lab Sample ID: 890-1352-37
Matrix: Solid
Date Collected: 10/01/21 14:10
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 07:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 07:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 07:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/05/21 11:12	10/10/21 07:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 07:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/05/21 11:12	10/10/21 07:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*240*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 07:29*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS37

Lab Sample ID: 890-1352-37
Matrix: Solid
Date Collected: 10/01/21 14:10
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*10/05/21 11:12*	*10/10/21 07:29*	*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			10/11/21 15:20	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			10/07/21 09:18	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		10/08/21 08:35	10/08/21 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 18:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*10/08/21 08:35*	*10/08/21 18:33*	*1*
o-Terphenyl	*116*		*70 - 130*	*10/08/21 08:35*	*10/08/21 18:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1410**		24.9		mg/Kg			10/11/21 16:06	5

Client Sample ID: FS38

Lab Sample ID: 890-1352-38
Matrix: Solid
Date Collected: 10/01/21 14:12
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 07:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 07:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 07:57	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/05/21 11:12	10/10/21 07:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/05/21 11:12	10/10/21 07:57	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/05/21 11:12	10/10/21 07:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*311*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 07:57*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*10/05/21 11:12*	*10/10/21 07:57*	*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			10/11/21 15:20	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			10/07/21 09:18	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS38

Lab Sample ID: 890-1352-38
Matrix: Solid
Date Collected: 10/01/21 14:12
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 18:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 18:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:35	10/08/21 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*10/08/21 08:35*	*10/08/21 18:55*	*1*
o-Terphenyl	*114*		*70 - 130*	*10/08/21 08:35*	*10/08/21 18:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1210**	**F1**	24.8		mg/Kg			10/11/21 16:12	5

Client Sample ID: FS39

Lab Sample ID: 890-1352-39
Matrix: Solid
Date Collected: 10/01/21 14:14
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 08:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 08:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 08:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/05/21 11:12	10/10/21 08:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/10/21 08:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/05/21 11:12	10/10/21 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*10/05/21 11:12*	*10/10/21 08:24*	*1*
1,4-Difluorobenzene (Surr)	*0.3*	*S1-*	*70 - 130*	*10/05/21 11:12*	*10/10/21 08:24*	*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			10/11/21 15:20	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			10/07/21 09:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 19:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 19:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:35	10/08/21 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*10/08/21 08:35*	*10/08/21 19:16*	*1*
o-Terphenyl	*122*		*70 - 130*	*10/08/21 08:35*	*10/08/21 19:16*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS39

Lab Sample ID: 890-1352-39
Matrix: Solid
Date Collected: 10/01/21 14:14
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1790		25.1		mg/Kg			10/11/21 16:31	5

Client Sample ID: FS40

Lab Sample ID: 890-1352-40
Matrix: Solid
Date Collected: 10/01/21 14:16
Date Received: 10/04/21 11:34
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		10/05/21 11:12	10/10/21 08:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 08:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 08:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 08:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/05/21 11:12	10/10/21 08:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/05/21 11:12	10/10/21 08:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*187*	*S1+*	*70 - 130*	*10/05/21 11:12*	*10/10/21 08:51*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*10/05/21 11:12*	*10/10/21 08:51*	*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			10/11/21 15:20	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			10/07/21 09:20	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		10/08/21 08:35	10/08/21 19:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 19:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*10/08/21 08:35*	*10/08/21 19:38*	*1*
o-Terphenyl	*120*		*70 - 130*	*10/08/21 08:35*	*10/08/21 19:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1680		24.9		mg/Kg			10/11/21 16:37	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS41

Lab Sample ID: 890-1352-41
Matrix: Solid
Date Collected: 10/01/21 14:18
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 16:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/11/21 08:05	10/11/21 16:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/11/21 08:05	10/11/21 16:58	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		10/11/21 08:05	10/11/21 16:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/11/21 08:05	10/11/21 16:58	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		10/11/21 08:05	10/11/21 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*10/11/21 08:05*	*10/11/21 16:58*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*10/11/21 08:05*	*10/11/21 16:58*	*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			10/11/21 10:24	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			10/07/21 09:20	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		10/08/21 08:25	10/08/21 19:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:25	10/08/21 19:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:25	10/08/21 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*10/08/21 08:25*	*10/08/21 19:44*	*1*
o-Terphenyl	*107*		*70 - 130*	*10/08/21 08:25*	*10/08/21 19:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1770**		24.9		mg/Kg			10/11/21 16:56	5

Client Sample ID: FS42

Lab Sample ID: 890-1352-42
Matrix: Solid
Date Collected: 10/01/21 14:20
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 17:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/21 08:05	10/11/21 17:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/21 08:05	10/11/21 17:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/21 08:05	10/11/21 17:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/21 08:05	10/11/21 17:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/21 08:05	10/11/21 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*10/11/21 08:05*	*10/11/21 17:18*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS42

Lab Sample ID: 890-1352-42
Matrix: Solid
Date Collected: 10/01/21 14:20
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*10/11/21 08:05*	*10/11/21 17:18*	*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			10/11/21 10:24	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			10/07/21 09:20	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		10/08/21 08:25	10/08/21 20:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:25	10/08/21 20:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:25	10/08/21 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*10/08/21 08:25*	*10/08/21 20:05*	*1*
o-Terphenyl	*113*		*70 - 130*	*10/08/21 08:25*	*10/08/21 20:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3880**		25.0		mg/Kg			10/11/21 17:02	5

Client Sample ID: FS43

Lab Sample ID: 890-1352-43
Matrix: Solid
Date Collected: 10/01/21 14:30
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 17:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/11/21 08:05	10/11/21 17:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/11/21 08:05	10/11/21 17:38	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/11/21 08:05	10/11/21 17:38	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/11/21 08:05	10/11/21 17:38	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/11/21 08:05	10/11/21 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*10/11/21 08:05*	*10/11/21 17:38*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*10/11/21 08:05*	*10/11/21 17:38*	*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			10/11/21 10:24	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			10/07/21 09:20	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS43

Lab Sample ID: 890-1352-43
Matrix: Solid
Date Collected: 10/01/21 14:30
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:25	10/08/21 20:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:25	10/08/21 20:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:25	10/08/21 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*10/08/21 08:25*	*10/08/21 20:27*	*1*
o-Terphenyl	*110*		*70 - 130*	*10/08/21 08:25*	*10/08/21 20:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1380**		25.0		mg/Kg			10/11/21 17:09	5

Client Sample ID: FS44

Lab Sample ID: 890-1352-44
Matrix: Solid
Date Collected: 10/01/21 14:32
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 17:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/11/21 08:05	10/11/21 17:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/11/21 08:05	10/11/21 17:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/11/21 08:05	10/11/21 17:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/11/21 08:05	10/11/21 17:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/11/21 08:05	10/11/21 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*10/11/21 08:05*	*10/11/21 17:59*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*10/11/21 08:05*	*10/11/21 17:59*	*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			10/11/21 10:24	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			10/07/21 09:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/08/21 08:25	10/08/21 20:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/08/21 08:25	10/08/21 20:47	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/08/21 08:25	10/08/21 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*10/08/21 08:25*	*10/08/21 20:47*	*1*
o-Terphenyl	*113*		*70 - 130*	*10/08/21 08:25*	*10/08/21 20:47*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS44

Lab Sample ID: 890-1352-44
Matrix: Solid
Date Collected: 10/01/21 14:32
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3070		24.8		mg/Kg			10/11/21 17:15	5

Client Sample ID: FS45

Lab Sample ID: 890-1352-45
Matrix: Solid
Date Collected: 10/01/21 14:34
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 18:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 18:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 18:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/21 08:05	10/11/21 18:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 18:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/21 08:05	10/11/21 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*10/11/21 08:05*	*10/11/21 18:19*	*1*
1,4-Difluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*10/11/21 08:05*	*10/11/21 18:19*	*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			10/11/21 10:24	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			10/07/21 09:20	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		10/08/21 08:25	10/08/21 21:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:25	10/08/21 21:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:25	10/08/21 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*10/08/21 08:25*	*10/08/21 21:08*	*1*
o-Terphenyl	*107*		*70 - 130*	*10/08/21 08:25*	*10/08/21 21:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2250		25.1		mg/Kg			10/11/21 17:21	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS46

Lab Sample ID: 890-1352-46
Matrix: Solid
Date Collected: 10/01/21 14:36
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 18:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 18:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 18:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/11/21 08:05	10/11/21 18:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 18:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/11/21 08:05	10/11/21 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*10/11/21 08:05*	*10/11/21 18:40*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/11/21 08:05*	*10/11/21 18:40*	*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			10/11/21 10:24	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			10/07/21 09:20	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		10/08/21 08:25	10/08/21 21:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/08/21 08:25	10/08/21 21:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/08/21 08:25	10/08/21 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*10/08/21 08:25*	*10/08/21 21:29*	*1*
o-Terphenyl	*109*		*70 - 130*	*10/08/21 08:25*	*10/08/21 21:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**964**		24.9		mg/Kg			10/11/21 17:27	5

Client Sample ID: FS47

Lab Sample ID: 890-1352-47
Matrix: Solid
Date Collected: 10/01/21 14:38
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 19:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/11/21 08:05	10/11/21 19:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/11/21 08:05	10/11/21 19:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/11/21 08:05	10/11/21 19:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/11/21 08:05	10/11/21 19:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/11/21 08:05	10/11/21 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*10/11/21 08:05*	*10/11/21 19:00*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS47

Lab Sample ID: 890-1352-47
Matrix: Solid
Date Collected: 10/01/21 14:38
Date Received: 10/04/21 11:34
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*10/11/21 08:05*	*10/11/21 19:00*	*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			10/11/21 10:24	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			10/07/21 09:20	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		10/06/21 14:35	10/07/21 05:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/06/21 14:35	10/07/21 05:25	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/06/21 14:35	10/07/21 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*10/06/21 14:35*	*10/07/21 05:25*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*10/06/21 14:35*	*10/07/21 05:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1440**		25.2		mg/Kg			10/11/21 17:34	5

Client Sample ID: FS48

Lab Sample ID: 890-1352-48
Matrix: Solid
Date Collected: 10/01/21 14:40
Date Received: 10/04/21 11:34
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		10/11/21 08:05	10/11/21 19:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/11/21 08:05	10/11/21 19:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/11/21 08:05	10/11/21 19:21	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/11/21 08:05	10/11/21 19:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/11/21 08:05	10/11/21 19:21	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/11/21 08:05	10/11/21 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*10/11/21 08:05*	*10/11/21 19:21*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*10/11/21 08:05*	*10/11/21 19:21*	*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			10/11/21 10:24	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			10/07/21 09:20	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS48

Date Collected: 10/01/21 14:40
Date Received: 10/04/21 11:34
Sample Depth: 0.5

Lab Sample ID: 890-1352-48

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		10/06/21 10:40	10/07/21 05:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		10/06/21 10:40	10/07/21 05:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/06/21 10:40	10/07/21 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*10/06/21 10:40*	*10/07/21 05:25*	*1*
o-Terphenyl	*114*		*70 - 130*	*10/06/21 10:40*	*10/07/21 05:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2300**		24.9		mg/Kg			10/11/21 18:01	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-6934-A-2-E MS	Matrix Spike	114	87										
880-6934-A-2-F MSD	Matrix Spike Duplicate	114	83										
890-1352-1	FS01	248 S1+	81										
890-1352-1 MS	FS01	132 S1+	111										
890-1352-1 MSD	FS01	171 S1+	141 S1+										
890-1352-2	FS02	99	84										
890-1352-3	FS03	129	100										
890-1352-4	FS04	105	67 S1-										
890-1352-5	FS05	164 S1+	116										
890-1352-6	FS06	199 S1+	112										
890-1352-7	FS07	302 S1+	102										
890-1352-8	FS08	155 S1+	120										
890-1352-9	FS09	87	71										
890-1352-10	FS10	147 S1+	103										
890-1352-11	FS11	430 S1+	91										
890-1352-12	FS12	352 S1+	86										
890-1352-13	FS13	239 S1+	94										
890-1352-14	FS14	164 S1+	112										
890-1352-15	FS15	195 S1+	92										
890-1352-16	FS16	223 S1+	89										
890-1352-17	FS17	162 S1+	110										
890-1352-18	FS18	160 S1+	109										
890-1352-19	FS19	249 S1+	70										
890-1352-20	FS20	171 S1+	113										
890-1352-21	FS21	92	78										
890-1352-21 MS	FS21	124	99										
890-1352-21 MSD	FS21	100	41 S1-										
890-1352-22	FS22	222 S1+	114										
890-1352-23	FS23	151 S1+	110										
890-1352-24	FS24	183 S1+	75										
890-1352-25	FS25	149 S1+	108										
890-1352-26	FS26	171 S1+	118										
890-1352-27	FS27	167 S1+	116										
890-1352-28	FS28	171 S1+	117										
890-1352-29	FS29	286 S1+	114										
890-1352-30	FS30	76	52 S1-										
890-1352-31	FS31	122	68 S1-										
890-1352-32	FS32	102	49 S1-										
890-1352-33	FS33	146 S1+	106										
890-1352-34	FS34	168 S1+	115										
890-1352-35	FS35	170 S1+	118										
890-1352-36	FS36	117	85										
890-1352-37	FS37	240 S1+	74										
890-1352-38	FS38	311 S1+	112										
890-1352-39	FS39	81	0.3 S1-										
890-1352-40	FS40	187 S1+	73										
890-1352-41	FS41	136 S1+	84										
890-1352-42	FS42	125	78										
890-1352-43	FS43	112	81										

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Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1352-1
Project/Site: RDX Federal 28-12h SDG: Eddy County

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1352-44	FS44	131 S1+	78
890-1352-45	FS45	93	68 S1-
890-1352-46	FS46	127	91
890-1352-47	FS47	114	76
890-1352-48	FS48	129	79
LCS 880-8908/1-A	Lab Control Sample	162 S1+	111
LCS 880-8911/1-A	Lab Control Sample	167 S1+	118
LCS 880-9182/1-A	Lab Control Sample	117	87
LCSD 880-8908/2-A	Lab Control Sample Dup	136 S1+	95
LCSD 880-8911/2-A	Lab Control Sample Dup	157 S1+	108
LCSD 880-9182/2-A	Lab Control Sample Dup	112	85
MB 880-8831/5-A	Method Blank	110	84
MB 880-8908/5-A	Method Blank	89	100
MB 880-8911/5-A	Method Blank	93	102
MB 880-9114/8	Method Blank	86	97
MB 880-9182/5-A	Method Blank	112	78

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)
880-6805-A-2-B MS	Matrix Spike	115	113
880-6805-A-2-C MSD	Matrix Spike Duplicate	117	115
880-6967-A-1-B MS	Matrix Spike	95	90
880-6967-A-1-C MSD	Matrix Spike Duplicate	98	93
880-6967-A-6-C MS	Matrix Spike	102	100
880-6967-A-6-D MSD	Matrix Spike Duplicate	102	105
880-6968-A-1-E MS	Matrix Spike	114	112
880-6968-A-1-F MSD	Matrix Spike Duplicate	111	111
880-6968-A-7-C MS	Matrix Spike	89	90
880-6968-A-7-D MSD	Matrix Spike Duplicate	83	85
890-1352-1	FS01	87	96
890-1352-2	FS02	98	108
890-1352-3	FS03	87	96
890-1352-4	FS04	84	93
890-1352-5	FS05	86	94
890-1352-6	FS06	80	90
890-1352-7	FS07	82	91
890-1352-8	FS08	85	93
890-1352-9	FS09	92	96
890-1352-10	FS10	91	101
890-1352-11	FS11	91	102
890-1352-12	FS12	91	100
890-1352-13	FS13	89	99
890-1352-14	FS14	91	101

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1352-1
Project/Site: RDX Federal 28-12h SDG: Eddy County

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-1352-15	FS15	87	95								
890-1352-16	FS16	89	96								
890-1352-17	FS17	86	92								
890-1352-18	FS18	92	98								
890-1352-19	FS19	92	102								
890-1352-20	FS20	92	99								
890-1352-21	FS21	88	94								
890-1352-22	FS22	92	98								
890-1352-23	FS23	93	101								
890-1352-24	FS24	93	101								
890-1352-25	FS25	97	105								
890-1352-26	FS26	94	104								
890-1352-27	FS27	93	103								
890-1352-28	FS28	93	101								
890-1352-29	FS29	90	98								
890-1352-30	FS30	93	104								
890-1352-31	FS31	103	115								
890-1352-32	FS32	105	118								
890-1352-33	FS33	116	132 S1+								
890-1352-34	FS34	108	119								
890-1352-35	FS35	107	118								
890-1352-36	FS36	105	113								
890-1352-37	FS37	107	116								
890-1352-38	FS38	107	114								
890-1352-39	FS39	110	122								
890-1352-40	FS40	110	120								
890-1352-41	FS41	98	107								
890-1352-42	FS42	103	113								
890-1352-43	FS43	99	110								
890-1352-44	FS44	103	113								
890-1352-45	FS45	98	107								
890-1352-46	FS46	100	109								
890-1352-47	FS47	115	136 S1+								
890-1352-48	FS48	106	114								
890-1366-A-1-G MS	Matrix Spike	92	97								
890-1366-A-1-H MSD	Matrix Spike Duplicate	102	105								
LCS 880-8972/2-A	Lab Control Sample	105	105								
LCS 880-8981/2-A	Lab Control Sample	98	106								
LCS 880-9090/2-A	Lab Control Sample	96	95								
LCS 880-9091/2-A	Lab Control Sample	69 S1-	71								
LCS 880-9092/2-A	Lab Control Sample	109	116								
LCS 880-9093/2-A	Lab Control Sample	90	95								
LCSD 880-8972/3-A	Lab Control Sample Dup	112	110								
LCSD 880-8981/3-A	Lab Control Sample Dup	97	104								
LCSD 880-9090/3-A	Lab Control Sample Dup	97	93								
LCSD 880-9091/3-A	Lab Control Sample Dup	81	85								
LCSD 880-9092/3-A	Lab Control Sample Dup	94	97								
LCSD 880-9093/3-A	Lab Control Sample Dup	100	107								
MB 880-8972/1-A	Method Blank	120	132 S1+								
MB 880-8981/1-A	Method Blank	115	139 S1+								

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1352-1
Project/Site: RDX Federal 28-12h SDG: Eddy County

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
MB 880-9090/1-A	Method Blank	110	122								
MB 880-9091/1-A	Method Blank	92	103								
MB 880-9092/1-A	Method Blank	94	102								
MB 880-9093/1-A	Method Blank	114	131 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8831/5-A
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8831

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/21 13:46	10/11/21 00:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/21 13:46	10/11/21 00:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/21 13:46	10/11/21 00:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/04/21 13:46	10/11/21 00:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/21 13:46	10/11/21 00:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/04/21 13:46	10/11/21 00:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/04/21 13:46*	*10/11/21 00:15*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*10/04/21 13:46*	*10/11/21 00:15*	*1*

Lab Sample ID: MB 880-8908/5-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 09:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:09	10/09/21 09:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:09	10/09/21 09:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*10/05/21 11:09*	*10/09/21 09:13*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*10/05/21 11:09*	*10/09/21 09:13*	*1*

Lab Sample ID: LCS 880-8908/1-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8908

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1085		mg/Kg		109	70 - 130		
Toluene			0.100	0.1196		mg/Kg		120	70 - 130		
Ethylbenzene			0.100	0.1159		mg/Kg		116	70 - 130		
m-Xylene & p-Xylene			0.200	0.2491		mg/Kg		125	70 - 130		
o-Xylene			0.100	0.1285		mg/Kg		129	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*162*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-8908/2-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8908

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08761		mg/Kg		88	70 - 130	21	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-8908/2-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8908

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.1004		mg/Kg		100	70 - 130	18	35
Ethylbenzene			0.100	0.09597		mg/Kg		96	70 - 130	19	35
m-Xylene & p-Xylene			0.200	0.2069		mg/Kg		103	70 - 130	18	35
o-Xylene			0.100	0.1072		mg/Kg		107	70 - 130	18	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-1352-1 MS
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 8908

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F2 F1	0.0998	0.04690	F1	mg/Kg		46	70 - 130
Toluene	<0.00200	U F1	0.0998	0.05523	F1	mg/Kg		54	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.0998	0.05716	F1	mg/Kg		56	70 - 130
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.1220	F1	mg/Kg		61	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0998	0.06291	F1	mg/Kg		62	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 890-1352-1 MSD
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 8908

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0990	0.02238	F2 F1	mg/Kg		22	70 - 130	71	35
Toluene	<0.00200	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00200	U F2 F1	0.0990	0.02519	F2 F1	mg/Kg		24	70 - 130	78	35
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.198	0.05209	F2 F1	mg/Kg		26	70 - 130	80	35
o-Xylene	<0.00200	U F2 F1	0.0990	0.03222	F2 F1	mg/Kg		32	70 - 130	65	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*171*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*141*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-8911/5-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/09/21 22:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/09/21 22:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/09/21 22:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/05/21 11:12	10/09/21 22:46	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: MB 880-8911/5-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/05/21 11:12	10/09/21 22:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/05/21 11:12	10/09/21 22:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*10/05/21 11:12*	*10/09/21 22:46*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*10/05/21 11:12*	*10/09/21 22:46*	*1*

Lab Sample ID: LCS 880-8911/1-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1153		mg/Kg		115	70 - 130
Toluene	0.100	0.1108		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1157		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2505		mg/Kg		125	70 - 130
o-Xylene	0.100	0.1304		mg/Kg		130	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*167*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-8911/2-A
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8911

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1118		mg/Kg		112	70 - 130	3	35
Toluene	0.100	0.1015		mg/Kg		101	70 - 130	9	35
Ethylbenzene	0.100	0.1129		mg/Kg		113	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2450		mg/Kg		123	70 - 130	2	35
o-Xylene	0.100	0.1276		mg/Kg		128	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*157*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-1352-21 MS
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: FS21
Prep Type: Total/NA
Prep Batch: 8911

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1 F2	0.0998	0.003803	F1	mg/Kg		3	70 - 130
Toluene	<0.00199	U F1 F2	0.0998	0.005204	F1	mg/Kg		5	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.01021	F1	mg/Kg		10	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.02410	F1	mg/Kg		12	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.008141	F1	mg/Kg		7	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: 890-1352-21 MS
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: FS21
Prep Type: Total/NA
Prep Batch: 8911

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-1352-21 MSD
Matrix: Solid
Analysis Batch: 9114

Client Sample ID: FS21
Prep Type: Total/NA
Prep Batch: 8911

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0992	<0.00198	U F1 F2	mg/Kg		0.5	70 - 130	100	35
Toluene	<0.00199	U F1 F2	0.0992	<0.00198	U F1 F2	mg/Kg		0.9	70 - 130	140	35
Ethylbenzene	<0.00199	U F1 F2	0.0992	<0.00198	U F1 F2	mg/Kg		0.8	70 - 130	151	35
m-Xylene & p-Xylene	<0.00398	U F1	0.198	<0.00397	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00199	U F1	0.0992	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	41	S1-	70 - 130

Lab Sample ID: MB 880-9114/8
Matrix: Solid
Analysis Batch: 9114

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			10/08/21 19:40	1
Toluene	<0.00200	U	0.00200		mg/Kg			10/08/21 19:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			10/08/21 19:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			10/08/21 19:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			10/08/21 19:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			10/08/21 19:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130		10/08/21 19:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130		10/08/21 19:40	1

Lab Sample ID: MB 880-9182/5-A
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 11:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 11:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 11:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/21 08:05	10/11/21 11:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/21 08:05	10/11/21 11:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/21 08:05	10/11/21 11:08	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: MB 880-9182/5-A
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9182

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 08:05	10/11/21 11:08	1
1,4-Difluorobenzene (Surr)	78		70 - 130	10/11/21 08:05	10/11/21 11:08	1

Lab Sample ID: LCS 880-9182/1-A
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9182

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09072		mg/Kg		91	70 - 130		
Toluene			0.100	0.09034		mg/Kg		90	70 - 130		
Ethylbenzene			0.100	0.09282		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene			0.200	0.1976		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09927		mg/Kg		99	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: LCSD 880-9182/2-A
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9182

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08352		mg/Kg		84	70 - 130	8	35
Toluene			0.100	0.08453		mg/Kg		85	70 - 130	7	35
Ethylbenzene			0.100	0.08717		mg/Kg		87	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1845		mg/Kg		92	70 - 130	7	35
o-Xylene			0.100	0.09318		mg/Kg		93	70 - 130	6	35

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

Lab Sample ID: 880-6934-A-2-E MS
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.100	0.09225		mg/Kg		92	70 - 130		
Toluene	<0.00200	U	0.100	0.09375		mg/Kg		94	70 - 130		
Ethylbenzene	<0.00200	U	0.100	0.09649		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2049		mg/Kg		102	70 - 130		
o-Xylene	<0.00200	U	0.100	0.1035		mg/Kg		103	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: 880-6934-A-2-F MSD
Matrix: Solid
Analysis Batch: 9112

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 9182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.09120		mg/Kg		92	70 - 130	1	35
Toluene	<0.00200	U	0.0990	0.09376		mg/Kg		95	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0990	0.09765		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene	<0.00399	U	0.198	0.2068		mg/Kg		104	70 - 130	1	35
o-Xylene	<0.00200	U	0.0990	0.1052		mg/Kg		106	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

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

Lab Sample ID: MB 880-8972/1-A
Matrix: Solid
Analysis Batch: 8955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8972

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		10/06/21 10:40	10/06/21 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/06/21 10:40	10/06/21 20:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/06/21 10:40	10/06/21 20:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*10/06/21 10:40*	*10/06/21 20:31*	*1*
o-Terphenyl	*132*	*S1+*	*70 - 130*	*10/06/21 10:40*	*10/06/21 20:31*	*1*

Lab Sample ID: LCS 880-8972/2-A
Matrix: Solid
Analysis Batch: 8955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8972

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	906.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	999.9		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-8972/3-A
Matrix: Solid
Analysis Batch: 8955

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	994.2		mg/Kg		99	70 - 130	9	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-8972/3-A
Matrix: Solid
Analysis Batch: 8955

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1260	*1	mg/Kg		126	70 - 130	23	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*110*		*70 - 130*

Lab Sample ID: 880-6805-A-2-B MS
Matrix: Solid
Analysis Batch: 8955

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8972

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	997	1027		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	999.4		mg/Kg		95	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: 880-6805-A-2-C MSD
Matrix: Solid
Analysis Batch: 8955

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8972

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	1000	1147		mg/Kg		113	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	1000	1033		mg/Kg		98	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Lab Sample ID: MB 880-8981/1-A
Matrix: Solid
Analysis Batch: 8953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8981

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		10/06/21 14:35	10/06/21 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/06/21 14:35	10/06/21 20:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/06/21 14:35	10/06/21 20:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*10/06/21 14:35*	*10/06/21 20:31*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*10/06/21 14:35*	*10/06/21 20:31*	*1*

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: LCS 880-8981/2-A
Matrix: Solid
Analysis Batch: 8953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8981

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	839.1		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	876.8		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: LCSD 880-8981/3-A
Matrix: Solid
Analysis Batch: 8953

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8981

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	789.6		mg/Kg		79	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	871.9		mg/Kg		87	70 - 130	1	20

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

Lab Sample ID: 890-1366-A-1-G MS
Matrix: Solid
Analysis Batch: 8953

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 8981

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	997	836.8		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	887.4		mg/Kg		89	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 890-1366-A-1-H MSD
Matrix: Solid
Analysis Batch: 8953

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8981

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	1000	907.4		mg/Kg		91	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	996.9		mg/Kg		100	70 - 130	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: 890-1366-A-1-H MSD
Matrix: Solid
Analysis Batch: 8953

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 8981

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	105		70 - 130

Lab Sample ID: MB 880-9090/1-A
Matrix: Solid
Analysis Batch: 9082

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9090

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		10/08/21 08:25	10/08/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:25	10/08/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:25	10/08/21 12:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/08/21 08:25	10/08/21 12:16	1
o-Terphenyl	122		70 - 130	10/08/21 08:25	10/08/21 12:16	1

Lab Sample ID: LCS 880-9090/2-A
Matrix: Solid
Analysis Batch: 9082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9090

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	854.4		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	923.8		mg/Kg		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-9090/3-A
Matrix: Solid
Analysis Batch: 9082

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9090

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1016		mg/Kg		102	70 - 130	17	20
Diesel Range Organics (Over C10-C28)			1000	1002		mg/Kg		100	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	93		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: 880-6968-A-1-E MS
Matrix: Solid
Analysis Batch: 9082

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9090

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	997	959.3		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	100		997	1024		mg/Kg		93	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 880-6968-A-1-F MSD
Matrix: Solid
Analysis Batch: 9082

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 9090

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	1000	938.3		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	100		1000	1022		mg/Kg		92	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: MB 880-9091/1-A
Matrix: Solid
Analysis Batch: 9084

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9091

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		10/08/21 08:27	10/08/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:27	10/08/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/08/21 08:27*	*10/08/21 12:16*	*1*
o-Terphenyl	*103*		*70 - 130*	*10/08/21 08:27*	*10/08/21 12:16*	*1*

Lab Sample ID: LCS 880-9091/2-A
Matrix: Solid
Analysis Batch: 9084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	751.0		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	694.0	*-	mg/Kg		69	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: LCS 880-9091/2-A
Matrix: Solid
Analysis Batch: 9084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9091

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	71		70 - 130

Lab Sample ID: LCSD 880-9091/3-A
Matrix: Solid
Analysis Batch: 9084

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9091

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	807.7		mg/Kg		81	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	775.5		mg/Kg		78	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: 880-6967-A-1-B MS
Matrix: Solid
Analysis Batch: 9084

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9091

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	997	852.1		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *-	997	782.7		mg/Kg		76	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-6967-A-1-C MSD
Matrix: Solid
Analysis Batch: 9084

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 9091

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	1000	881.7		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U *-	1000	827.1		mg/Kg		80	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	93		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: MB 880-9092/1-A
Matrix: Solid
Analysis Batch: 9086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9092

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		10/08/21 08:34	10/08/21 12:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 12:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:34	10/08/21 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*10/08/21 08:34*	*10/08/21 12:13*	*1*
o-Terphenyl	*102*		*70 - 130*	*10/08/21 08:34*	*10/08/21 12:13*	*1*

Lab Sample ID: LCS 880-9092/2-A
Matrix: Solid
Analysis Batch: 9086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9092

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	965.8		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.5		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: LCSD 880-9092/3-A
Matrix: Solid
Analysis Batch: 9086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9092

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	810.0		mg/Kg		81	70 - 130	18	20
Diesel Range Organics (Over C10-C28)			1000	822.3		mg/Kg		82	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 880-6968-A-7-C MS
Matrix: Solid
Analysis Batch: 9086

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9092

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	997	795.3		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	762.7		mg/Kg		74	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: 880-6968-A-7-C MS
Matrix: Solid
Analysis Batch: 9086

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9092

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-6968-A-7-D MSD
Matrix: Solid
Analysis Batch: 9086

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 9092

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	1000	792.3		mg/Kg		79	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	732.4		mg/Kg		71	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: MB 880-9093/1-A
Matrix: Solid
Analysis Batch: 9088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9093

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		10/08/21 08:35	10/08/21 12:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 12:13	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/08/21 08:35	10/08/21 12:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	10/08/21 08:35	10/08/21 12:13	1
o-Terphenyl	131	S1+	70 - 130	10/08/21 08:35	10/08/21 12:13	1

Lab Sample ID: LCS 880-9093/2-A
Matrix: Solid
Analysis Batch: 9088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	776.9		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	900.9		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	95		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-9093/3-A
Matrix: Solid
Analysis Batch: 9088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 9093

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	835.1		mg/Kg		84	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1036		mg/Kg		104	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: 880-6967-A-6-C MS
Matrix: Solid
Analysis Batch: 9088

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 9093

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	997	890.3		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1025		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Lab Sample ID: 880-6967-A-6-D MSD
Matrix: Solid
Analysis Batch: 9088

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 9093

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	1000	981.0		mg/Kg		94	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1078		mg/Kg		108	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9101/1-A
Matrix: Solid
Analysis Batch: 9188

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			10/11/21 10:47	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-9101/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9188

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	253.3		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-9101/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9188

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	253.2		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-6763-A-6-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9188

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	2810	F1	1240	4308	F1	mg/Kg		120	90 - 110		

Lab Sample ID: 880-6763-A-6-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9188

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2810	F1	1240	4267	F1	mg/Kg		117	90 - 110	1	20

Lab Sample ID: 890-1350-A-1-I MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9188

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	23.2	F1	248	317.5	F1	mg/Kg		119	90 - 110		

Lab Sample ID: 890-1350-A-1-J MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9188

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	23.2	F1	248	313.4	F1	mg/Kg		117	90 - 110	1	20

Lab Sample ID: MB 880-9103/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/11/21 14:26	1

Lab Sample ID: LCS 880-9103/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 9218

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	258.9		mg/Kg		104	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-9103/3-A
Matrix: Solid
Analysis Batch: 9218

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	259.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-1352-28 MS
Matrix: Solid
Analysis Batch: 9218

Client Sample ID: FS28
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1280		248	1509	E 4	mg/Kg		94	90 - 110

Lab Sample ID: 890-1352-28 MSD
Matrix: Solid
Analysis Batch: 9218

Client Sample ID: FS28
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1280		248	1500	E 4	mg/Kg		90	90 - 110	1	20

Lab Sample ID: 890-1352-38 MS
Matrix: Solid
Analysis Batch: 9218

Client Sample ID: FS38
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1210	F1	1240	2600	F1	mg/Kg		112	90 - 110

Lab Sample ID: 890-1352-38 MSD
Matrix: Solid
Analysis Batch: 9218

Client Sample ID: FS38
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1210	F1	1240	2553		mg/Kg		108	90 - 110	2	20

Lab Sample ID: MB 880-9127/1-A
Matrix: Solid
Analysis Batch: 9221

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			10/11/21 15:47	1

Lab Sample ID: LCS 880-9127/2-A
Matrix: Solid
Analysis Batch: 9221

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9127/3-A
Matrix: Solid
Analysis Batch: 9221

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	243.0		mg/Kg		97	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-6796-A-2-C MS
Matrix: Solid
Analysis Batch: 9221

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9170		2500	11700		mg/Kg		101	90 - 110

Lab Sample ID: 880-6796-A-2-D MSD
Matrix: Solid
Analysis Batch: 9221

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9170		2500	11720		mg/Kg		102	90 - 110	0	20

Lab Sample ID: MB 880-9340/1-A
Matrix: Solid
Analysis Batch: 9372

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			10/13/21 11:51	1

Lab Sample ID: LCS 880-9340/2-A
Matrix: Solid
Analysis Batch: 9372

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	256.7		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-9340/3-A
Matrix: Solid
Analysis Batch: 9372

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	256.7		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-1352-8 MS
Matrix: Solid
Analysis Batch: 9372

Client Sample ID: FS08
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5490		2500	7889		mg/Kg		96	90 - 110

Lab Sample ID: 890-1352-8 MSD
Matrix: Solid
Analysis Batch: 9372

Client Sample ID: FS08
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5490		2500	7848		mg/Kg		94	90 - 110	1	20

Lab Sample ID: 890-1352-18 MS
Matrix: Solid
Analysis Batch: 9372

Client Sample ID: FS18
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4560		1260	5845		mg/Kg		102	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1352-18 MSD
Matrix: Solid
Analysis Batch: 9372

Client Sample ID: FS18
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4560		1260	5858		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC VOA

Prep Batch: 8831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8831/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Total/NA	Solid	5035	
890-1352-2	FS02	Total/NA	Solid	5035	
890-1352-3	FS03	Total/NA	Solid	5035	
890-1352-4	FS04	Total/NA	Solid	5035	
890-1352-5	FS05	Total/NA	Solid	5035	
890-1352-6	FS06	Total/NA	Solid	5035	
890-1352-7	FS07	Total/NA	Solid	5035	
890-1352-8	FS08	Total/NA	Solid	5035	
890-1352-9	FS09	Total/NA	Solid	5035	
890-1352-10	FS10	Total/NA	Solid	5035	
890-1352-11	FS11	Total/NA	Solid	5035	
890-1352-12	FS12	Total/NA	Solid	5035	
890-1352-13	FS13	Total/NA	Solid	5035	
890-1352-14	FS14	Total/NA	Solid	5035	
890-1352-15	FS15	Total/NA	Solid	5035	
890-1352-16	FS16	Total/NA	Solid	5035	
890-1352-17	FS17	Total/NA	Solid	5035	
890-1352-18	FS18	Total/NA	Solid	5035	
890-1352-19	FS19	Total/NA	Solid	5035	
890-1352-20	FS20	Total/NA	Solid	5035	
MB 880-8908/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8908/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8908/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1352-1 MS	FS01	Total/NA	Solid	5035	
890-1352-1 MSD	FS01	Total/NA	Solid	5035	

Prep Batch: 8911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-21	FS21	Total/NA	Solid	5035	
890-1352-22	FS22	Total/NA	Solid	5035	
890-1352-23	FS23	Total/NA	Solid	5035	
890-1352-24	FS24	Total/NA	Solid	5035	
890-1352-25	FS25	Total/NA	Solid	5035	
890-1352-26	FS26	Total/NA	Solid	5035	
890-1352-27	FS27	Total/NA	Solid	5035	
890-1352-28	FS28	Total/NA	Solid	5035	
890-1352-29	FS29	Total/NA	Solid	5035	
890-1352-30	FS30	Total/NA	Solid	5035	
890-1352-31	FS31	Total/NA	Solid	5035	
890-1352-32	FS32	Total/NA	Solid	5035	
890-1352-33	FS33	Total/NA	Solid	5035	
890-1352-34	FS34	Total/NA	Solid	5035	
890-1352-35	FS35	Total/NA	Solid	5035	
890-1352-36	FS36	Total/NA	Solid	5035	
890-1352-37	FS37	Total/NA	Solid	5035	
890-1352-38	FS38	Total/NA	Solid	5035	
890-1352-39	FS39	Total/NA	Solid	5035	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC VOA (Continued)

Prep Batch: 8911 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-40	FS40	Total/NA	Solid	5035	
MB 880-8911/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8911/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8911/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1352-21 MS	FS21	Total/NA	Solid	5035	
890-1352-21 MSD	FS21	Total/NA	Solid	5035	

Analysis Batch: 9112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-41	FS41	Total/NA	Solid	8021B	9182
890-1352-42	FS42	Total/NA	Solid	8021B	9182
890-1352-43	FS43	Total/NA	Solid	8021B	9182
890-1352-44	FS44	Total/NA	Solid	8021B	9182
890-1352-45	FS45	Total/NA	Solid	8021B	9182
890-1352-46	FS46	Total/NA	Solid	8021B	9182
890-1352-47	FS47	Total/NA	Solid	8021B	9182
890-1352-48	FS48	Total/NA	Solid	8021B	9182
MB 880-8831/5-A	Method Blank	Total/NA	Solid	8021B	8831
MB 880-9182/5-A	Method Blank	Total/NA	Solid	8021B	9182
LCS 880-9182/1-A	Lab Control Sample	Total/NA	Solid	8021B	9182
LCSD 880-9182/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9182
880-6934-A-2-E MS	Matrix Spike	Total/NA	Solid	8021B	9182
880-6934-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	9182

Analysis Batch: 9114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Total/NA	Solid	8021B	8908
890-1352-2	FS02	Total/NA	Solid	8021B	8908
890-1352-3	FS03	Total/NA	Solid	8021B	8908
890-1352-4	FS04	Total/NA	Solid	8021B	8908
890-1352-5	FS05	Total/NA	Solid	8021B	8908
890-1352-6	FS06	Total/NA	Solid	8021B	8908
890-1352-7	FS07	Total/NA	Solid	8021B	8908
890-1352-8	FS08	Total/NA	Solid	8021B	8908
890-1352-9	FS09	Total/NA	Solid	8021B	8908
890-1352-10	FS10	Total/NA	Solid	8021B	8908
890-1352-11	FS11	Total/NA	Solid	8021B	8908
890-1352-12	FS12	Total/NA	Solid	8021B	8908
890-1352-13	FS13	Total/NA	Solid	8021B	8908
890-1352-14	FS14	Total/NA	Solid	8021B	8908
890-1352-15	FS15	Total/NA	Solid	8021B	8908
890-1352-16	FS16	Total/NA	Solid	8021B	8908
890-1352-17	FS17	Total/NA	Solid	8021B	8908
890-1352-18	FS18	Total/NA	Solid	8021B	8908
890-1352-19	FS19	Total/NA	Solid	8021B	8908
890-1352-20	FS20	Total/NA	Solid	8021B	8908
890-1352-21	FS21	Total/NA	Solid	8021B	8911
890-1352-22	FS22	Total/NA	Solid	8021B	8911
890-1352-23	FS23	Total/NA	Solid	8021B	8911
890-1352-24	FS24	Total/NA	Solid	8021B	8911
890-1352-25	FS25	Total/NA	Solid	8021B	8911

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC VOA (Continued)

Analysis Batch: 9114 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-26	FS26	Total/NA	Solid	8021B	8911
890-1352-27	FS27	Total/NA	Solid	8021B	8911
890-1352-28	FS28	Total/NA	Solid	8021B	8911
890-1352-29	FS29	Total/NA	Solid	8021B	8911
890-1352-30	FS30	Total/NA	Solid	8021B	8911
890-1352-31	FS31	Total/NA	Solid	8021B	8911
890-1352-32	FS32	Total/NA	Solid	8021B	8911
890-1352-33	FS33	Total/NA	Solid	8021B	8911
890-1352-34	FS34	Total/NA	Solid	8021B	8911
890-1352-35	FS35	Total/NA	Solid	8021B	8911
890-1352-36	FS36	Total/NA	Solid	8021B	8911
890-1352-37	FS37	Total/NA	Solid	8021B	8911
890-1352-38	FS38	Total/NA	Solid	8021B	8911
890-1352-39	FS39	Total/NA	Solid	8021B	8911
890-1352-40	FS40	Total/NA	Solid	8021B	8911
MB 880-8908/5-A	Method Blank	Total/NA	Solid	8021B	8908
MB 880-8911/5-A	Method Blank	Total/NA	Solid	8021B	8911
MB 880-9114/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-8908/1-A	Lab Control Sample	Total/NA	Solid	8021B	8908
LCS 880-8911/1-A	Lab Control Sample	Total/NA	Solid	8021B	8911
LCSD 880-8908/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8908
LCSD 880-8911/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8911
890-1352-1 MS	FS01	Total/NA	Solid	8021B	8908
890-1352-1 MSD	FS01	Total/NA	Solid	8021B	8908
890-1352-21 MS	FS21	Total/NA	Solid	8021B	8911
890-1352-21 MSD	FS21	Total/NA	Solid	8021B	8911

Analysis Batch: 9139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-41	FS41	Total/NA	Solid	Total BTEX	
890-1352-42	FS42	Total/NA	Solid	Total BTEX	
890-1352-43	FS43	Total/NA	Solid	Total BTEX	
890-1352-44	FS44	Total/NA	Solid	Total BTEX	
890-1352-45	FS45	Total/NA	Solid	Total BTEX	
890-1352-46	FS46	Total/NA	Solid	Total BTEX	
890-1352-47	FS47	Total/NA	Solid	Total BTEX	
890-1352-48	FS48	Total/NA	Solid	Total BTEX	

Prep Batch: 9182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-41	FS41	Total/NA	Solid	5035	
890-1352-42	FS42	Total/NA	Solid	5035	
890-1352-43	FS43	Total/NA	Solid	5035	
890-1352-44	FS44	Total/NA	Solid	5035	
890-1352-45	FS45	Total/NA	Solid	5035	
890-1352-46	FS46	Total/NA	Solid	5035	
890-1352-47	FS47	Total/NA	Solid	5035	
890-1352-48	FS48	Total/NA	Solid	5035	
MB 880-9182/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9182/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9182/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC VOA (Continued)

Prep Batch: 9182 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6934-A-2-E MS	Matrix Spike	Total/NA	Solid	5035	
880-6934-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 9242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Total/NA	Solid	Total BTEX	
890-1352-2	FS02	Total/NA	Solid	Total BTEX	
890-1352-3	FS03	Total/NA	Solid	Total BTEX	
890-1352-4	FS04	Total/NA	Solid	Total BTEX	
890-1352-5	FS05	Total/NA	Solid	Total BTEX	
890-1352-6	FS06	Total/NA	Solid	Total BTEX	
890-1352-7	FS07	Total/NA	Solid	Total BTEX	
890-1352-8	FS08	Total/NA	Solid	Total BTEX	
890-1352-9	FS09	Total/NA	Solid	Total BTEX	
890-1352-10	FS10	Total/NA	Solid	Total BTEX	
890-1352-11	FS11	Total/NA	Solid	Total BTEX	
890-1352-12	FS12	Total/NA	Solid	Total BTEX	
890-1352-13	FS13	Total/NA	Solid	Total BTEX	
890-1352-14	FS14	Total/NA	Solid	Total BTEX	
890-1352-15	FS15	Total/NA	Solid	Total BTEX	
890-1352-16	FS16	Total/NA	Solid	Total BTEX	
890-1352-17	FS17	Total/NA	Solid	Total BTEX	
890-1352-18	FS18	Total/NA	Solid	Total BTEX	
890-1352-19	FS19	Total/NA	Solid	Total BTEX	
890-1352-20	FS20	Total/NA	Solid	Total BTEX	
890-1352-21	FS21	Total/NA	Solid	Total BTEX	
890-1352-22	FS22	Total/NA	Solid	Total BTEX	
890-1352-23	FS23	Total/NA	Solid	Total BTEX	
890-1352-24	FS24	Total/NA	Solid	Total BTEX	
890-1352-25	FS25	Total/NA	Solid	Total BTEX	
890-1352-26	FS26	Total/NA	Solid	Total BTEX	
890-1352-27	FS27	Total/NA	Solid	Total BTEX	
890-1352-28	FS28	Total/NA	Solid	Total BTEX	
890-1352-29	FS29	Total/NA	Solid	Total BTEX	
890-1352-30	FS30	Total/NA	Solid	Total BTEX	
890-1352-31	FS31	Total/NA	Solid	Total BTEX	
890-1352-32	FS32	Total/NA	Solid	Total BTEX	
890-1352-33	FS33	Total/NA	Solid	Total BTEX	
890-1352-34	FS34	Total/NA	Solid	Total BTEX	
890-1352-35	FS35	Total/NA	Solid	Total BTEX	
890-1352-36	FS36	Total/NA	Solid	Total BTEX	
890-1352-37	FS37	Total/NA	Solid	Total BTEX	
890-1352-38	FS38	Total/NA	Solid	Total BTEX	
890-1352-39	FS39	Total/NA	Solid	Total BTEX	
890-1352-40	FS40	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 8953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-47	FS47	Total/NA	Solid	8015B NM	8981

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 8953 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8981/1-A	Method Blank	Total/NA	Solid	8015B NM	8981
LCS 880-8981/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8981
LCSD 880-8981/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8981
890-1366-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	8981
890-1366-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8981

Analysis Batch: 8955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-48	FS48	Total/NA	Solid	8015B NM	8972
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015B NM	8972
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8972
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8972
880-6805-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8972
880-6805-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8972

Prep Batch: 8972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-48	FS48	Total/NA	Solid	8015NM Prep	
MB 880-8972/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8972/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6805-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6805-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-47	FS47	Total/NA	Solid	8015NM Prep	
MB 880-8981/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8981/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8981/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1366-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1366-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Total/NA	Solid	8015 NM	
890-1352-2	FS02	Total/NA	Solid	8015 NM	
890-1352-3	FS03	Total/NA	Solid	8015 NM	
890-1352-4	FS04	Total/NA	Solid	8015 NM	
890-1352-5	FS05	Total/NA	Solid	8015 NM	
890-1352-6	FS06	Total/NA	Solid	8015 NM	
890-1352-7	FS07	Total/NA	Solid	8015 NM	
890-1352-8	FS08	Total/NA	Solid	8015 NM	
890-1352-9	FS09	Total/NA	Solid	8015 NM	
890-1352-10	FS10	Total/NA	Solid	8015 NM	
890-1352-11	FS11	Total/NA	Solid	8015 NM	
890-1352-12	FS12	Total/NA	Solid	8015 NM	
890-1352-13	FS13	Total/NA	Solid	8015 NM	
890-1352-14	FS14	Total/NA	Solid	8015 NM	
890-1352-15	FS15	Total/NA	Solid	8015 NM	
890-1352-16	FS16	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 9044 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-17	FS17	Total/NA	Solid	8015 NM	
890-1352-18	FS18	Total/NA	Solid	8015 NM	
890-1352-19	FS19	Total/NA	Solid	8015 NM	
890-1352-20	FS20	Total/NA	Solid	8015 NM	
890-1352-21	FS21	Total/NA	Solid	8015 NM	
890-1352-22	FS22	Total/NA	Solid	8015 NM	
890-1352-23	FS23	Total/NA	Solid	8015 NM	
890-1352-24	FS24	Total/NA	Solid	8015 NM	
890-1352-25	FS25	Total/NA	Solid	8015 NM	
890-1352-26	FS26	Total/NA	Solid	8015 NM	
890-1352-27	FS27	Total/NA	Solid	8015 NM	
890-1352-28	FS28	Total/NA	Solid	8015 NM	
890-1352-29	FS29	Total/NA	Solid	8015 NM	
890-1352-30	FS30	Total/NA	Solid	8015 NM	
890-1352-31	FS31	Total/NA	Solid	8015 NM	
890-1352-32	FS32	Total/NA	Solid	8015 NM	
890-1352-33	FS33	Total/NA	Solid	8015 NM	
890-1352-34	FS34	Total/NA	Solid	8015 NM	
890-1352-35	FS35	Total/NA	Solid	8015 NM	
890-1352-36	FS36	Total/NA	Solid	8015 NM	
890-1352-37	FS37	Total/NA	Solid	8015 NM	
890-1352-38	FS38	Total/NA	Solid	8015 NM	
890-1352-39	FS39	Total/NA	Solid	8015 NM	
890-1352-40	FS40	Total/NA	Solid	8015 NM	
890-1352-41	FS41	Total/NA	Solid	8015 NM	
890-1352-42	FS42	Total/NA	Solid	8015 NM	
890-1352-43	FS43	Total/NA	Solid	8015 NM	
890-1352-44	FS44	Total/NA	Solid	8015 NM	
890-1352-45	FS45	Total/NA	Solid	8015 NM	
890-1352-46	FS46	Total/NA	Solid	8015 NM	
890-1352-47	FS47	Total/NA	Solid	8015 NM	
890-1352-48	FS48	Total/NA	Solid	8015 NM	

Analysis Batch: 9082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-41	FS41	Total/NA	Solid	8015B NM	9090
890-1352-42	FS42	Total/NA	Solid	8015B NM	9090
890-1352-43	FS43	Total/NA	Solid	8015B NM	9090
890-1352-44	FS44	Total/NA	Solid	8015B NM	9090
890-1352-45	FS45	Total/NA	Solid	8015B NM	9090
890-1352-46	FS46	Total/NA	Solid	8015B NM	9090
MB 880-9090/1-A	Method Blank	Total/NA	Solid	8015B NM	9090
LCS 880-9090/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9090
LCSD 880-9090/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9090
880-6968-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	9090
880-6968-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9090

Analysis Batch: 9084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Total/NA	Solid	8015B NM	9091
890-1352-2	FS02	Total/NA	Solid	8015B NM	9091

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 9084 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-3	FS03	Total/NA	Solid	8015B NM	9091
890-1352-4	FS04	Total/NA	Solid	8015B NM	9091
890-1352-5	FS05	Total/NA	Solid	8015B NM	9091
890-1352-6	FS06	Total/NA	Solid	8015B NM	9091
890-1352-7	FS07	Total/NA	Solid	8015B NM	9091
890-1352-8	FS08	Total/NA	Solid	8015B NM	9091
890-1352-9	FS09	Total/NA	Solid	8015B NM	9091
890-1352-10	FS10	Total/NA	Solid	8015B NM	9091
890-1352-11	FS11	Total/NA	Solid	8015B NM	9091
890-1352-12	FS12	Total/NA	Solid	8015B NM	9091
890-1352-13	FS13	Total/NA	Solid	8015B NM	9091
890-1352-14	FS14	Total/NA	Solid	8015B NM	9091
890-1352-15	FS15	Total/NA	Solid	8015B NM	9091
MB 880-9091/1-A	Method Blank	Total/NA	Solid	8015B NM	9091
LCS 880-9091/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9091
LCSD 880-9091/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9091
880-6967-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	9091
880-6967-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9091

Analysis Batch: 9086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-16	FS16	Total/NA	Solid	8015B NM	9092
890-1352-17	FS17	Total/NA	Solid	8015B NM	9092
890-1352-18	FS18	Total/NA	Solid	8015B NM	9092
890-1352-19	FS19	Total/NA	Solid	8015B NM	9092
890-1352-20	FS20	Total/NA	Solid	8015B NM	9092
890-1352-21	FS21	Total/NA	Solid	8015B NM	9092
890-1352-22	FS22	Total/NA	Solid	8015B NM	9092
890-1352-23	FS23	Total/NA	Solid	8015B NM	9092
890-1352-24	FS24	Total/NA	Solid	8015B NM	9092
890-1352-25	FS25	Total/NA	Solid	8015B NM	9092
890-1352-26	FS26	Total/NA	Solid	8015B NM	9092
890-1352-27	FS27	Total/NA	Solid	8015B NM	9092
890-1352-28	FS28	Total/NA	Solid	8015B NM	9092
890-1352-29	FS29	Total/NA	Solid	8015B NM	9092
890-1352-30	FS30	Total/NA	Solid	8015B NM	9092
MB 880-9092/1-A	Method Blank	Total/NA	Solid	8015B NM	9092
LCS 880-9092/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9092
LCSD 880-9092/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9092
880-6968-A-7-C MS	Matrix Spike	Total/NA	Solid	8015B NM	9092
880-6968-A-7-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9092

Analysis Batch: 9088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-31	FS31	Total/NA	Solid	8015B NM	9093
890-1352-32	FS32	Total/NA	Solid	8015B NM	9093
890-1352-33	FS33	Total/NA	Solid	8015B NM	9093
890-1352-34	FS34	Total/NA	Solid	8015B NM	9093
890-1352-35	FS35	Total/NA	Solid	8015B NM	9093
890-1352-36	FS36	Total/NA	Solid	8015B NM	9093
890-1352-37	FS37	Total/NA	Solid	8015B NM	9093

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 9088 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-38	FS38	Total/NA	Solid	8015B NM	9093
890-1352-39	FS39	Total/NA	Solid	8015B NM	9093
890-1352-40	FS40	Total/NA	Solid	8015B NM	9093
MB 880-9093/1-A	Method Blank	Total/NA	Solid	8015B NM	9093
LCS 880-9093/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9093
LCSD 880-9093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9093
880-6967-A-6-C MS	Matrix Spike	Total/NA	Solid	8015B NM	9093
880-6967-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9093

Prep Batch: 9090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-41	FS41	Total/NA	Solid	8015NM Prep	
890-1352-42	FS42	Total/NA	Solid	8015NM Prep	
890-1352-43	FS43	Total/NA	Solid	8015NM Prep	
890-1352-44	FS44	Total/NA	Solid	8015NM Prep	
890-1352-45	FS45	Total/NA	Solid	8015NM Prep	
890-1352-46	FS46	Total/NA	Solid	8015NM Prep	
MB 880-9090/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9090/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9090/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6968-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6968-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 9091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Total/NA	Solid	8015NM Prep	
890-1352-2	FS02	Total/NA	Solid	8015NM Prep	
890-1352-3	FS03	Total/NA	Solid	8015NM Prep	
890-1352-4	FS04	Total/NA	Solid	8015NM Prep	
890-1352-5	FS05	Total/NA	Solid	8015NM Prep	
890-1352-6	FS06	Total/NA	Solid	8015NM Prep	
890-1352-7	FS07	Total/NA	Solid	8015NM Prep	
890-1352-8	FS08	Total/NA	Solid	8015NM Prep	
890-1352-9	FS09	Total/NA	Solid	8015NM Prep	
890-1352-10	FS10	Total/NA	Solid	8015NM Prep	
890-1352-11	FS11	Total/NA	Solid	8015NM Prep	
890-1352-12	FS12	Total/NA	Solid	8015NM Prep	
890-1352-13	FS13	Total/NA	Solid	8015NM Prep	
890-1352-14	FS14	Total/NA	Solid	8015NM Prep	
890-1352-15	FS15	Total/NA	Solid	8015NM Prep	
MB 880-9091/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9091/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9091/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6967-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6967-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 9092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-16	FS16	Total/NA	Solid	8015NM Prep	
890-1352-17	FS17	Total/NA	Solid	8015NM Prep	
890-1352-18	FS18	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

GC Semi VOA (Continued)

Prep Batch: 9092 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-19	FS19	Total/NA	Solid	8015NM Prep	
890-1352-20	FS20	Total/NA	Solid	8015NM Prep	
890-1352-21	FS21	Total/NA	Solid	8015NM Prep	
890-1352-22	FS22	Total/NA	Solid	8015NM Prep	
890-1352-23	FS23	Total/NA	Solid	8015NM Prep	
890-1352-24	FS24	Total/NA	Solid	8015NM Prep	
890-1352-25	FS25	Total/NA	Solid	8015NM Prep	
890-1352-26	FS26	Total/NA	Solid	8015NM Prep	
890-1352-27	FS27	Total/NA	Solid	8015NM Prep	
890-1352-28	FS28	Total/NA	Solid	8015NM Prep	
890-1352-29	FS29	Total/NA	Solid	8015NM Prep	
890-1352-30	FS30	Total/NA	Solid	8015NM Prep	
MB 880-9092/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9092/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9092/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6968-A-7-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6968-A-7-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 9093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-31	FS31	Total/NA	Solid	8015NM Prep	
890-1352-32	FS32	Total/NA	Solid	8015NM Prep	
890-1352-33	FS33	Total/NA	Solid	8015NM Prep	
890-1352-34	FS34	Total/NA	Solid	8015NM Prep	
890-1352-35	FS35	Total/NA	Solid	8015NM Prep	
890-1352-36	FS36	Total/NA	Solid	8015NM Prep	
890-1352-37	FS37	Total/NA	Solid	8015NM Prep	
890-1352-38	FS38	Total/NA	Solid	8015NM Prep	
890-1352-39	FS39	Total/NA	Solid	8015NM Prep	
890-1352-40	FS40	Total/NA	Solid	8015NM Prep	
MB 880-9093/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9093/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9093/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6967-A-6-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6967-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 9101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Soluble	Solid	DI Leach	
890-1352-2	FS02	Soluble	Solid	DI Leach	
890-1352-3	FS03	Soluble	Solid	DI Leach	
890-1352-4	FS04	Soluble	Solid	DI Leach	
890-1352-5	FS05	Soluble	Solid	DI Leach	
890-1352-6	FS06	Soluble	Solid	DI Leach	
890-1352-7	FS07	Soluble	Solid	DI Leach	
MB 880-9101/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9101/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9101/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6763-A-6-D MS	Matrix Spike	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

HPLC/IC (Continued)

Leach Batch: 9101 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6763-A-6-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-1350-A-1-I MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1350-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 9103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-28	FS28	Soluble	Solid	DI Leach	
890-1352-29	FS29	Soluble	Solid	DI Leach	
890-1352-30	FS30	Soluble	Solid	DI Leach	
890-1352-31	FS31	Soluble	Solid	DI Leach	
890-1352-32	FS32	Soluble	Solid	DI Leach	
890-1352-33	FS33	Soluble	Solid	DI Leach	
890-1352-34	FS34	Soluble	Solid	DI Leach	
890-1352-35	FS35	Soluble	Solid	DI Leach	
890-1352-36	FS36	Soluble	Solid	DI Leach	
890-1352-37	FS37	Soluble	Solid	DI Leach	
890-1352-38	FS38	Soluble	Solid	DI Leach	
890-1352-39	FS39	Soluble	Solid	DI Leach	
890-1352-40	FS40	Soluble	Solid	DI Leach	
890-1352-41	FS41	Soluble	Solid	DI Leach	
890-1352-42	FS42	Soluble	Solid	DI Leach	
890-1352-43	FS43	Soluble	Solid	DI Leach	
890-1352-44	FS44	Soluble	Solid	DI Leach	
890-1352-45	FS45	Soluble	Solid	DI Leach	
890-1352-46	FS46	Soluble	Solid	DI Leach	
890-1352-47	FS47	Soluble	Solid	DI Leach	
MB 880-9103/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9103/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9103/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1352-28 MS	FS28	Soluble	Solid	DI Leach	
890-1352-28 MSD	FS28	Soluble	Solid	DI Leach	
890-1352-38 MS	FS38	Soluble	Solid	DI Leach	
890-1352-38 MSD	FS38	Soluble	Solid	DI Leach	

Leach Batch: 9127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-48	FS48	Soluble	Solid	DI Leach	
MB 880-9127/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9127/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9127/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6796-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6796-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-1	FS01	Soluble	Solid	300.0	9101
890-1352-2	FS02	Soluble	Solid	300.0	9101
890-1352-3	FS03	Soluble	Solid	300.0	9101
890-1352-4	FS04	Soluble	Solid	300.0	9101
890-1352-5	FS05	Soluble	Solid	300.0	9101
890-1352-6	FS06	Soluble	Solid	300.0	9101

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

HPLC/IC (Continued)

Analysis Batch: 9188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-7	FS07	Soluble	Solid	300.0	9101
MB 880-9101/1-A	Method Blank	Soluble	Solid	300.0	9101
LCS 880-9101/2-A	Lab Control Sample	Soluble	Solid	300.0	9101
LCSD 880-9101/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9101
880-6763-A-6-D MS	Matrix Spike	Soluble	Solid	300.0	9101
880-6763-A-6-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9101
890-1350-A-1-I MS	Matrix Spike	Soluble	Solid	300.0	9101
890-1350-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9101

Analysis Batch: 9218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-28	FS28	Soluble	Solid	300.0	9103
890-1352-29	FS29	Soluble	Solid	300.0	9103
890-1352-30	FS30	Soluble	Solid	300.0	9103
890-1352-31	FS31	Soluble	Solid	300.0	9103
890-1352-32	FS32	Soluble	Solid	300.0	9103
890-1352-33	FS33	Soluble	Solid	300.0	9103
890-1352-34	FS34	Soluble	Solid	300.0	9103
890-1352-35	FS35	Soluble	Solid	300.0	9103
890-1352-36	FS36	Soluble	Solid	300.0	9103
890-1352-37	FS37	Soluble	Solid	300.0	9103
890-1352-38	FS38	Soluble	Solid	300.0	9103
890-1352-39	FS39	Soluble	Solid	300.0	9103
890-1352-40	FS40	Soluble	Solid	300.0	9103
890-1352-41	FS41	Soluble	Solid	300.0	9103
890-1352-42	FS42	Soluble	Solid	300.0	9103
890-1352-43	FS43	Soluble	Solid	300.0	9103
890-1352-44	FS44	Soluble	Solid	300.0	9103
890-1352-45	FS45	Soluble	Solid	300.0	9103
890-1352-46	FS46	Soluble	Solid	300.0	9103
890-1352-47	FS47	Soluble	Solid	300.0	9103
MB 880-9103/1-A	Method Blank	Soluble	Solid	300.0	9103
LCS 880-9103/2-A	Lab Control Sample	Soluble	Solid	300.0	9103
LCSD 880-9103/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9103
890-1352-28 MS	FS28	Soluble	Solid	300.0	9103
890-1352-28 MSD	FS28	Soluble	Solid	300.0	9103
890-1352-38 MS	FS38	Soluble	Solid	300.0	9103
890-1352-38 MSD	FS38	Soluble	Solid	300.0	9103

Analysis Batch: 9221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-48	FS48	Soluble	Solid	300.0	9127
MB 880-9127/1-A	Method Blank	Soluble	Solid	300.0	9127
LCS 880-9127/2-A	Lab Control Sample	Soluble	Solid	300.0	9127
LCSD 880-9127/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9127
880-6796-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	9127
880-6796-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9127

Leach Batch: 9340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-8	FS08	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

HPLC/IC (Continued)

Leach Batch: 9340 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-9	FS09	Soluble	Solid	DI Leach	
890-1352-10	FS10	Soluble	Solid	DI Leach	
890-1352-11	FS11	Soluble	Solid	DI Leach	
890-1352-12	FS12	Soluble	Solid	DI Leach	
890-1352-13	FS13	Soluble	Solid	DI Leach	
890-1352-14	FS14	Soluble	Solid	DI Leach	
890-1352-15	FS15	Soluble	Solid	DI Leach	
890-1352-16	FS16	Soluble	Solid	DI Leach	
890-1352-17	FS17	Soluble	Solid	DI Leach	
890-1352-18	FS18	Soluble	Solid	DI Leach	
890-1352-19	FS19	Soluble	Solid	DI Leach	
890-1352-20	FS20	Soluble	Solid	DI Leach	
890-1352-21	FS21	Soluble	Solid	DI Leach	
890-1352-22	FS22	Soluble	Solid	DI Leach	
890-1352-23	FS23	Soluble	Solid	DI Leach	
890-1352-24	FS24	Soluble	Solid	DI Leach	
890-1352-25	FS25	Soluble	Solid	DI Leach	
890-1352-26	FS26	Soluble	Solid	DI Leach	
890-1352-27	FS27	Soluble	Solid	DI Leach	
MB 880-9340/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9340/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9340/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1352-8 MS	FS08	Soluble	Solid	DI Leach	
890-1352-8 MSD	FS08	Soluble	Solid	DI Leach	
890-1352-18 MS	FS18	Soluble	Solid	DI Leach	
890-1352-18 MSD	FS18	Soluble	Solid	DI Leach	

Analysis Batch: 9372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1352-8	FS08	Soluble	Solid	300.0	9340
890-1352-9	FS09	Soluble	Solid	300.0	9340
890-1352-10	FS10	Soluble	Solid	300.0	9340
890-1352-11	FS11	Soluble	Solid	300.0	9340
890-1352-12	FS12	Soluble	Solid	300.0	9340
890-1352-13	FS13	Soluble	Solid	300.0	9340
890-1352-14	FS14	Soluble	Solid	300.0	9340
890-1352-15	FS15	Soluble	Solid	300.0	9340
890-1352-16	FS16	Soluble	Solid	300.0	9340
890-1352-17	FS17	Soluble	Solid	300.0	9340
890-1352-18	FS18	Soluble	Solid	300.0	9340
890-1352-19	FS19	Soluble	Solid	300.0	9340
890-1352-20	FS20	Soluble	Solid	300.0	9340
890-1352-21	FS21	Soluble	Solid	300.0	9340
890-1352-22	FS22	Soluble	Solid	300.0	9340
890-1352-23	FS23	Soluble	Solid	300.0	9340
890-1352-24	FS24	Soluble	Solid	300.0	9340
890-1352-25	FS25	Soluble	Solid	300.0	9340
890-1352-26	FS26	Soluble	Solid	300.0	9340
890-1352-27	FS27	Soluble	Solid	300.0	9340
MB 880-9340/1-A	Method Blank	Soluble	Solid	300.0	9340
LCS 880-9340/2-A	Lab Control Sample	Soluble	Solid	300.0	9340

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1352-1
Project/Site: RDX Federal 28-12h SDG: Eddy County

HPLC/IC (Continued)

Analysis Batch: 9372 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-9340/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9340
890-1352-8 MS	FS08	Soluble	Solid	300.0	9340
890-1352-8 MSD	FS08	Soluble	Solid	300.0	9340
890-1352-18 MS	FS18	Soluble	Solid	300.0	9340
890-1352-18 MSD	FS18	Soluble	Solid	300.0	9340

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS01
Date Collected: 10/01/21 12:00
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-1
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			5.01 g	5 mL	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 09:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 16:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		10			9188	10/11/21 13:11	CH	XEN MID

Client Sample ID: FS02
Date Collected: 10/01/21 12:02
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-2
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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 10:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 16:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		10			9188	10/11/21 13:17	CH	XEN MID

Client Sample ID: FS03
Date Collected: 10/01/21 12:04
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-3
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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 10:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 16:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		10			9188	10/11/21 13:24	CH	XEN MID

Client Sample ID: FS04
Date Collected: 10/01/21 12:06
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-4
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			5.04 g	5 mL	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 10:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS04

Lab Sample ID: 890-1352-4
Matrix: Solid
Date Collected: 10/01/21 12:06
Date Received: 10/04/21 11:34

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			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 17:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		10			9188	10/11/21 13:30	CH	XEN MID

Client Sample ID: FS05

Lab Sample ID: 890-1352-5
Matrix: Solid
Date Collected: 10/01/21 12:08
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 11:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 17:33	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		5			9188	10/11/21 13:36	CH	XEN MID

Client Sample ID: FS06

Lab Sample ID: 890-1352-6
Matrix: Solid
Date Collected: 10/01/21 12:10
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 11:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 18:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		10			9188	10/11/21 13:42	CH	XEN MID

Client Sample ID: FS07

Lab Sample ID: 890-1352-7
Matrix: Solid
Date Collected: 10/01/21 12:20
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 12:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 18:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS07

Lab Sample ID: 890-1352-7
Matrix: Solid
Date Collected: 10/01/21 12:20
Date Received: 10/04/21 11:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	9101	10/08/21 10:14	CA	XEN MID
Soluble	Analysis	300.0		10			9188	10/11/21 13:49	CH	XEN MID

Client Sample ID: FS08

Lab Sample ID: 890-1352-8
Matrix: Solid
Date Collected: 10/01/21 12:22
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 12:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 19:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:18	CH	XEN MID

Client Sample ID: FS09

Lab Sample ID: 890-1352-9
Matrix: Solid
Date Collected: 10/01/21 12:24
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 13:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 19:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:24	CH	XEN MID

Client Sample ID: FS10

Lab Sample ID: 890-1352-10
Matrix: Solid
Date Collected: 10/01/21 12:26
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 13:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 19:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 12:34	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS11

Lab Sample ID: 890-1352-11
Matrix: Solid
Date Collected: 10/01/21 12:28
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 15:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 20:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:30	CH	XEN MID

Client Sample ID: FS12

Lab Sample ID: 890-1352-12
Matrix: Solid
Date Collected: 10/01/21 12:30
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 15:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 20:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:37	CH	XEN MID

Client Sample ID: FS13

Lab Sample ID: 890-1352-13
Matrix: Solid
Date Collected: 10/01/21 12:40
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 16:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 20:47	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:43	CH	XEN MID

Client Sample ID: FS14

Lab Sample ID: 890-1352-14
Matrix: Solid
Date Collected: 10/01/21 12:42
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 16:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS14

Lab Sample ID: 890-1352-14
Matrix: Solid
Date Collected: 10/01/21 12:42
Date Received: 10/04/21 11:34

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			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 21:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:49	CH	XEN MID

Client Sample ID: FS15

Lab Sample ID: 890-1352-15
Matrix: Solid
Date Collected: 10/01/21 12:44
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 17:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9091	10/08/21 08:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9084	10/08/21 21:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 15:56	CH	XEN MID

Client Sample ID: FS16

Lab Sample ID: 890-1352-16
Matrix: Solid
Date Collected: 10/01/21 12:46
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 17:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 15:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 13:25	CH	XEN MID

Client Sample ID: FS17

Lab Sample ID: 890-1352-17
Matrix: Solid
Date Collected: 10/01/21 12:48
Date Received: 10/04/21 11:34

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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 17:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 16:19	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS17

Date Collected: 10/01/21 12:48
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-17
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	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 13:31	CH	XEN MID

Client Sample ID: FS18

Date Collected: 10/01/21 12:50
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-18
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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 18:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 16:41	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 13:37	CH	XEN MID

Client Sample ID: FS19

Date Collected: 10/01/21 13:00
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-19
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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 18:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 13:56	CH	XEN MID

Client Sample ID: FS20

Date Collected: 10/01/21 13:02
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-20
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	8908	10/05/21 11:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 19:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 17:26	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:02	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS21

Lab Sample ID: 890-1352-21

Date Collected: 10/01/21 13:04
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 23:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 18:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		10			9372	10/13/21 16:02	CH	XEN MID

Client Sample ID: FS22

Lab Sample ID: 890-1352-22

Date Collected: 10/01/21 13:06
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/09/21 23:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:11	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 18:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:28	CH	XEN MID

Client Sample ID: FS23

Lab Sample ID: 890-1352-23

Date Collected: 10/01/21 13:08
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 00:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 18:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:34	CH	XEN MID

Client Sample ID: FS24

Lab Sample ID: 890-1352-24

Date Collected: 10/01/21 13:10
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 00:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS24
Date Collected: 10/01/21 13:10
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-24
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			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 19:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:40	CH	XEN MID

Client Sample ID: FS25
Date Collected: 10/01/21 13:30
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-25
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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 00:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 19:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:47	CH	XEN MID

Client Sample ID: FS26
Date Collected: 10/01/21 13:32
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-26
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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 01:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 20:00	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:53	CH	XEN MID

Client Sample ID: FS27
Date Collected: 10/01/21 13:34
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-27
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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 01:47	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 20:21	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS27

Lab Sample ID: 890-1352-27
Matrix: Solid
Date Collected: 10/01/21 13:34
Date Received: 10/04/21 11:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	9340	10/12/21 19:13	SC	XEN MID
Soluble	Analysis	300.0		5			9372	10/13/21 14:59	CH	XEN MID

Client Sample ID: FS28

Lab Sample ID: 890-1352-28
Matrix: Solid
Date Collected: 10/01/21 13:36
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 02:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 20:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		1			9218	10/11/21 14:44	CH	XEN MID

Client Sample ID: FS29

Lab Sample ID: 890-1352-29
Matrix: Solid
Date Collected: 10/01/21 13:38
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 02:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 21:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 15:03	CH	XEN MID

Client Sample ID: FS30

Lab Sample ID: 890-1352-30
Matrix: Solid
Date Collected: 10/01/21 13:40
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 03:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9092	10/08/21 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9086	10/08/21 21:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		1			9218	10/11/21 15:09	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS31

Lab Sample ID: 890-1352-31

Date Collected: 10/01/21 13:50
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 04:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 15:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 15:16	CH	XEN MID

Client Sample ID: FS32

Lab Sample ID: 890-1352-32

Date Collected: 10/01/21 13:52
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 05:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 16:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 15:22	CH	XEN MID

Client Sample ID: FS33

Lab Sample ID: 890-1352-33

Date Collected: 10/01/21 13:54
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 05:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 16:41	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 15:41	CH	XEN MID

Client Sample ID: FS34

Lab Sample ID: 890-1352-34

Date Collected: 10/01/21 13:56
Matrix: Solid
Date Received: 10/04/21 11:34

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 06:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS34
Date Collected: 10/01/21 13:56
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-34
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			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 15:47	CH	XEN MID

Client Sample ID: FS35
Date Collected: 10/01/21 13:58
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-35
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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 06:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 17:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		1			9218	10/11/21 15:53	CH	XEN MID

Client Sample ID: FS36
Date Collected: 10/01/21 14:00
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-36
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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 07:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 18:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		1			9218	10/11/21 15:59	CH	XEN MID

Client Sample ID: FS37
Date Collected: 10/01/21 14:10
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-37
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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 07:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 18:33	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS37

Date Collected: 10/01/21 14:10
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-37

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			5.02 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 16:06	CH	XEN MID

Client Sample ID: FS38

Date Collected: 10/01/21 14:12
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-38

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 07:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:18	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 18:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 16:12	CH	XEN MID

Client Sample ID: FS39

Date Collected: 10/01/21 14:14
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-39

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 08:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 19:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 16:31	CH	XEN MID

Client Sample ID: FS40

Date Collected: 10/01/21 14:16
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-40

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	8911	10/05/21 11:12	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9114	10/10/21 08:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9242	10/11/21 15:20	MR	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9093	10/08/21 08:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9088	10/08/21 19:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 16:37	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS41

Date Collected: 10/01/21 14:18
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-41

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 16:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 19:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 16:56	CH	XEN MID

Client Sample ID: FS42

Date Collected: 10/01/21 14:20
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-42

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 17:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 20:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 17:02	CH	XEN MID

Client Sample ID: FS43

Date Collected: 10/01/21 14:30
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-43

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 17:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 20:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 17:09	CH	XEN MID

Client Sample ID: FS44

Date Collected: 10/01/21 14:32
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-44

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 17:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS44

Lab Sample ID: 890-1352-44

Date Collected: 10/01/21 14:32
Matrix: Solid
Date Received: 10/04/21 11:34

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			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 20:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 17:15	CH	XEN MID

Client Sample ID: FS45

Lab Sample ID: 890-1352-45

Date Collected: 10/01/21 14:34
Matrix: Solid
Date Received: 10/04/21 11:34

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 18:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 21:08	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 17:21	CH	XEN MID

Client Sample ID: FS46

Lab Sample ID: 890-1352-46

Date Collected: 10/01/21 14:36
Matrix: Solid
Date Received: 10/04/21 11:34

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 18:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	9090	10/08/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9082	10/08/21 21:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 17:27	CH	XEN MID

Client Sample ID: FS47

Lab Sample ID: 890-1352-47

Date Collected: 10/01/21 14:38
Matrix: Solid
Date Received: 10/04/21 11:34

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 19:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	8981	10/06/21 14:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			8953	10/07/21 05:25	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Client Sample ID: FS47

Date Collected: 10/01/21 14:38
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-47

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			4.96 g	50 mL	9103	10/08/21 10:19	CA	XEN MID
Soluble	Analysis	300.0		5			9218	10/11/21 17:34	CH	XEN MID

Client Sample ID: FS48

Date Collected: 10/01/21 14:40
Date Received: 10/04/21 11:34

Lab Sample ID: 890-1352-48

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	9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9112	10/11/21 19:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1			9044	10/07/21 09:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	8972	10/06/21 10:40	AM	XEN MID
Total/NA	Analysis	8015B NM		1			8955	10/07/21 05:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	9127	10/08/21 15:32	CH	XEN MID
Soluble	Analysis	300.0		5			9221	10/11/21 18:01	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-1352-1
Project/Site: RDX Federal 28-12h SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: RDX Federal 28-12h

Job ID: 890-1352-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1352-1	FS01	Solid	10/01/21 12:00	10/04/21 11:34	0.5
890-1352-2	FS02	Solid	10/01/21 12:02	10/04/21 11:34	0.5
890-1352-3	FS03	Solid	10/01/21 12:04	10/04/21 11:34	0.5
890-1352-4	FS04	Solid	10/01/21 12:06	10/04/21 11:34	0.5
890-1352-5	FS05	Solid	10/01/21 12:08	10/04/21 11:34	0.5
890-1352-6	FS06	Solid	10/01/21 12:10	10/04/21 11:34	0.5
890-1352-7	FS07	Solid	10/01/21 12:20	10/04/21 11:34	0.5
890-1352-8	FS08	Solid	10/01/21 12:22	10/04/21 11:34	0.5
890-1352-9	FS09	Solid	10/01/21 12:24	10/04/21 11:34	0.5
890-1352-10	FS10	Solid	10/01/21 12:26	10/04/21 11:34	0.5
890-1352-11	FS11	Solid	10/01/21 12:28	10/04/21 11:34	0.5
890-1352-12	FS12	Solid	10/01/21 12:30	10/04/21 11:34	0.5
890-1352-13	FS13	Solid	10/01/21 12:40	10/04/21 11:34	0.5
890-1352-14	FS14	Solid	10/01/21 12:42	10/04/21 11:34	0.5
890-1352-15	FS15	Solid	10/01/21 12:44	10/04/21 11:34	0.5
890-1352-16	FS16	Solid	10/01/21 12:46	10/04/21 11:34	0.5
890-1352-17	FS17	Solid	10/01/21 12:48	10/04/21 11:34	0.5
890-1352-18	FS18	Solid	10/01/21 12:50	10/04/21 11:34	0.5
890-1352-19	FS19	Solid	10/01/21 13:00	10/04/21 11:34	0.5
890-1352-20	FS20	Solid	10/01/21 13:02	10/04/21 11:34	0.5
890-1352-21	FS21	Solid	10/01/21 13:04	10/04/21 11:34	0.5
890-1352-22	FS22	Solid	10/01/21 13:06	10/04/21 11:34	0.5
890-1352-23	FS23	Solid	10/01/21 13:08	10/04/21 11:34	0.5
890-1352-24	FS24	Solid	10/01/21 13:10	10/04/21 11:34	0.5
890-1352-25	FS25	Solid	10/01/21 13:30	10/04/21 11:34	0.5
890-1352-26	FS26	Solid	10/01/21 13:32	10/04/21 11:34	0.5
890-1352-27	FS27	Solid	10/01/21 13:34	10/04/21 11:34	0.5
890-1352-28	FS28	Solid	10/01/21 13:36	10/04/21 11:34	0.5
890-1352-29	FS29	Solid	10/01/21 13:38	10/04/21 11:34	0.5
890-1352-30	FS30	Solid	10/01/21 13:40	10/04/21 11:34	0.5
890-1352-31	FS31	Solid	10/01/21 13:50	10/04/21 11:34	0.5
890-1352-32	FS32	Solid	10/01/21 13:52	10/04/21 11:34	0.5
890-1352-33	FS33	Solid	10/01/21 13:54	10/04/21 11:34	0.5
890-1352-34	FS34	Solid	10/01/21 13:56	10/04/21 11:34	0.5
890-1352-35	FS35	Solid	10/01/21 13:58	10/04/21 11:34	0.5
890-1352-36	FS36	Solid	10/01/21 14:00	10/04/21 11:34	0.5
890-1352-37	FS37	Solid	10/01/21 14:10	10/04/21 11:34	0.5
890-1352-38	FS38	Solid	10/01/21 14:12	10/04/21 11:34	0.5
890-1352-39	FS39	Solid	10/01/21 14:14	10/04/21 11:34	0.5
890-1352-40	FS40	Solid	10/01/21 14:16	10/04/21 11:34	0.5
890-1352-41	FS41	Solid	10/01/21 14:18	10/04/21 11:34	0.5
890-1352-42	FS42	Solid	10/01/21 14:20	10/04/21 11:34	0.5
890-1352-43	FS43	Solid	10/01/21 14:30	10/04/21 11:34	0.5
890-1352-44	FS44	Solid	10/01/21 14:32	10/04/21 11:34	0.5
890-1352-45	FS45	Solid	10/01/21 14:34	10/04/21 11:34	0.5
890-1352-46	FS46	Solid	10/01/21 14:36	10/04/21 11:34	0.5
890-1352-47	FS47	Solid	10/01/21 14:38	10/04/21 11:34	0.5
890-1352-48	FS48	Solid	10/01/21 14:40	10/04/21 11:34	0.5

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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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N 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:	RDX Federal 28-124	Turn Around	☒ Routine ☐ Rush
Project Number:	3140336Ø.ØØ7	Due Date:	
Project Location:	Eddy County	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Anna Byers		
PO #:	nAPP2124531124		

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR Mod7
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.4
Total Containers:		Corrected Temperature:	2.2

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
FS01	S	10/1/21	1200	0.5'	Comp	1					
FS02			1202			1					
FS03			1204			1					
FS04			1206			1					
FS05			1208			1					
FS06			1210			1					
FS07			1220			1					
FS08			1222			1					
FS09			1224			1					
FS10			1226			1					

Parameters

890-1352 Chain of Custody

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 Anna Byers	Cle Cup	10.4.21 1134	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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10/13/2021

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eurofins | Environment Testing Xenco

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 2 of 5

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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:	RDX Federal 28--12H	Turn Around	
Project Number:	3140331605.0007	☒ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2124531124		

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:		
Total Containers:		Corrected Temperature:		

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
FS11	S	10/1/21	1228	0.5'	Comp	1					
FS12			1230			1					
FS13			1240			1					
FS14			1242			1					
FS15			1244			1					
FS16			1246			1					
FS17			1248			1					
FS18			1250			1					
FS19			1300			1					
FS20			1302			1					

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers		10.4.21 1134	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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N 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:	RDX Federal 28-12H	Turn Around	
Project Number:	3140336Ø.ØØ7	☒ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2124531124		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	1
Cooler Custody Seals:	Yes No N/A	Correction Factor:	RG
Sample Custody Seals:	Yes No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 mod)	BTEX (EPA 8021 B)	Chloride (EPA 300.0)	Sample Comments
FS21	S	10/1/21	1304	0.5'	Comp	1					
FS22			1306			1					
FS23			1308			1					
FS24			1310			1					
FS25			1330			1					
FS26			1332			1					
FS27			1334			1					
FS28			1336			1					
FS29			1338			1					
FS30			1340			1					

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	Ace Cruz	10.4.21 1134	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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N 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:	RDX Federal 28-12H	Turn Around	
Project Number:	314033660.0007	☑ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2124531124		

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:	0
Sample Custody Seals:	Yes No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 mod.)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
FS31	S	10/1/21	1350	0.5'	Comp	1					
FS32			1352			1					
FS33			1354			1					
FS34			1356			1					
FS35			1358			1					
FS36			1400			1					
FS37			1410			1					
FS38			1412			1					
FS39			1414			1					
FS40			1416			1					

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	Cloe Cuff	10-4-21 1134	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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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:	RDX Federal 28 12H	Turn Around	
Project Number:	3140336805.0007	☒ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2124531124		

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:	0.1
Sample Custody Seals:	~~Yes~~ No N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
FS41	S	10/1/21	1418	0.5'	Comp	1					
FS42			1420			1					
FS43			1430			1					
FS44			1432			1					
FS45			1434			1					
FS46			1436			1					
FS47			1438			1					
FS48			1440			1					

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

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers		10-4-21 1134			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-443 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1352-1
Address: 1211 W Florida Ave	Due Date Requested: 10/8/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: RDX Federal 28-12h	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/8016NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
FS01 (890-1352-1)	10/1/21	12 00 Mountain		Solid			X	X	X	X	X	1	
FS02 (890-1352-2)	10/1/21	12 02 Mountain		Solid			X	X	X	X	X	1	
FS03 (890-1352-3)	10/1/21	12 04 Mountain		Solid			X	X	X	X	X	1	
FS04 (890-1352-4)	10/1/21	12 06 Mountain		Solid			X	X	X	X	X	1	
FS05 (890-1352-5)	10/1/21	12 08 Mountain		Solid			X	X	X	X	X	1	
FS06 (890-1352-6)	10/1/21	12 10 Mountain		Solid			X	X	X	X	X	1	
FS07 (890-1352-7)	10/1/21	12 20 Mountain		Solid			X	X	X	X	X	1	
FS08 (890-1352-8)	10/1/21	12 22 Mountain		Solid			X	X	X	X	X	1	
FS09 (890-1352-9)	10/1/21	12 24 Mountain		Solid			X	X	X	X	X	1	

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

Possible Hazard Identification	***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 Cruz 10.4.21	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

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

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Released to Imaging: 4/20/2022 3:21:28 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-443 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset com	State of Origin: New Mexico	Page: Page 2 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1352-1
Address: 1211 W Florida Ave	Due Date Requested: 10/8/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDX Federal 28-12h	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:										
FS10 (890-1352-10)	10/1/21	12 26 Mountain		Solid			X	X	X	X	X	1	
FS11 (890-1352-11)	10/1/21	12 28 Mountain		Solid			X	X	X	X	X	1	
FS12 (890-1352-12)	10/1/21	12 30 Mountain		Solid			X	X	X	X	X	1	
FS13 (890-1352-13)	10/1/21	12 40 Mountain		Solid			X	X	X	X	X	1	
FS14 (890-1352-14)	10/1/21	12 42 Mountain		Solid			X	X	X	X	X	1	
FS15 (890-1352-15)	10/1/21	12 44 Mountain		Solid			X	X	X	X	X	1	
FS16 (890-1352-16)	10/1/21	12 46 Mountain		Solid			X	X	X	X	X	1	
FS17 (890-1352-17)	10/1/21	12 48 Mountain		Solid			X	X	X	X	X	1	
FS18 (890-1352-18)	10/1/21	12 50 Mountain		Solid			X	X	X	X	X	1	

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

Possible Hazard Identification	***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: Cloe Cruz 10.4.21	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-443 3
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset com	State of Origin: New Mexico	Page: Page 3 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1352-1
Address: 1211 W Florida Ave,	Due Date Requested: 10/8/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDX Federal 28-12h	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	8016MOD_NM/8016NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
FS19 (890-1352-19)	10/1/21	13 00 Mountain		Solid			X	X	X	X	X	1	
FS20 (890-1352-20)	10/1/21	13 02 Mountain		Solid			X	X	X	X	X	1	
FS21 (890-1352-21)	10/1/21	13 04 Mountain		Solid			X	X	X	X	X	1	
FS22 (890-1352-22)	10/1/21	13 06 Mountain		Solid			X	X	X	X	X	1	
FS23 (890-1352-23)	10/1/21	13 08 Mountain		Solid			X	X	X	X	X	1	
FS24 (890-1352-24)	10/1/21	13 10 Mountain		Solid			X	X	X	X	X	1	
FS25 (890-1352-25)	10/1/21	13 30 Mountain		Solid			X	X	X	X	X	1	
FS26 (890-1352-26)	10/1/21	13 32 Mountain		Solid			X	X	X	X	X	1	
FS27 (890-1352-27)	10/1/21	13 34 Mountain		Solid			X	X	X	X	X	1	

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

Possible Hazard Identification	***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: Clae Curry 10.4.21	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time.	Company

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

Ver: 06/08/2021

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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: 890-443 4
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 4 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1352-1
Address: 1211 W Florida Ave	Due Date Requested: 10/8/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDX Federal 28-12h	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:										
FS28 (890-1352-28)	10/1/21	13 36 Mountain		Solid			X	X	X	X	X	1	
FS29 (890-1352-29)	10/1/21	13 38 Mountain		Solid			X	X	X	X	X	1	
FS30 (890-1352-30)	10/1/21	13 40 Mountain		Solid			X	X	X	X	X	1	
FS31 (890-1352-31)	10/1/21	13 50 Mountain		Solid			X	X	X	X	X	1	
FS32 (890-1352-32)	10/1/21	13 52 Mountain		Solid			X	X	X	X	X	1	
FS33 (890-1352-33)	10/1/21	13 54 Mountain		Solid			X	X	X	X	X	1	
FS34 (890-1352-34)	10/1/21	13 56 Mountain		Solid			X	X	X	X	X	1	
FS35 (890-1352-35)	10/1/21	13 58 Mountain		Solid			X	X	X	X	X	1	
FS36 (890-1352-36)	10/1/21	14 00 Mountain		Solid			X	X	X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
Clue Cuff 10.4.21		Xenco			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company

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

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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: 890-443 5
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 5 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1352-1
Address: 1211 W Florida Ave	Due Date Requested: 10/8/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: RDX Federal 28-12h	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:										
FS37 (890-1352-37)	10/1/21	14 10 Mountain		Solid			X	X	X	X	X	1	
FS38 (890-1352-38)	10/1/21	14 12 Mountain		Solid			X	X	X	X	X	1	
FS39 (890-1352-39)	10/1/21	14 14 Mountain		Solid			X	X	X	X	X	1	
FS40 (890-1352-40)	10/1/21	14 16 Mountain		Solid			X	X	X	X	X	1	
FS41 (890-1352-41)	10/1/21	14 18 Mountain		Solid			X	X	X	X	X	1	
FS42 (890-1352-42)	10/1/21	14 20 Mountain		Solid			X	X	X	X	X	1	
FS43 (890-1352-43)	10/1/21	14 30 Mountain		Solid			X	X	X	X	X	1	
FS44 (890-1352-44)	10/1/21	14 32 Mountain		Solid			X	X	X	X	X	1	
FS45 (890-1352-45)	10/1/21	14 34 Mountain		Solid			X	X	X	X	X	1	

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

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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: Cloe Cuy 10.4.21	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-443 6
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 6 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-1352-1
Address: 1211 W Florida Ave	Due Date Requested: 10/8/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #			
Project Name: RDX Federal 28-12h	Project #: 88000203			
Site	SSOW#:			

Analysis Requested

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:										
FS46 (890-1352-46)	10/1/21	14 36 Mountain		Solid			X	X	X	X	X	1	
FS47 (890-1352-47)	10/1/21	14 38 Mountain		Solid			X	X	X	X	X	1	
FS48 (890-1352-48)	10/1/21	14 40 Mountain		Solid			X	X	X	X	X	1	

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:

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by: Cleo Cuty 10.4.21	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1352-1
SDG Number: Eddy County

Login Number: 1352
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1352-1
SDG Number: Eddy County

Login Number: 1352
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland
List Creation: 10/05/21 02:02 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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1903-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12
Revision: 1

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
2/9/2022 2:24:44 PM

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

LINKS

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Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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: RDX 28-12

Laboratory Job ID: 890-1903-1
SDG: 31403360.007

Table of Contents

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Surrogate Summary 8
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Method Summary 17
Sample Summary 18
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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1903-1
Project/Site: RDX 28-12 SDG: 31403360.007

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Job ID: 890-1903-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1903-1

REVISION

The report being provided is a revision of the original report sent on 2/8/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name change.

Report revision history

Receipt
The samples were received on 2/1/2022 3:22 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18627 and analytical batch 880-18625 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

HPLC/IC
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: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Client Sample ID: FS49

Date Collected: 01/31/22 14:45
Date Received: 02/01/22 15:22
Sample Depth: 4

Lab Sample ID: 890-1903-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:15	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:15	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:15	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399		mg/Kg		02/05/22 12:11	02/05/22 16:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:15	1
Xylenes, Total	<0.00399	U F1	0.00399		mg/Kg		02/05/22 12:11	02/05/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/05/22 12:11*	*02/05/22 16:15*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/05/22 12:11*	*02/05/22 16:15*	*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			02/07/22 15:34	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			02/07/22 16:46	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		02/04/22 14:40	02/07/22 07:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 14:40	02/07/22 07:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 14:40	02/07/22 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*02/04/22 14:40*	*02/07/22 07:02*	*1*
o-Terphenyl	*82*		*70 - 130*	*02/04/22 14:40*	*02/07/22 07:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1170**		4.98		mg/Kg			02/07/22 16:34	1

Client Sample ID: FS50

Date Collected: 01/31/22 14:40
Date Received: 02/01/22 15:22
Sample Depth: 4

Lab Sample ID: 890-1903-2

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		02/05/22 12:11	02/05/22 16:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/05/22 12:11	02/05/22 16:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 16:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/05/22 12:11	02/05/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/05/22 12:11*	*02/05/22 16:35*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Client Sample ID: FS50

Lab Sample ID: 890-1903-2
Matrix: Solid
Date Collected: 01/31/22 14:40
Date Received: 02/01/22 15:22
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/05/22 12:11*	*02/05/22 16:35*	*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			02/07/22 15:34	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			02/07/22 16:46	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		02/04/22 14:40	02/07/22 07:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 14:40	02/07/22 07:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 14:40	02/07/22 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*02/04/22 14:40*	*02/07/22 07:22*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/04/22 14:40*	*02/07/22 07:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2720**		24.9		mg/Kg			02/07/22 17:14	5

Client Sample ID: FS51

Lab Sample ID: 890-1903-3
Matrix: Solid
Date Collected: 01/31/22 14:25
Date Received: 02/01/22 15:22
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		02/05/22 12:11	02/05/22 16:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/05/22 12:11	02/05/22 16:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/05/22 12:11	02/05/22 16:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/05/22 12:11	02/05/22 16:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/05/22 12:11	02/05/22 16:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/05/22 12:11	02/05/22 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/05/22 12:11*	*02/05/22 16:56*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*02/05/22 12:11*	*02/05/22 16:56*	*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			02/07/22 15:34	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			02/07/22 16:46	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Client Sample ID: FS51

Date Collected: 01/31/22 14:25
Date Received: 02/01/22 15:22
Sample Depth: 4

Lab Sample ID: 890-1903-3

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		02/04/22 14:40	02/07/22 07:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 14:40	02/07/22 07:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 14:40	02/07/22 07:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*02/04/22 14:40*	*02/07/22 07:43*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/04/22 14:40*	*02/07/22 07:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5630**		49.6		mg/Kg			02/07/22 17:21	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1903-1	FS49	122	114
890-1903-1 MS	FS49	108	103
890-1903-1 MSD	FS49	105	103
890-1903-2	FS50	119	92
890-1903-3	FS51	106	89
LCS 880-18627/1-A	Lab Control Sample	106	96
LCSD 880-18627/2-A	Lab Control Sample Dup	127	110
MB 880-18627/5-A	Method Blank	124	95

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-10926-A-7-D MS	Matrix Spike	76	78
880-10926-A-7-E MSD	Matrix Spike Duplicate	78	81
890-1903-1	FS49	73	82
890-1903-2	FS50	77	88
890-1903-3	FS51	72	85
LCS 880-18603/2-A	Lab Control Sample	95	103
LCSD 880-18603/3-A	Lab Control Sample Dup	92	99
MB 880-18603/1-A	Method Blank	84	98

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18627/5-A
Matrix: Solid
Analysis Batch: 18625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 15:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 15:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 15:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/05/22 12:11	02/05/22 15:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/05/22 12:11	02/05/22 15:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/05/22 12:11	02/05/22 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*02/05/22 12:11*	*02/05/22 15:53*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/05/22 12:11*	*02/05/22 15:53*	*1*

Lab Sample ID: LCS 880-18627/1-A
Matrix: Solid
Analysis Batch: 18625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18627

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07478		mg/Kg		75	70 - 130		
Toluene			0.100	0.07455		mg/Kg		75	70 - 130		
Ethylbenzene			0.100	0.07781		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene			0.200	0.1596		mg/Kg		80	70 - 130		
o-Xylene			0.100	0.07931		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-18627/2-A
Matrix: Solid
Analysis Batch: 18625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18627

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07497		mg/Kg		75	70 - 130	0	35
Toluene			0.100	0.08063		mg/Kg		81	70 - 130	8	35
Ethylbenzene			0.100	0.08674		mg/Kg		87	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1773		mg/Kg		89	70 - 130	10	35
o-Xylene			0.100	0.08920		mg/Kg		89	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-1903-1 MS
Matrix: Solid
Analysis Batch: 18625

Client Sample ID: FS49
Prep Type: Total/NA
Prep Batch: 18627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.0998	0.06369	F1	mg/Kg		63	70 - 130		
Toluene	<0.00200	U F1	0.0998	0.06529	F1	mg/Kg		65	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

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

Lab Sample ID: 890-1903-1 MS
Matrix: Solid
Analysis Batch: 18625

Client Sample ID: FS49
Prep Type: Total/NA
Prep Batch: 18627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1	0.0998	0.06927	F1	mg/Kg		69	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1319	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00200	U	0.0998	0.07255		mg/Kg		72	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-1903-1 MSD
Matrix: Solid
Analysis Batch: 18625

Client Sample ID: FS49
Prep Type: Total/NA
Prep Batch: 18627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.06662	F1	mg/Kg		66	70 - 130	4	35
Toluene	<0.00200	U F1	0.100	0.06699	F1	mg/Kg		66	70 - 130	3	35
Ethylbenzene	<0.00200	U F1	0.100	0.06954	F1	mg/Kg		69	70 - 130	0	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1429		mg/Kg		71	70 - 130	8	35
o-Xylene	<0.00200	U	0.100	0.07154		mg/Kg		70	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-18603/1-A
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18603

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		02/04/22 14:40	02/06/22 23:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 14:40	02/06/22 23:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 14:40	02/06/22 23:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*02/04/22 14:40*	*02/06/22 23:15*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/04/22 14:40*	*02/06/22 23:15*	*1*

Lab Sample ID: LCS 880-18603/2-A
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	827.6		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1127		mg/Kg		113	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

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

Lab Sample ID: LCS 880-18603/2-A
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18603

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-18603/3-A
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18603

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	834.3		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1160		mg/Kg		116	70 - 130	3	20

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

Lab Sample ID: 880-10926-A-7-D MS
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18603

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	788.1		mg/Kg		76	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	882.1		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	78		70 - 130

Lab Sample ID: 880-10926-A-7-E MSD
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18603

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	813.1		mg/Kg		79	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	921.8		mg/Kg		90	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18695/1-A
Matrix: Solid
Analysis Batch: 18722

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			02/07/22 14:33	1

Lab Sample ID: LCS 880-18695/2-A
Matrix: Solid
Analysis Batch: 18722

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.5		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-18695/3-A
Matrix: Solid
Analysis Batch: 18722

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	250.5		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-10934-A-15-C MS
Matrix: Solid
Analysis Batch: 18722

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<5.00	U	250	254.3		mg/Kg		101	90 - 110		

Lab Sample ID: 880-10934-A-15-D MSD
Matrix: Solid
Analysis Batch: 18722

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<5.00	U	250	255.0		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

GC VOA

Analysis Batch: 18625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Total/NA	Solid	8021B	18627
890-1903-2	FS50	Total/NA	Solid	8021B	18627
890-1903-3	FS51	Total/NA	Solid	8021B	18627
MB 880-18627/5-A	Method Blank	Total/NA	Solid	8021B	18627
LCS 880-18627/1-A	Lab Control Sample	Total/NA	Solid	8021B	18627
LCSD 880-18627/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18627
890-1903-1 MS	FS49	Total/NA	Solid	8021B	18627
890-1903-1 MSD	FS49	Total/NA	Solid	8021B	18627

Prep Batch: 18627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Total/NA	Solid	5035	
890-1903-2	FS50	Total/NA	Solid	5035	
890-1903-3	FS51	Total/NA	Solid	5035	
MB 880-18627/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18627/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18627/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1903-1 MS	FS49	Total/NA	Solid	5035	
890-1903-1 MSD	FS49	Total/NA	Solid	5035	

Analysis Batch: 18770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Total/NA	Solid	Total BTEX	
890-1903-2	FS50	Total/NA	Solid	Total BTEX	
890-1903-3	FS51	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Total/NA	Solid	8015NM Prep	
890-1903-2	FS50	Total/NA	Solid	8015NM Prep	
890-1903-3	FS51	Total/NA	Solid	8015NM Prep	
MB 880-18603/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18603/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18603/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10926-A-7-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10926-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Total/NA	Solid	8015B NM	18603
890-1903-2	FS50	Total/NA	Solid	8015B NM	18603
890-1903-3	FS51	Total/NA	Solid	8015B NM	18603
MB 880-18603/1-A	Method Blank	Total/NA	Solid	8015B NM	18603
LCS 880-18603/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18603
LCSD 880-18603/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18603
880-10926-A-7-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18603
880-10926-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18603

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

GC Semi VOA

Analysis Batch: 18777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Total/NA	Solid	8015 NM	
890-1903-2	FS50	Total/NA	Solid	8015 NM	
890-1903-3	FS51	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Soluble	Solid	DI Leach	
890-1903-2	FS50	Soluble	Solid	DI Leach	
890-1903-3	FS51	Soluble	Solid	DI Leach	
MB 880-18695/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18695/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18695/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10934-A-15-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10934-A-15-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1903-1	FS49	Soluble	Solid	300.0	18695
890-1903-2	FS50	Soluble	Solid	300.0	18695
890-1903-3	FS51	Soluble	Solid	300.0	18695
MB 880-18695/1-A	Method Blank	Soluble	Solid	300.0	18695
LCS 880-18695/2-A	Lab Control Sample	Soluble	Solid	300.0	18695
LCSD 880-18695/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18695
880-10934-A-15-C MS	Matrix Spike	Soluble	Solid	300.0	18695
880-10934-A-15-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18695

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Client Sample ID: FS49
Date Collected: 01/31/22 14:45
Date Received: 02/01/22 15:22

Lab Sample ID: 890-1903-1
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			5.01 g	5 mL	18627	02/05/22 12:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18625	02/05/22 16:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18603	02/04/22 14:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/07/22 07:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18695	02/07/22 10:42	SC	XEN MID
Soluble	Analysis	300.0		1			18722	02/07/22 16:34	CH	XEN MID

Client Sample ID: FS50
Date Collected: 01/31/22 14:40
Date Received: 02/01/22 15:22

Lab Sample ID: 890-1903-2
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			5.01 g	5 mL	18627	02/05/22 12:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18625	02/05/22 16:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18603	02/04/22 14:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/07/22 07:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18695	02/07/22 10:42	SC	XEN MID
Soluble	Analysis	300.0		5			18722	02/07/22 17:14	CH	XEN MID

Client Sample ID: FS51
Date Collected: 01/31/22 14:25
Date Received: 02/01/22 15:22

Lab Sample ID: 890-1903-3
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			5.03 g	5 mL	18627	02/05/22 12:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18625	02/05/22 16:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:34	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18603	02/04/22 14:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/07/22 07:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	18695	02/07/22 10:42	SC	XEN MID
Soluble	Analysis	300.0		10			18722	02/07/22 17:21	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1903-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1903-1	FS49	Solid	01/31/22 14:45	02/01/22 15:22	4
890-1903-2	FS50	Solid	01/31/22 14:40	02/01/22 15:22	4
890-1903-3	FS51	Solid	01/31/22 14:25	02/01/22 15:22	4

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

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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 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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:	RDX 28 - 12	Turn Around	
Project Number:	31403360.007	☑ Routine ☐ Rush	
Project Location:	nAPP2124531124	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #: CC#:	10611208201		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	T-Nmar	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.7	
Total Containers:		Corrected Temperature:	1.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021 B)	Chloride (EPA 300.0)
FS01	S	1/31/22	1445	4'	Comp	1		X	X	X
FS02	S	↓	1430	4'	Comp	1		X	X	X
FS03	S	↓	1425	4'	Comp	1		X	X	X
~~FS04 CB~~										

ANALYSIS REQUEST

890-1903 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

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 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 Anna Byers		2/1/22 3:22	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-610 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-1903-1
Address: 1211 W Florida Ave ,	Due Date Requested: 2/7/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: RDX 28-12	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:										
FS01 (890-1903-1)	1/31/22	14 45 Mountain		Solid			X	X	X	X	X	1	
FS02 (890-1903-2)	1/31/22	14 40 Mountain		Solid			X	X	X	X	X	1	
FS03 (890-1903-3)	1/31/22	14 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:	Date/Time: 2/2/22	Company	Received by:	Date/Time: 2/4/22 1540	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 4.6/4.7

Ver: 06/08/2021

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Received by OCD: 3/21/2022 1:35:04 PM
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2/9/2022 (Rev. 1)
Released to Imaging: 4/20/2022 3:21:28 PM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1903-1
SDG Number: 31403360.007

Login Number: 1903
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: 890-1903-1
SDG Number: 31403360.007

Login Number: 1903
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 02/04/22 03:42 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").	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1930-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
2/21/2022 7:03:44 PM

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

LINKS

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Visit us at: www.eurofinsus.com/Env

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: RDX 28-12

Laboratory Job ID: 890-1930-1
SDG: 31403360.007

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1930-1
Project/Site: RDX 28-12 SDG: 31403360.007

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD 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.

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: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Job ID: 890-1930-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1930-1

Receipt
The samples were received on 2/9/2022 4:07 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19022 and analytical batch 880-19117 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: SW04 (890-1930-13), (MB 880-19128/1-A), (880-11151-A-1-G), (880-11151-A-1-H MS) and (880-11151-A-1-I MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: FS52 (890-1930-1), FS53 (890-1930-2), FS54 (890-1930-3), FS55 (890-1930-4), FS56 (890-1930-5), FS57 (890-1930-6), FS58 (890-1930-7), FS59 (890-1930-8), FS60 (890-1930-9), (MB 880-19177/1-A), (890-1930-A-1-E MS) and (890-1930-A-1-F MSD). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-19131 and analytical batch 880-19282 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28)

Method 8015MOD_NM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-19131 and analytical batch 880-19282 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-19423 and analytical batch 880-19585 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS52

Lab Sample ID: 890-1930-1
Matrix: Solid
Date Collected: 02/09/22 08:50
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 19:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/11/22 08:30	02/11/22 19:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/11/22 08:30	02/11/22 19:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/11/22 08:30	02/11/22 19:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/11/22 08:30	02/11/22 19:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/11/22 08:30	02/11/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*02/11/22 08:30*	*02/11/22 19:03*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*02/11/22 08:30*	*02/11/22 19:03*	*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			02/14/22 09:32	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			02/15/22 12:34	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		02/11/22 15:10	02/13/22 11:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 11:58	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 11:58*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 11:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2640**		25.0		mg/Kg			02/19/22 12:57	5

Client Sample ID: FS53

Lab Sample ID: 890-1930-2
Matrix: Solid
Date Collected: 02/09/22 08:52
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 19:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 19:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 19:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 08:30	02/11/22 19:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 19:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 08:30	02/11/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*02/11/22 08:30*	*02/11/22 19:23*	*1*

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS53

Lab Sample ID: 890-1930-2
Matrix: Solid
Date Collected: 02/09/22 08:52
Date Received: 02/09/22 16:07
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/11/22 08:30*	*02/11/22 19:23*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 15:10	02/13/22 13:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 13:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*59*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 13:00*	*1*
o-Terphenyl	*61*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 13:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9090**		248		mg/Kg			02/16/22 19:44	50

Client Sample ID: FS54

Lab Sample ID: 890-1930-3
Matrix: Solid
Date Collected: 02/09/22 08:55
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 19:43	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/11/22 08:30	02/11/22 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 19:43	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/11/22 08:30	02/11/22 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*02/11/22 08:30*	*02/11/22 19:43*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*02/11/22 08:30*	*02/11/22 19:43*	*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			02/14/22 09:32	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			02/17/22 15:56	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS54

Lab Sample ID: 890-1930-3
Matrix: Solid
Date Collected: 02/09/22 08:55
Date Received: 02/09/22 16:07
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		02/11/22 15:10	02/13/22 13:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 13:20	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*62*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 13:20*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 13:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9000**		251		mg/Kg			02/16/22 19:53	50

Client Sample ID: FS55

Lab Sample ID: 890-1930-4
Matrix: Solid
Date Collected: 02/09/22 08:57
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 20:04	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/11/22 08:30	02/11/22 20:04	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/11/22 08:30	02/11/22 20:04	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/11/22 08:30	02/11/22 20:04	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/11/22 08:30	02/11/22 20:04	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/11/22 08:30	02/11/22 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*02/11/22 08:30*	*02/11/22 20:04*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/11/22 08:30*	*02/11/22 20:04*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 15:10	02/13/22 13:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 13:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 13:41*	*1*
o-Terphenyl	*62*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 13:41*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS55

Lab Sample ID: 890-1930-4
Matrix: Solid
Date Collected: 02/09/22 08:57
Date Received: 02/09/22 16:07
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4940	F1	50.5		mg/Kg			02/16/22 20:02	10

Client Sample ID: FS56

Lab Sample ID: 890-1930-5
Matrix: Solid
Date Collected: 02/09/22 09:00
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 20:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/11/22 08:30	02/11/22 20:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/11/22 08:30	02/11/22 20:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/11/22 08:30	02/11/22 20:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/11/22 08:30	02/11/22 20:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/11/22 08:30	02/11/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*139*	*S1+*	*70 - 130*	*02/11/22 08:30*	*02/11/22 20:24*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/11/22 08:30*	*02/11/22 20:24*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 15:10	02/13/22 14:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 14:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 14:01*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 14:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5190		49.8		mg/Kg			02/16/22 20:29	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS57

Lab Sample ID: 890-1930-6
Matrix: Solid
Date Collected: 02/09/22 12:40
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 20:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 20:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 20:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 08:30	02/11/22 20:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 20:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 08:30	02/11/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*02/11/22 08:30*	*02/11/22 20:45*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*02/11/22 08:30*	*02/11/22 20:45*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 15:10	02/13/22 14:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 14:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*59*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 14:21*	*1*
o-Terphenyl	*63*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 14:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9020**		248		mg/Kg			02/16/22 20:38	50

Client Sample ID: FS58

Lab Sample ID: 890-1930-7
Matrix: Solid
Date Collected: 02/09/22 12:45
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 21:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 21:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 21:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/11/22 08:30	02/11/22 21:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 21:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/11/22 08:30	02/11/22 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*02/11/22 08:30*	*02/11/22 21:05*	*1*

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS58

Lab Sample ID: 890-1930-7
Matrix: Solid
Date Collected: 02/09/22 12:45
Date Received: 02/09/22 16:07
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/11/22 08:30*	*02/11/22 21:05*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 15:10	02/13/22 14:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 14:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 14:41*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 14:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7890**		99.4		mg/Kg			02/17/22 20:41	20

Client Sample ID: FS59

Lab Sample ID: 890-1930-8
Matrix: Solid
Date Collected: 02/09/22 12:50
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 21:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 21:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 21:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/11/22 08:30	02/11/22 21:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 21:25	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/11/22 08:30	02/11/22 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*02/11/22 08:30*	*02/11/22 21:25*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/11/22 08:30*	*02/11/22 21:25*	*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			02/14/22 09:32	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			02/17/22 15:56	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS59

Lab Sample ID: 890-1930-8
Matrix: Solid
Date Collected: 02/09/22 12:50
Date Received: 02/09/22 16:07
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	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 15:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 15:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 15:01*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 15:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5450**		50.0		mg/Kg			02/16/22 21:13	10

Client Sample ID: FS60

Lab Sample ID: 890-1930-9
Matrix: Solid
Date Collected: 02/09/22 12:55
Date Received: 02/09/22 16:07
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		02/11/22 08:30	02/11/22 21:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 21:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 21:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/11/22 08:30	02/11/22 21:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 21:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/11/22 08:30	02/11/22 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*02/11/22 08:30*	*02/11/22 21:46*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/11/22 08:30*	*02/11/22 21:46*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 15:10	02/13/22 15:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 15:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 15:10	02/13/22 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 15:21*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 15:21*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS60

Lab Sample ID: 890-1930-9
Matrix: Solid
Date Collected: 02/09/22 12:55
Date Received: 02/09/22 16:07
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5720		50.0		mg/Kg			02/16/22 21:22	10

Client Sample ID: SW01

Lab Sample ID: 890-1930-10
Matrix: Solid
Date Collected: 02/09/22 12:00
Date Received: 02/09/22 16:07
Sample Depth: 0 - 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		02/11/22 08:30	02/11/22 22:06	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 22:06	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 22:06	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/11/22 08:30	02/11/22 22:06	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/11/22 08:30	02/11/22 22:06	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/11/22 08:30	02/11/22 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*02/11/22 08:30*	*02/11/22 22:06*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/11/22 08:30*	*02/11/22 22:06*	*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			02/14/22 09:32	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			02/17/22 15:56	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		02/11/22 11:54	02/12/22 19:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/11/22 11:54	02/12/22 19:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 11:54	02/12/22 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*02/11/22 11:54*	*02/12/22 19:16*	*1*
o-Terphenyl	*76*		*70 - 130*	*02/11/22 11:54*	*02/12/22 19:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.8		5.03		mg/Kg			02/16/22 21:31	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: SW02

Lab Sample ID: 890-1930-11
Matrix: Solid
Date Collected: 02/09/22 12:05
Date Received: 02/09/22 16:07
Sample Depth: 0 - 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		02/11/22 16:00	02/12/22 10:32	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/11/22 16:00	02/12/22 10:32	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/11/22 16:00	02/12/22 10:32	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/11/22 16:00	02/12/22 10:32	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/11/22 16:00	02/12/22 10:32	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/11/22 16:00	02/12/22 10:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/11/22 16:00*	*02/12/22 10:32*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/11/22 16:00*	*02/12/22 10:32*	*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			02/14/22 09:43	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			02/17/22 15:56	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		02/11/22 11:54	02/12/22 19:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		02/11/22 11:54	02/12/22 19:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 11:54	02/12/22 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*02/11/22 11:54*	*02/12/22 19:37*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*02/11/22 11:54*	*02/12/22 19:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**76.5**		4.99		mg/Kg			02/16/22 21:39	1

Client Sample ID: SW03

Lab Sample ID: 890-1930-12
Matrix: Solid
Date Collected: 02/09/22 12:10
Date Received: 02/09/22 16:07
Sample Depth: 0 - 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		02/11/22 16:00	02/12/22 10:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 10:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 10:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/11/22 16:00	02/12/22 10:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 10:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/11/22 16:00	02/12/22 10:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*02/11/22 16:00*	*02/12/22 10:52*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: SW03

Lab Sample ID: 890-1930-12
Matrix: Solid
Date Collected: 02/09/22 12:10
Date Received: 02/09/22 16:07
Sample Depth: 0 - 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/11/22 16:00*	*02/12/22 10:52*	*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			02/14/22 09:43	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			02/17/22 15:56	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		02/11/22 11:54	02/12/22 19:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/11/22 11:54	02/12/22 19:58	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 11:54	02/12/22 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*68*	*S1-*	*70 - 130*	*02/11/22 11:54*	*02/12/22 19:58*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*02/11/22 11:54*	*02/12/22 19:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3430**		25.0		mg/Kg			02/16/22 21:48	5

Client Sample ID: SW04

Lab Sample ID: 890-1930-13
Matrix: Solid
Date Collected: 02/09/22 12:15
Date Received: 02/09/22 16:07
Sample Depth: 0 - 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		02/11/22 16:00	02/12/22 11:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 11:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 11:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/11/22 16:00	02/12/22 11:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 11:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/11/22 16:00	02/12/22 11:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/11/22 16:00*	*02/12/22 11:13*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/11/22 16:00*	*02/12/22 11:13*	*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			02/14/22 09:43	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			02/17/22 15:56	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: SW04

Lab Sample ID: 890-1930-13

Date Collected: 02/09/22 12:15
Date Received: 02/09/22 16:07
Sample Depth: 0 - 4

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		02/11/22 11:24	02/13/22 04:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/11/22 11:24	02/13/22 04:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/11/22 11:24	02/13/22 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*02/11/22 11:24*	*02/13/22 04:50*	*1*
o-Terphenyl	*78*		*70 - 130*	*02/11/22 11:24*	*02/13/22 04:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4470**		49.8		mg/Kg			02/16/22 21:57	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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)
880-11142-A-1-A MS	Matrix Spike	117	94
880-11142-A-1-B MSD	Matrix Spike Duplicate	125	93
880-11152-A-31-A MS	Matrix Spike	109	99
880-11152-A-31-B MSD	Matrix Spike Duplicate	106	114
890-1930-1	FS52	127	89
890-1930-2	FS53	133 S1+	100
890-1930-3	FS54	136 S1+	103
890-1930-4	FS55	140 S1+	100
890-1930-5	FS56	139 S1+	107
890-1930-6	FS57	129	111
890-1930-7	FS58	130	106
890-1930-8	FS59	126	100
890-1930-9	FS60	124	97
890-1930-10	SW01	118	93
890-1930-11	SW02	98	105
890-1930-12	SW03	93	104
890-1930-13	SW04	102	114
LCS 880-19022/1-A	Lab Control Sample	127	108
LCS 880-19036/1-A	Lab Control Sample	93	106
LCSD 880-19022/2-A	Lab Control Sample Dup	119	93
LCSD 880-19036/2-A	Lab Control Sample Dup	97	88
MB 880-19022/5-A	Method Blank	120	93
MB 880-19035/5-A	Method Blank	89	100
MB 880-19036/5-A	Method Blank	104	104

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)
880-11151-A-1-H MS	Matrix Spike	63 S1-	63 S1-
880-11151-A-1-I MSD	Matrix Spike Duplicate	63 S1-	62 S1-
880-11196-A-21-B MS	Matrix Spike	79	80
880-11196-A-21-C MSD	Matrix Spike Duplicate	60 S1-	61 S1-
890-1930-1	FS52	63 S1-	67 S1-
890-1930-1 MS	FS52	62 S1-	55 S1-
890-1930-1 MSD	FS52	62 S1-	55 S1-
890-1930-2	FS53	59 S1-	61 S1-
890-1930-3	FS54	62 S1-	65 S1-
890-1930-4	FS55	60 S1-	62 S1-
890-1930-5	FS56	61 S1-	66 S1-
890-1930-6	FS57	59 S1-	63 S1-
890-1930-7	FS58	60 S1-	66 S1-
890-1930-8	FS59	61 S1-	66 S1-
890-1930-9	FS60	63 S1-	69 S1-

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1930-1
Project/Site: RDX 28-12 SDG: 31403360.007

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-1930-10	SW01	75	76										
890-1930-11	SW02	69 S1-	68 S1-										
890-1930-12	SW03	68 S1-	67 S1-										
890-1930-13	SW04	65 S1-	78										
LCS 880-19128/2-A	Lab Control Sample	99	107										
LCS 880-19177/2-A	Lab Control Sample	103	104										
LCSD 880-19128/3-A	Lab Control Sample Dup	94	100										
LCSD 880-19177/3-A	Lab Control Sample Dup	99	99										
MB 880-19128/1-A	Method Blank	63 S1-	75										
MB 880-19177/1-A	Method Blank	65 S1-	75										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)										
LCS 880-19131/2-A	Lab Control Sample	82	82										
LCSD 880-19131/3-A	Lab Control Sample Dup	96	103										
MB 880-19131/1-A	Method Blank	71	71										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19022/5-A
Matrix: Solid
Analysis Batch: 19117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 13:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 13:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 13:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 08:30	02/11/22 13:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 08:30	02/11/22 13:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 08:30	02/11/22 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/11/22 08:30*	*02/11/22 13:40*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/11/22 08:30*	*02/11/22 13:40*	*1*

Lab Sample ID: LCS 880-19022/1-A
Matrix: Solid
Analysis Batch: 19117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09450		mg/Kg		95	70 - 130
Toluene	0.100	0.1013		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1042		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2070		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-19022/2-A
Matrix: Solid
Analysis Batch: 19117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19022

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08633		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.09157		mg/Kg		92	70 - 130	10	35
Ethylbenzene	0.100	0.09398		mg/Kg		94	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.1838		mg/Kg		92	70 - 130	12	35
o-Xylene	0.100	0.09615		mg/Kg		96	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-11142-A-1-A MS
Matrix: Solid
Analysis Batch: 19117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19022

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.100	0.07529		mg/Kg		75	70 - 130
Toluene	<0.00200	U F1	0.100	0.06719	F1	mg/Kg		67	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: 880-11142-A-1-A MS
Matrix: Solid
Analysis Batch: 19117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19022

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1	0.100	0.06501	F1	mg/Kg		65	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1249	F1	mg/Kg		62	70 - 130
o-Xylene	<0.00200	U F1	0.100	0.05856	F1	mg/Kg		59	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-11142-A-1-B MSD
Matrix: Solid
Analysis Batch: 19117

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19022

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.06144	F1	mg/Kg		62	70 - 130	20	35
Toluene	<0.00200	U F1	0.0998	0.06072	F1	mg/Kg		61	70 - 130	10	35
Ethylbenzene	<0.00200	U F1	0.0998	0.06368	F1	mg/Kg		64	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1282	F1	mg/Kg		64	70 - 130	3	35
o-Xylene	<0.00200	U F1	0.0998	0.05999	F1	mg/Kg		60	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: MB 880-19035/5-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19035

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 11:13	02/11/22 22:14	1

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

Lab Sample ID: MB 880-19036/5-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 16:00	02/12/22 09:09	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-19036/5-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 16:00	02/12/22 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/11/22 16:00*	*02/12/22 09:09*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/11/22 16:00*	*02/12/22 09:09*	*1*

Lab Sample ID: LCS 880-19036/1-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09249		mg/Kg		92	70 - 130
Toluene	0.100	0.09207		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.09926		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1837		mg/Kg		92	70 - 130
o-Xylene	0.100	0.09006		mg/Kg		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-19036/2-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19036

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08701		mg/Kg		87	70 - 130	6	35
Toluene	0.100	0.08975		mg/Kg		90	70 - 130	3	35
Ethylbenzene	0.100	0.09948		mg/Kg		99	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1868		mg/Kg		93	70 - 130	2	35
o-Xylene	0.100	0.09313		mg/Kg		93	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-11152-A-31-A MS
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.0998	0.06812	F1	mg/Kg		68	70 - 130
Toluene	<0.00201	U	0.0998	0.07261		mg/Kg		73	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.08506		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1566		mg/Kg		78	70 - 130
o-Xylene	<0.00201	U	0.0998	0.08036		mg/Kg		81	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: 880-11152-A-31-A MS
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19036

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-11152-A-31-B MSD
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19036

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0998	0.08550		mg/Kg		86	70 - 130	23	35
Toluene	<0.00201	U	0.0998	0.08578		mg/Kg		86	70 - 130	17	35
Ethylbenzene	<0.00201	U	0.0998	0.09057		mg/Kg		91	70 - 130	6	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1705		mg/Kg		85	70 - 130	8	35
o-Xylene	<0.00201	U	0.0998	0.08550		mg/Kg		86	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

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

Lab Sample ID: MB 880-19128/1-A
Matrix: Solid
Analysis Batch: 19227

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19128

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		02/11/22 11:24	02/12/22 20:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 11:24	02/12/22 20:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 11:24	02/12/22 20:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*02/11/22 11:24*	*02/12/22 20:10*	*1*
o-Terphenyl	*75*		*70 - 130*	*02/11/22 11:24*	*02/12/22 20:10*	*1*

Lab Sample ID: LCS 880-19128/2-A
Matrix: Solid
Analysis Batch: 19227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19128

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	917.8		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	989.6		mg/Kg		99	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: LCSD 880-19128/3-A
Matrix: Solid
Analysis Batch: 19227

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19128

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	809.7		mg/Kg		81	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	863.2		mg/Kg		86	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Lab Sample ID: 880-11151-A-1-H MS
Matrix: Solid
Analysis Batch: 19227

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19128

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	867.8		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	886.2		mg/Kg		89	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*63*	*S1-*	*70 - 130*
o-Terphenyl	*63*	*S1-*	*70 - 130*

Lab Sample ID: 880-11151-A-1-I MSD
Matrix: Solid
Analysis Batch: 19227

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19128

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	889.9		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	893.6		mg/Kg		90	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*63*	*S1-*	*70 - 130*
o-Terphenyl	*62*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-19131/1-A
Matrix: Solid
Analysis Batch: 19282

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19131

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		02/11/22 11:54	02/12/22 11:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 11:54	02/12/22 11:08	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 11:54	02/12/22 11:08	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-19131/1-A
Matrix: Solid
Analysis Batch: 19282

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19131

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	02/11/22 11:54	02/12/22 11:08	1
o-Terphenyl	71		70 - 130	02/11/22 11:54	02/12/22 11:08	1

Lab Sample ID: LCS 880-19131/2-A
Matrix: Solid
Analysis Batch: 19282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19131

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	886.6		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	760.0		mg/Kg		76	70 - 130		

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

Lab Sample ID: LCSD 880-19131/3-A
Matrix: Solid
Analysis Batch: 19282

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19131

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1011		mg/Kg		101	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	958.9	*1	mg/Kg		96	70 - 130	23	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 880-11196-A-21-B MS
Matrix: Solid
Analysis Batch: 19282

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19131

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 F2	1000	1047		mg/Kg		102	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U *1 F2	1000	1009		mg/Kg		101	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	80		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: 880-11196-A-21-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19282 — **Prep Batch: 19131**

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 F2	998	757.4	F2	mg/Kg		73	70 - 130	32	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1 F2	998	761.0	F2	mg/Kg		76	70 - 130	28	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*60*	*S1-*	*70 - 130*
o-Terphenyl	*61*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-19177/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19246 — **Prep Batch: 19177**

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		02/11/22 15:10	02/13/22 10:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 10:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/11/22 15:10	02/13/22 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*02/11/22 15:10*	*02/13/22 10:52*	*1*
o-Terphenyl	*75*		*70 - 130*	*02/11/22 15:10*	*02/13/22 10:52*	*1*

Lab Sample ID: LCS 880-19177/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19246 — **Prep Batch: 19177**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	874.4		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	988.0		mg/Kg		99	70 - 130		

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

Lab Sample ID: LCSD 880-19177/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19246 — **Prep Batch: 19177**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	830.2		mg/Kg		83	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	893.4		mg/Kg		89	70 - 130	10	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

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

Lab Sample ID: LCSD 880-19177/3-A
Matrix: Solid
Analysis Batch: 19246

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19177

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

Lab Sample ID: 890-1930-1 MS
Matrix: Solid
Analysis Batch: 19246

Client Sample ID: FS52
Prep Type: Total/NA
Prep Batch: 19177

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	891.2		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	883.9		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	62	S1-	70 - 130
o-Terphenyl	55	S1-	70 - 130

Lab Sample ID: 890-1930-1 MSD
Matrix: Solid
Analysis Batch: 19246

Client Sample ID: FS52
Prep Type: Total/NA
Prep Batch: 19177

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	950.2		mg/Kg		93	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	898.6		mg/Kg		88	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	62	S1-	70 - 130
o-Terphenyl	55	S1-	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19422/1-A
Matrix: Solid
Analysis Batch: 19575

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			02/19/22 08:32	1

Lab Sample ID: LCS 880-19422/2-A
Matrix: Solid
Analysis Batch: 19575

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-19422/3-A
Matrix: Solid
Analysis Batch: 19575

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	237.5		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-1927-A-2-D MS
Matrix: Solid
Analysis Batch: 19575

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5230	F1	4990	9457	F1	mg/Kg		85	90 - 110

Lab Sample ID: 890-1927-A-2-E MSD
Matrix: Solid
Analysis Batch: 19575

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5230	F1	4990	9514	F1	mg/Kg		86	90 - 110	1	20

Lab Sample ID: MB 880-19423/1-A
Matrix: Solid
Analysis Batch: 19585

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			02/16/22 17:32	1

Lab Sample ID: LCS 880-19423/2-A
Matrix: Solid
Analysis Batch: 19585

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	265.2		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-19423/3-A
Matrix: Solid
Analysis Batch: 19585

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	265.3		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-1930-4 MS
Matrix: Solid
Analysis Batch: 19585

Client Sample ID: FS55
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4940	F1	2530	7555		mg/Kg		104	90 - 110

Lab Sample ID: 890-1930-4 MSD
Matrix: Solid
Analysis Batch: 19585

Client Sample ID: FS55
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4940	F1	2530	8346	F1	mg/Kg		135	90 - 110	10	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

GC VOA

Prep Batch: 19022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Total/NA	Solid	5035	
890-1930-2	FS53	Total/NA	Solid	5035	
890-1930-3	FS54	Total/NA	Solid	5035	
890-1930-4	FS55	Total/NA	Solid	5035	
890-1930-5	FS56	Total/NA	Solid	5035	
890-1930-6	FS57	Total/NA	Solid	5035	
890-1930-7	FS58	Total/NA	Solid	5035	
890-1930-8	FS59	Total/NA	Solid	5035	
890-1930-9	FS60	Total/NA	Solid	5035	
890-1930-10	SW01	Total/NA	Solid	5035	
MB 880-19022/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19022/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19022/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11142-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-11142-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 19035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19035/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 19036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-11	SW02	Total/NA	Solid	5035	
890-1930-12	SW03	Total/NA	Solid	5035	
890-1930-13	SW04	Total/NA	Solid	5035	
MB 880-19036/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19036/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19036/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11152-A-31-A MS	Matrix Spike	Total/NA	Solid	5035	
880-11152-A-31-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-11	SW02	Total/NA	Solid	8021B	19036
890-1930-12	SW03	Total/NA	Solid	8021B	19036
890-1930-13	SW04	Total/NA	Solid	8021B	19036
MB 880-19035/5-A	Method Blank	Total/NA	Solid	8021B	19035
MB 880-19036/5-A	Method Blank	Total/NA	Solid	8021B	19036
LCS 880-19036/1-A	Lab Control Sample	Total/NA	Solid	8021B	19036
LCSD 880-19036/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19036
880-11152-A-31-A MS	Matrix Spike	Total/NA	Solid	8021B	19036
880-11152-A-31-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19036

Analysis Batch: 19117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Total/NA	Solid	8021B	19022
890-1930-2	FS53	Total/NA	Solid	8021B	19022
890-1930-3	FS54	Total/NA	Solid	8021B	19022
890-1930-4	FS55	Total/NA	Solid	8021B	19022
890-1930-5	FS56	Total/NA	Solid	8021B	19022
890-1930-6	FS57	Total/NA	Solid	8021B	19022

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

GC VOA (Continued)

Analysis Batch: 19117 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-7	FS58	Total/NA	Solid	8021B	19022
890-1930-8	FS59	Total/NA	Solid	8021B	19022
890-1930-9	FS60	Total/NA	Solid	8021B	19022
890-1930-10	SW01	Total/NA	Solid	8021B	19022
MB 880-19022/5-A	Method Blank	Total/NA	Solid	8021B	19022
LCS 880-19022/1-A	Lab Control Sample	Total/NA	Solid	8021B	19022
LCSD 880-19022/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19022
880-11142-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	19022
880-11142-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19022

Analysis Batch: 19331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Total/NA	Solid	Total BTEX	
890-1930-2	FS53	Total/NA	Solid	Total BTEX	
890-1930-3	FS54	Total/NA	Solid	Total BTEX	
890-1930-4	FS55	Total/NA	Solid	Total BTEX	
890-1930-5	FS56	Total/NA	Solid	Total BTEX	
890-1930-6	FS57	Total/NA	Solid	Total BTEX	
890-1930-7	FS58	Total/NA	Solid	Total BTEX	
890-1930-8	FS59	Total/NA	Solid	Total BTEX	
890-1930-9	FS60	Total/NA	Solid	Total BTEX	
890-1930-10	SW01	Total/NA	Solid	Total BTEX	

Analysis Batch: 19350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-11	SW02	Total/NA	Solid	Total BTEX	
890-1930-12	SW03	Total/NA	Solid	Total BTEX	
890-1930-13	SW04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 19128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-13	SW04	Total/NA	Solid	8015NM Prep	
MB 880-19128/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19128/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19128/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11151-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11151-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 19131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-10	SW01	Total/NA	Solid	8015NM Prep	
890-1930-11	SW02	Total/NA	Solid	8015NM Prep	
890-1930-12	SW03	Total/NA	Solid	8015NM Prep	
MB 880-19131/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19131/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19131/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11196-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11196-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

GC Semi VOA

Prep Batch: 19177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Total/NA	Solid	8015NM Prep	
890-1930-2	FS53	Total/NA	Solid	8015NM Prep	
890-1930-3	FS54	Total/NA	Solid	8015NM Prep	
890-1930-4	FS55	Total/NA	Solid	8015NM Prep	
890-1930-5	FS56	Total/NA	Solid	8015NM Prep	
890-1930-6	FS57	Total/NA	Solid	8015NM Prep	
890-1930-7	FS58	Total/NA	Solid	8015NM Prep	
890-1930-8	FS59	Total/NA	Solid	8015NM Prep	
890-1930-9	FS60	Total/NA	Solid	8015NM Prep	
MB 880-19177/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19177/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19177/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1930-1 MS	FS52	Total/NA	Solid	8015NM Prep	
890-1930-1 MSD	FS52	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-13	SW04	Total/NA	Solid	8015B NM	19128
MB 880-19128/1-A	Method Blank	Total/NA	Solid	8015B NM	19128
LCS 880-19128/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19128
LCSD 880-19128/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19128
880-11151-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	19128
880-11151-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19128

Analysis Batch: 19246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Total/NA	Solid	8015B NM	19177
890-1930-2	FS53	Total/NA	Solid	8015B NM	19177
890-1930-3	FS54	Total/NA	Solid	8015B NM	19177
890-1930-4	FS55	Total/NA	Solid	8015B NM	19177
890-1930-5	FS56	Total/NA	Solid	8015B NM	19177
890-1930-6	FS57	Total/NA	Solid	8015B NM	19177
890-1930-7	FS58	Total/NA	Solid	8015B NM	19177
890-1930-8	FS59	Total/NA	Solid	8015B NM	19177
890-1930-9	FS60	Total/NA	Solid	8015B NM	19177
MB 880-19177/1-A	Method Blank	Total/NA	Solid	8015B NM	19177
LCS 880-19177/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19177
LCSD 880-19177/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19177
890-1930-1 MS	FS52	Total/NA	Solid	8015B NM	19177
890-1930-1 MSD	FS52	Total/NA	Solid	8015B NM	19177

Analysis Batch: 19282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-10	SW01	Total/NA	Solid	8015B NM	19131
890-1930-11	SW02	Total/NA	Solid	8015B NM	19131
890-1930-12	SW03	Total/NA	Solid	8015B NM	19131
MB 880-19131/1-A	Method Blank	Total/NA	Solid	8015B NM	19131
LCS 880-19131/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19131
LCSD 880-19131/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19131
880-11196-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	19131
880-11196-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19131

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

GC Semi VOA

Analysis Batch: 19489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Total/NA	Solid	8015 NM	

Analysis Batch: 19741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-2	FS53	Total/NA	Solid	8015 NM	
890-1930-3	FS54	Total/NA	Solid	8015 NM	
890-1930-4	FS55	Total/NA	Solid	8015 NM	
890-1930-5	FS56	Total/NA	Solid	8015 NM	
890-1930-6	FS57	Total/NA	Solid	8015 NM	
890-1930-7	FS58	Total/NA	Solid	8015 NM	
890-1930-8	FS59	Total/NA	Solid	8015 NM	
890-1930-9	FS60	Total/NA	Solid	8015 NM	
890-1930-10	SW01	Total/NA	Solid	8015 NM	
890-1930-11	SW02	Total/NA	Solid	8015 NM	
890-1930-12	SW03	Total/NA	Solid	8015 NM	
890-1930-13	SW04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Soluble	Solid	DI Leach	
MB 880-19422/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19422/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19422/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1927-A-2-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1927-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 19423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-2	FS53	Soluble	Solid	DI Leach	
890-1930-3	FS54	Soluble	Solid	DI Leach	
890-1930-4	FS55	Soluble	Solid	DI Leach	
890-1930-5	FS56	Soluble	Solid	DI Leach	
890-1930-6	FS57	Soluble	Solid	DI Leach	
890-1930-7	FS58	Soluble	Solid	DI Leach	
890-1930-8	FS59	Soluble	Solid	DI Leach	
890-1930-9	FS60	Soluble	Solid	DI Leach	
890-1930-10	SW01	Soluble	Solid	DI Leach	
890-1930-11	SW02	Soluble	Solid	DI Leach	
890-1930-12	SW03	Soluble	Solid	DI Leach	
890-1930-13	SW04	Soluble	Solid	DI Leach	
MB 880-19423/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19423/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19423/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1930-4 MS	FS55	Soluble	Solid	DI Leach	
890-1930-4 MSD	FS55	Soluble	Solid	DI Leach	

Analysis Batch: 19575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-1	FS52	Soluble	Solid	300.0	19422

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

HPLC/IC (Continued)

Analysis Batch: 19575 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19422/1-A	Method Blank	Soluble	Solid	300.0	19422
LCS 880-19422/2-A	Lab Control Sample	Soluble	Solid	300.0	19422
LCSD 880-19422/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19422
890-1927-A-2-D MS	Matrix Spike	Soluble	Solid	300.0	19422
890-1927-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19422

Analysis Batch: 19585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1930-2	FS53	Soluble	Solid	300.0	19423
890-1930-3	FS54	Soluble	Solid	300.0	19423
890-1930-4	FS55	Soluble	Solid	300.0	19423
890-1930-5	FS56	Soluble	Solid	300.0	19423
890-1930-6	FS57	Soluble	Solid	300.0	19423
890-1930-7	FS58	Soluble	Solid	300.0	19423
890-1930-8	FS59	Soluble	Solid	300.0	19423
890-1930-9	FS60	Soluble	Solid	300.0	19423
890-1930-10	SW01	Soluble	Solid	300.0	19423
890-1930-11	SW02	Soluble	Solid	300.0	19423
890-1930-12	SW03	Soluble	Solid	300.0	19423
890-1930-13	SW04	Soluble	Solid	300.0	19423
MB 880-19423/1-A	Method Blank	Soluble	Solid	300.0	19423
LCS 880-19423/2-A	Lab Control Sample	Soluble	Solid	300.0	19423
LCSD 880-19423/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19423
890-1930-4 MS	FS55	Soluble	Solid	300.0	19423
890-1930-4 MSD	FS55	Soluble	Solid	300.0	19423

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS52
Date Collected: 02/09/22 08:50
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-1
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	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 19:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19489	02/15/22 12:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 11:58	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19422	02/14/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		5			19575	02/19/22 12:57	CH	XEN MID

Client Sample ID: FS53
Date Collected: 02/09/22 08:52
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-2
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	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 19:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 13:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		50			19585	02/16/22 19:44	CH	XEN MID

Client Sample ID: FS54
Date Collected: 02/09/22 08:55
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-3
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	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 19:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 13:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		50			19585	02/16/22 19:53	CH	XEN MID

Client Sample ID: FS55
Date Collected: 02/09/22 08:57
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-4
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			4.96 g	5 mL	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 20:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS55
Date Collected: 02/09/22 08:57
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-4
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			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 13:41	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		10			19585	02/16/22 20:02	CH	XEN MID

Client Sample ID: FS56
Date Collected: 02/09/22 09:00
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-5
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			5.02 g	5 mL	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 20:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 14:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		10			19585	02/16/22 20:29	CH	XEN MID

Client Sample ID: FS57
Date Collected: 02/09/22 12:40
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-6
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	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 20:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 14:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		50			19585	02/16/22 20:38	CH	XEN MID

Client Sample ID: FS58
Date Collected: 02/09/22 12:45
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-7
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	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 21:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 14:41	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: FS58
Date Collected: 02/09/22 12:45
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-7
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			5.03 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		20			19585	02/17/22 20:41	CH	XEN MID

Client Sample ID: FS59
Date Collected: 02/09/22 12:50
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-8
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			5.04 g	5 mL	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 21:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 15:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		10			19585	02/16/22 21:13	CH	XEN MID

Client Sample ID: FS60
Date Collected: 02/09/22 12:55
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-9
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			5.05 g	5 mL	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 21:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19177	02/11/22 15:10	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19246	02/13/22 15:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		10			19585	02/16/22 21:22	CH	XEN MID

Client Sample ID: SW01
Date Collected: 02/09/22 12:00
Date Received: 02/09/22 16:07

Lab Sample ID: 890-1930-10
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	19022	02/11/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19117	02/11/22 22:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19331	02/14/22 09:32	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19131	02/11/22 11:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19282	02/12/22 19:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		1			19585	02/16/22 21:31	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Client Sample ID: SW02

Lab Sample ID: 890-1930-11
Matrix: Solid
Date Collected: 02/09/22 12:05
Date Received: 02/09/22 16:07

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	19036	02/11/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 10:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19131	02/11/22 11:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19282	02/12/22 19:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		1			19585	02/16/22 21:39	CH	XEN MID

Client Sample ID: SW03

Lab Sample ID: 890-1930-12
Matrix: Solid
Date Collected: 02/09/22 12:10
Date Received: 02/09/22 16:07

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	19036	02/11/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 10:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19131	02/11/22 11:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19282	02/12/22 19:58	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		5			19585	02/16/22 21:48	CH	XEN MID

Client Sample ID: SW04

Lab Sample ID: 890-1930-13
Matrix: Solid
Date Collected: 02/09/22 12:15
Date Received: 02/09/22 16:07

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	19036	02/11/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19116	02/12/22 11:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19741	02/17/22 15:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19128	02/11/22 11:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19227	02/13/22 04:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19423	02/14/22 13:47	SC	XEN MID
Soluble	Analysis	300.0		10			19585	02/16/22 21:57	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1930-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: 890-1930-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1930-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1930-1	FS52	Solid	02/09/22 08:50	02/09/22 16:07	4
890-1930-2	FS53	Solid	02/09/22 08:52	02/09/22 16:07	4
890-1930-3	FS54	Solid	02/09/22 08:55	02/09/22 16:07	4
890-1930-4	FS55	Solid	02/09/22 08:57	02/09/22 16:07	4
890-1930-5	FS56	Solid	02/09/22 09:00	02/09/22 16:07	4
890-1930-6	FS57	Solid	02/09/22 12:40	02/09/22 16:07	4
890-1930-7	FS58	Solid	02/09/22 12:45	02/09/22 16:07	4
890-1930-8	FS59	Solid	02/09/22 12:50	02/09/22 16:07	4
890-1930-9	FS60	Solid	02/09/22 12:55	02/09/22 16:07	4
890-1930-10	SW01	Solid	02/09/22 12:00	02/09/22 16:07	0 - 4
890-1930-11	SW02	Solid	02/09/22 12:05	02/09/22 16:07	0 - 4
890-1930-12	SW03	Solid	02/09/22 12:10	02/09/22 16:07	0 - 4
890-1930-13	SW04	Solid	02/09/22 12:15	02/09/22 16:07	0 - 4

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

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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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-782-2329	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:	RDX 28-12	Turn Around	
Project Number:	314033360.007	☒ Routine ☐ Rush	
Project Location:	NM 21245 31124	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC # 106112088 01		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
FS52	S	2/9/22	0850	4'	Comp	1				
FS53			0852	4'		1				
FS54			0855	4'		1				
FS55			0857	4'		1				
FS56			0900	4'		1				
FS57			1240	4'		1				
FS58			1245	4'		1				
FS59			1250	4'		1				
FS60			1255	4'		1				
SW01			1200	0-4'		1				

890-1930 Chain of Custody

Parameters

ANALYSIS REQUEST

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

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 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 Anna Byers		2/9/22 4:07	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

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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 2 of 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281)782-2329	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:	RDX 28-12	Turn Around	☒ Routine ☐ Rush
Project Number:	3140336Ø.ØØ7	Due Date:	
Project Location:	nAPP2124531124	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Anna Byers		
PO #:	CC # 1Ø6112Ø8Ø1		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	FWM-407	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
SW02	S	2/9/22	1205	Ø-4'	Comp	1					
SW03	↓	↓	1210	↓	↓	1					
SW04	↓	↓	1215	↓	↓	1					

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 Anna Byers	N. Otero	2/9/22 4:07	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-619.1
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 - Texas		Job #: 890-1930-1
Address: 1211 W. Florida Ave, ,	Due Date Requested: 2/15/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: RDX 28-12	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:										
FS52 (890-1930-1)	2/9/22	08:50 Mountain		Solid			X	X	X	X	X	1	
FS53 (890-1930-2)	2/9/22	08:52 Mountain		Solid			X	X	X	X	X	1	
FS54 (890-1930-3)	2/9/22	08:55 Mountain		Solid			X	X	X	X	X	1	
FS55 (890-1930-4)	2/9/22	08:57 Mountain		Solid			X	X	X	X	X	1	
FS56 (890-1930-5)	2/9/22	09:00 Mountain		Solid			X	X	X	X	X	1	
FS57 (890-1930-6)	2/9/22	12:40 Mountain		Solid			X	X	X	X	X	1	
FS58 (890-1930-7)	2/9/22	12:45 Mountain		Solid			X	X	X	X	X	1	
FS59 (890-1930-8)	2/9/22	12:50 Mountain		Solid			X	X	X	X	X	1	
FS60 (890-1930-9)	2/9/22	12:55 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:

Relinquished by: Clue Cap 2·10·22	Date/Time:	Company	Received by:	Date/Time: 2/11/22 12:05	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

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2/21/2022
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Released to Imaging: 4/20/2022 3:21:28 PM

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-619.2
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 - Texas		Job #: 890-1930-1
Address: 1211 W. Florida Ave, ,	Due Date Requested: 2/15/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: RDX 28-12	Project #: 88000203			
Site:	SSOW#:			

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:

Analysis Requested

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:										
SW01 (890-1930-10)	2/9/22	12:00 Mountain		Solid			X	X	X	X	X	1	
SW02 (890-1930-11)	2/9/22	12:05 Mountain		Solid			X	X	X	X	X	1	
SW03 (890-1930-12)	2/9/22	12:10 Mountain		Solid			X	X	X	X	X	1	
SW04 (890-1930-13)	2/9/22	12:15 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:		
Relinquished by: Clue Corp 2-10-22	Date/Time:	Company	Received by:	Date/Time: 2/11/22 12:05	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: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

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Received by OCD: 3/21/2022 1:35:04 PM
2/21/2022
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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1930-1
SDG Number: 31403360.007

Login Number: 1930
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: 890-1930-1
SDG Number: 31403360.007

Login Number: 1930
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 02/11/22 12:08 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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1932-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12

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

Attn: Joseph Hernandez

Authorized for release by:
2/17/2022 8:32:21 AM

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

LINKS

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

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

Client: WSP USA Inc.
Project/Site: RDX 28-12

Laboratory Job ID: 890-1932-1
SDG: 31403360.007

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1932-1
Project/Site: RDX 28-12 SDG: 31403360.007

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
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: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Job ID: 890-1932-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1932-1

Receipt
The samples were received on 2/10/2022 3:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SW06 (890-1932-5). 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.

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: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Client Sample ID: FS61

Lab Sample ID: 890-1932-1
Matrix: Solid
Date Collected: 02/09/22 13:10
Date Received: 02/10/22 15:52
Sample Depth: 2 - 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		02/14/22 12:30	02/14/22 16:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/14/22 12:30	02/14/22 16:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/14/22 12:30	02/14/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*02/14/22 12:30*	*02/14/22 16:14*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/14/22 12:30*	*02/14/22 16:14*	*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			02/14/22 10:07	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			02/15/22 12:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 13:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 13:20	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*02/14/22 08:41*	*02/14/22 13:20*	*1*
o-Terphenyl	*76*		*70 - 130*	*02/14/22 08:41*	*02/14/22 13:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**163**		4.97		mg/Kg			02/16/22 12:25	1

Client Sample ID: FS62

Lab Sample ID: 890-1932-2
Matrix: Solid
Date Collected: 02/09/22 13:15
Date Received: 02/10/22 15:52
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		02/14/22 12:30	02/14/22 16:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/14/22 12:30	02/14/22 16:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/14/22 12:30	02/14/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/14/22 12:30*	*02/14/22 16:35*	*1*

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Client Sample ID: FS62

Lab Sample ID: 890-1932-2
Matrix: Solid
Date Collected: 02/09/22 13:15
Date Received: 02/10/22 15:52
Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/14/22 12:30*	*02/14/22 16:35*	*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			02/14/22 10:07	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			02/15/22 12:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/14/22 08:41	02/14/22 13:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/14/22 08:41	02/14/22 13:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/14/22 08:41	02/14/22 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*82*		*70 - 130*	*02/14/22 08:41*	*02/14/22 13:41*	*1*
o-Terphenyl	*83*		*70 - 130*	*02/14/22 08:41*	*02/14/22 13:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.2**		4.98		mg/Kg			02/16/22 12:31	1

Client Sample ID: FS63

Lab Sample ID: 890-1932-3
Matrix: Solid
Date Collected: 02/09/22 13:20
Date Received: 02/10/22 15:52
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		02/14/22 12:30	02/14/22 16:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/14/22 12:30	02/14/22 16:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/14/22 12:30	02/14/22 16:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/14/22 12:30	02/14/22 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*02/14/22 12:30*	*02/14/22 16:55*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/14/22 12:30*	*02/14/22 16:55*	*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			02/14/22 10:07	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			02/15/22 12:50	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Client Sample ID: FS63

Lab Sample ID: 890-1932-3
Matrix: Solid
Date Collected: 02/09/22 13:20
Date Received: 02/10/22 15:52
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		02/14/22 08:41	02/14/22 14:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/14/22 08:41	02/14/22 14:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/14/22 08:41	02/14/22 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*02/14/22 08:41*	*02/14/22 14:02*	*1*
o-Terphenyl	*75*		*70 - 130*	*02/14/22 08:41*	*02/14/22 14:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**128**		4.97		mg/Kg			02/16/22 12:37	1

Client Sample ID: SW05

Lab Sample ID: 890-1932-4
Matrix: Solid
Date Collected: 02/09/22 13:35
Date Received: 02/10/22 15:52
Sample Depth: 0 - 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		02/14/22 12:30	02/14/22 17:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/14/22 12:30	02/14/22 17:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/14/22 12:30	02/14/22 17:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/14/22 12:30	02/14/22 17:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/14/22 12:30	02/14/22 17:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/14/22 12:30	02/14/22 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*02/14/22 12:30*	*02/14/22 17:15*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/14/22 12:30*	*02/14/22 17:15*	*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			02/14/22 10:07	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			02/15/22 12:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 14:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 14:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*02/14/22 08:41*	*02/14/22 14:23*	*1*
o-Terphenyl	*78*		*70 - 130*	*02/14/22 08:41*	*02/14/22 14:23*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Client Sample ID: SW05

Lab Sample ID: 890-1932-4
Matrix: Solid
Date Collected: 02/09/22 13:35
Date Received: 02/10/22 15:52
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.0		5.00		mg/Kg			02/16/22 12:44	1

Client Sample ID: SW06

Lab Sample ID: 890-1932-5
Matrix: Solid
Date Collected: 02/09/22 13:50
Date Received: 02/10/22 15:52
Sample Depth: 0 - 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		02/14/22 12:30	02/14/22 17:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/14/22 12:30	02/14/22 17:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/14/22 12:30	02/14/22 17:36	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/14/22 12:30	02/14/22 17:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/14/22 12:30	02/14/22 17:36	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/14/22 12:30	02/14/22 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*02/14/22 12:30*	*02/14/22 17:36*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*02/14/22 12:30*	*02/14/22 17:36*	*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			02/14/22 10:07	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			02/15/22 12:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 14:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 14:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/14/22 08:41*	*02/14/22 14:44*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/14/22 08:41*	*02/14/22 14:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.8		4.95		mg/Kg			02/16/22 12:50	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-1932-1	FS61	114	86										
890-1932-2	FS62	112	98										
890-1932-3	FS63	111	92										
890-1932-4	SW05	111	100										
890-1932-5	SW06	133 S1+	120										
890-1933-A-1-I MS	Matrix Spike	95	103										
890-1933-A-1-J MSD	Matrix Spike Duplicate	97	113										
LCS 880-19233/1-A	Lab Control Sample	94	105										
LCSD 880-19233/2-A	Lab Control Sample Dup	98	103										
MB 880-19233/5-A	Method Blank	105	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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-1932-1	FS61	76	76										
890-1932-2	FS62	82	83										
890-1932-3	FS63	74	75										
890-1932-4	SW05	79	78										
890-1932-5	SW06	100	100										
890-1933-A-1-G MS	Matrix Spike	76	74										
890-1933-A-1-H MSD	Matrix Spike Duplicate	70	74										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO2	OTPH2										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
LCS 880-19288/2-A	Lab Control Sample	107	103										
LCSD 880-19288/3-A	Lab Control Sample Dup	106	113										
MB 880-19288/1-A	Method Blank	87	90										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19233/5-A
Matrix: Solid
Analysis Batch: 19287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19233

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/14/22 07:30	02/14/22 10:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/14/22 07:30	02/14/22 10:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/14/22 07:30	02/14/22 10:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/14/22 07:30	02/14/22 10:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/14/22 07:30	02/14/22 10:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/14/22 07:30	02/14/22 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/14/22 07:30*	*02/14/22 10:45*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*02/14/22 07:30*	*02/14/22 10:45*	*1*

Lab Sample ID: LCS 880-19233/1-A
Matrix: Solid
Analysis Batch: 19287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19233

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08139		mg/Kg		81	70 - 130		
Toluene			0.100	0.08280		mg/Kg		83	70 - 130		
Ethylbenzene			0.100	0.08810		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1790		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09153		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-19233/2-A
Matrix: Solid
Analysis Batch: 19287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19233

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08548		mg/Kg		85	70 - 130	5	35
Toluene			0.100	0.08704		mg/Kg		87	70 - 130	5	35
Ethylbenzene			0.100	0.09599		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1918		mg/Kg		96	70 - 130	7	35
o-Xylene			0.100	0.09502		mg/Kg		95	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-1933-A-1-I MS
Matrix: Solid
Analysis Batch: 19287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19233

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.0998	0.08454		mg/Kg		84	70 - 130		
Toluene	<0.00199	U	0.0998	0.08428		mg/Kg		84	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

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

Lab Sample ID: 890-1933-A-1-I MS
Matrix: Solid
Analysis Batch: 19287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19233

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.0998	0.08638		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1786		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U	0.0998	0.09061		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-1933-A-1-J MSD
Matrix: Solid
Analysis Batch: 19287

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19233

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0992	0.08596		mg/Kg		86	70 - 130	2	35
Toluene	<0.00199	U	0.0992	0.08252		mg/Kg		82	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.0992	0.09040		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1832		mg/Kg		92	70 - 130	3	35
o-Xylene	<0.00199	U	0.0992	0.09305		mg/Kg		93	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

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

Lab Sample ID: MB 880-19288/1-A
Matrix: Solid
Analysis Batch: 19305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19288

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		02/14/22 08:41	02/14/22 10:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 10:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/14/22 08:41	02/14/22 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*02/14/22 08:41*	*02/14/22 10:54*	*1*
o-Terphenyl	*90*		*70 - 130*	*02/14/22 08:41*	*02/14/22 10:54*	*1*

Lab Sample ID: LCS 880-19288/2-A
Matrix: Solid
Analysis Batch: 19305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	968.8		mg/Kg		97	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

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

Lab Sample ID: LCS 880-19288/2-A
Matrix: Solid
Analysis Batch: 19305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19288

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-19288/3-A
Matrix: Solid
Analysis Batch: 19305

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19288

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1004		mg/Kg		100	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	986.1		mg/Kg		99	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-1933-A-1-G MS
Matrix: Solid
Analysis Batch: 19305

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19288

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	866.3		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	954.7		mg/Kg		95	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	74		70 - 130

Lab Sample ID: 890-1933-A-1-H MSD
Matrix: Solid
Analysis Batch: 19305

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19288

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	833.1		mg/Kg		82	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	961.6		mg/Kg		96	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	70		70 - 130
o-Terphenyl	74		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19525/1-A
Matrix: Solid
Analysis Batch: 19573

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			02/16/22 11:05	1

Lab Sample ID: LCS 880-19525/2-A
Matrix: Solid
Analysis Batch: 19573

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.5		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-19525/3-A
Matrix: Solid
Analysis Batch: 19573

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	253.3		mg/Kg		101	90 - 110	3	20

Lab Sample ID: 890-1932-5 MS
Matrix: Solid
Analysis Batch: 19573

Client Sample ID: SW06
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.8		248	319.3		mg/Kg		109	90 - 110

Lab Sample ID: 890-1932-5 MSD
Matrix: Solid
Analysis Batch: 19573

Client Sample ID: SW06
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	50.8		248	320.2		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

GC VOA

Prep Batch: 19233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Total/NA	Solid	5035	
890-1932-2	FS62	Total/NA	Solid	5035	
890-1932-3	FS63	Total/NA	Solid	5035	
890-1932-4	SW05	Total/NA	Solid	5035	
890-1932-5	SW06	Total/NA	Solid	5035	
MB 880-19233/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19233/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19233/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1933-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
890-1933-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Total/NA	Solid	8021B	19233
890-1932-2	FS62	Total/NA	Solid	8021B	19233
890-1932-3	FS63	Total/NA	Solid	8021B	19233
890-1932-4	SW05	Total/NA	Solid	8021B	19233
890-1932-5	SW06	Total/NA	Solid	8021B	19233
MB 880-19233/5-A	Method Blank	Total/NA	Solid	8021B	19233
LCS 880-19233/1-A	Lab Control Sample	Total/NA	Solid	8021B	19233
LCSD 880-19233/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19233
890-1933-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	19233
890-1933-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19233

Analysis Batch: 19370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Total/NA	Solid	Total BTEX	
890-1932-2	FS62	Total/NA	Solid	Total BTEX	
890-1932-3	FS63	Total/NA	Solid	Total BTEX	
890-1932-4	SW05	Total/NA	Solid	Total BTEX	
890-1932-5	SW06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 19288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Total/NA	Solid	8015NM Prep	
890-1932-2	FS62	Total/NA	Solid	8015NM Prep	
890-1932-3	FS63	Total/NA	Solid	8015NM Prep	
890-1932-4	SW05	Total/NA	Solid	8015NM Prep	
890-1932-5	SW06	Total/NA	Solid	8015NM Prep	
MB 880-19288/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19288/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19288/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1933-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1933-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Total/NA	Solid	8015B NM	19288
890-1932-2	FS62	Total/NA	Solid	8015B NM	19288

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

GC Semi VOA (Continued)

Analysis Batch: 19305 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-3	FS63	Total/NA	Solid	8015B NM	19288
890-1932-4	SW05	Total/NA	Solid	8015B NM	19288
890-1932-5	SW06	Total/NA	Solid	8015B NM	19288
MB 880-19288/1-A	Method Blank	Total/NA	Solid	8015B NM	19288
LCS 880-19288/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19288
LCSD 880-19288/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19288
890-1933-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	19288
890-1933-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19288

Analysis Batch: 19499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Total/NA	Solid	8015 NM	
890-1932-2	FS62	Total/NA	Solid	8015 NM	
890-1932-3	FS63	Total/NA	Solid	8015 NM	
890-1932-4	SW05	Total/NA	Solid	8015 NM	
890-1932-5	SW06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Soluble	Solid	DI Leach	
890-1932-2	FS62	Soluble	Solid	DI Leach	
890-1932-3	FS63	Soluble	Solid	DI Leach	
890-1932-4	SW05	Soluble	Solid	DI Leach	
890-1932-5	SW06	Soluble	Solid	DI Leach	
MB 880-19525/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19525/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19525/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1932-5 MS	SW06	Soluble	Solid	DI Leach	
890-1932-5 MSD	SW06	Soluble	Solid	DI Leach	

Analysis Batch: 19573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1932-1	FS61	Soluble	Solid	300.0	19525
890-1932-2	FS62	Soluble	Solid	300.0	19525
890-1932-3	FS63	Soluble	Solid	300.0	19525
890-1932-4	SW05	Soluble	Solid	300.0	19525
890-1932-5	SW06	Soluble	Solid	300.0	19525
MB 880-19525/1-A	Method Blank	Soluble	Solid	300.0	19525
LCS 880-19525/2-A	Lab Control Sample	Soluble	Solid	300.0	19525
LCSD 880-19525/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19525
890-1932-5 MS	SW06	Soluble	Solid	300.0	19525
890-1932-5 MSD	SW06	Soluble	Solid	300.0	19525

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Client Sample ID: FS61

Lab Sample ID: 890-1932-1
Matrix: Solid
Date Collected: 02/09/22 13:10
Date Received: 02/10/22 15:52

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	19233	02/14/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19287	02/14/22 16:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19370	02/14/22 10:07	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19499	02/15/22 12:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19288	02/14/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19305	02/14/22 13:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	19525	02/15/22 19:46	SC	XEN MID
Soluble	Analysis	300.0		1			19573	02/16/22 12:25	CH	XEN MID

Client Sample ID: FS62

Lab Sample ID: 890-1932-2
Matrix: Solid
Date Collected: 02/09/22 13:15
Date Received: 02/10/22 15:52

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	19233	02/14/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19287	02/14/22 16:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19370	02/14/22 10:07	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19499	02/15/22 12:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19288	02/14/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19305	02/14/22 13:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19525	02/15/22 19:46	SC	XEN MID
Soluble	Analysis	300.0		1			19573	02/16/22 12:31	CH	XEN MID

Client Sample ID: FS63

Lab Sample ID: 890-1932-3
Matrix: Solid
Date Collected: 02/09/22 13:20
Date Received: 02/10/22 15:52

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	19233	02/14/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19287	02/14/22 16:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19370	02/14/22 10:07	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19499	02/15/22 12:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19288	02/14/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19305	02/14/22 14:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	19525	02/15/22 19:46	SC	XEN MID
Soluble	Analysis	300.0		1			19573	02/16/22 12:37	CH	XEN MID

Client Sample ID: SW05

Lab Sample ID: 890-1932-4
Matrix: Solid
Date Collected: 02/09/22 13:35
Date Received: 02/10/22 15:52

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	19233	02/14/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19287	02/14/22 17:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19370	02/14/22 10:07	KL	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Client Sample ID: SW05

Lab Sample ID: 890-1932-4
Matrix: Solid
Date Collected: 02/09/22 13:35
Date Received: 02/10/22 15:52

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			19499	02/15/22 12:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19288	02/14/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19305	02/14/22 14:23	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19525	02/15/22 19:46	SC	XEN MID
Soluble	Analysis	300.0		1			19573	02/16/22 12:44	CH	XEN MID

Client Sample ID: SW06

Lab Sample ID: 890-1932-5
Matrix: Solid
Date Collected: 02/09/22 13:50
Date Received: 02/10/22 15:52

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	19233	02/14/22 12:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19287	02/14/22 17:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			19370	02/14/22 10:07	KL	XEN MID
Total/NA	Analysis	8015 NM		1			19499	02/15/22 12:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19288	02/14/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19305	02/14/22 14:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19525	02/15/22 19:46	SC	XEN MID
Soluble	Analysis	300.0		1			19573	02/16/22 12:50	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: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

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: 890-1932-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1932-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1932-1	FS61	Solid	02/09/22 13:10	02/10/22 15:52	2 - 4
890-1932-2	FS62	Solid	02/09/22 13:15	02/10/22 15:52	2
890-1932-3	FS63	Solid	02/09/22 13:20	02/10/22 15:52	2
890-1932-4	SW05	Solid	02/09/22 13:35	02/10/22 15:52	0 - 4
890-1932-5	SW06	Solid	02/09/22 13:50	02/10/22 15:52	0 - 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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-782-2329 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:	RDX 28-12	Turn Around	
Project Number:	3140336.007	☒ Routine ☐ Rush	
Project Location:	nAPP2124531124	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC# 1061120801		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	T-NM-07	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.7	
Total Containers:		Corrected Temperature:	5.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH CEPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
FS61	S	2/9/22	1310	2-4'	Comp	1				
FS62	S		1315	2'		1				
FS63	S		1320	2'		1				
SW05	S		1335	0-4'		1				
SW06	S	↓	1350	0-4'	↓	1				

890-1932 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

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 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 Anna Byers		2/10/22 3:52	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 3/21/2022 1:35:04 PM

Released to Imaging: 4/20/2022 3:21:28 PM

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-620 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-1932-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 2/16/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: RDX 28-12	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:										
FS61 (890-1932-1)	2/9/22	13 10 Mountain		Solid			X	X	X	X	X	1	
FS62 (890-1932-2)	2/9/22	13 15 Mountain		Solid			X	X	X	X	X	1	
FS63 (890-1932-3)	2/9/22	13 20 Mountain		Solid			X	X	X	X	X	1	
SW05 (890-1932-4)	2/9/22	13 35 Mountain		Solid			X	X	X	X	X	1	
SW06 (890-1932-5)	2/9/22	13 50 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: Cup Cup 2-10-2 11:22	Date/Time	Company	Received by:	Date/Time: 2/14/22 8:00	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

Page 234 of 416
Received by OCD: 3/21/2022 1:35:04 PM
2/17/2022
Page 22 of 24
Released to Imaging: 4/20/2022 3:21:28 PM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1932-1
SDG Number: 31403360.007

Login Number: 1932
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: 890-1932-1
SDG Number: 31403360.007

Login Number: 1932
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 02/14/22 08:16 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").	True	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1938-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12

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

Attn: Joseph Hernandez

Authorized for release by:
2/24/2022 8:07:25 PM

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

LINKS

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

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

Client: WSP USA Inc.
Project/Site: RDX 28-12

Laboratory Job ID: 890-1938-1
SDG: 31403360.007

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1938-1
Project/Site: RDX 28-12 SDG: 31403360.007

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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.

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: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Job ID: 890-1938-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1938-1

Receipt
The samples were received on 2/14/2022 2:52 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 3.2°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: FS66 (890-1938-3), FS67 (890-1938-4) and FS68 (890-1938-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19726 and analytical batch 880-19783 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20055 and analytical batch 880-20204 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19555 and analytical batch 880-19569 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-11287-A-38-E 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: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: FS64

Lab Sample ID: 890-1938-1
Matrix: Solid
Date Collected: 02/11/22 13:10
Date Received: 02/14/22 14:52
Sample Depth: 2 - 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		02/18/22 14:00	02/20/22 05:55	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/18/22 14:00	02/20/22 05:55	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/18/22 14:00	02/20/22 05:55	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/18/22 14:00	02/20/22 05:55	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/18/22 14:00	02/20/22 05:55	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/18/22 14:00	02/20/22 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*02/18/22 14:00*	*02/20/22 05:55*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*02/18/22 14:00*	*02/20/22 05:55*	*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			02/18/22 14:39	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			02/17/22 13:29	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		02/16/22 08:38	02/16/22 16:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 16:51	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/16/22 08:38*	*02/16/22 16:51*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/16/22 08:38*	*02/16/22 16:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.4**		4.95		mg/Kg			02/20/22 18:45	1

Client Sample ID: FS65

Lab Sample ID: 890-1938-2
Matrix: Solid
Date Collected: 02/11/22 13:15
Date Received: 02/14/22 14:52
Sample Depth: 2 - 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		02/18/22 14:00	02/20/22 06:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/18/22 14:00	02/20/22 06:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/18/22 14:00	02/20/22 06:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/18/22 14:00	02/20/22 06:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/18/22 14:00	02/20/22 06:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/18/22 14:00	02/20/22 06:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/18/22 14:00*	*02/20/22 06:16*	*1*

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: FS65

Lab Sample ID: 890-1938-2
Matrix: Solid
Date Collected: 02/11/22 13:15
Date Received: 02/14/22 14:52
Sample Depth: 2 - 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*02/18/22 14:00*	*02/20/22 06:16*	*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			02/18/22 14:39	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			02/17/22 13:29	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		02/16/22 08:38	02/16/22 17:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/16/22 08:38	02/16/22 17:33	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/16/22 08:38	02/16/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*02/16/22 08:38*	*02/16/22 17:33*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/16/22 08:38*	*02/16/22 17:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.89**		5.02		mg/Kg			02/20/22 18:51	1

Client Sample ID: FS66

Lab Sample ID: 890-1938-3
Matrix: Solid
Date Collected: 02/11/22 13:25
Date Received: 02/14/22 14:52
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		02/16/22 15:30	02/16/22 19:59	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/16/22 15:30	02/16/22 19:59	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/16/22 15:30	02/16/22 19:59	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/16/22 15:30	02/16/22 19:59	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/16/22 15:30	02/16/22 19:59	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/16/22 15:30	02/16/22 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*02/16/22 15:30*	*02/16/22 19:59*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/16/22 15:30*	*02/16/22 19:59*	*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			02/18/22 14:39	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			02/17/22 13:29	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: FS66

Lab Sample ID: 890-1938-3
Matrix: Solid
Date Collected: 02/11/22 13:25
Date Received: 02/14/22 14:52
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		02/16/22 08:38	02/16/22 17:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 17:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/16/22 08:38*	*02/16/22 17:53*	*1*
o-Terphenyl	*96*		*70 - 130*	*02/16/22 08:38*	*02/16/22 17:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.1**		4.98		mg/Kg			02/21/22 13:41	1

Client Sample ID: FS67

Lab Sample ID: 890-1938-4
Matrix: Solid
Date Collected: 02/11/22 13:35
Date Received: 02/14/22 14:52
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		02/16/22 15:30	02/16/22 20:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/16/22 15:30	02/16/22 20:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/16/22 15:30	02/16/22 20:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/16/22 15:30	02/16/22 20:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/16/22 15:30	02/16/22 20:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/16/22 15:30	02/16/22 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*150*	*S1+*	*70 - 130*	*02/16/22 15:30*	*02/16/22 20:19*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/16/22 15:30*	*02/16/22 20:19*	*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			02/18/22 14:39	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			02/17/22 13:29	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		02/16/22 08:38	02/16/22 18:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 18:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/16/22 08:38*	*02/16/22 18:14*	*1*
o-Terphenyl	*97*		*70 - 130*	*02/16/22 08:38*	*02/16/22 18:14*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: FS67

Lab Sample ID: 890-1938-4
Matrix: Solid
Date Collected: 02/11/22 13:35
Date Received: 02/14/22 14:52
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1440		49.9		mg/Kg			02/20/22 19:04	10

Client Sample ID: FS68

Lab Sample ID: 890-1938-5
Matrix: Solid
Date Collected: 02/11/22 13:40
Date Received: 02/14/22 14:52
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		02/16/22 15:30	02/16/22 20:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/16/22 15:30	02/16/22 20:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/16/22 15:30	02/16/22 20:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/16/22 15:30	02/16/22 20:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/16/22 15:30	02/16/22 20:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/16/22 15:30	02/16/22 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*161*	*S1+*	*70 - 130*	*02/16/22 15:30*	*02/16/22 20:40*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/16/22 15:30*	*02/16/22 20:40*	*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			02/18/22 14:39	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			02/17/22 13:29	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		02/16/22 08:38	02/16/22 18:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 18:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/16/22 08:38*	*02/16/22 18:35*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/16/22 08:38*	*02/16/22 18:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1850		25.0		mg/Kg			02/20/22 19:10	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: SW08

Lab Sample ID: 890-1938-6
Matrix: Solid
Date Collected: 02/11/22 13:00
Date Received: 02/14/22 14:52
Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199		mg/Kg		02/22/22 14:29	02/24/22 15:50	1
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		02/22/22 14:29	02/24/22 15:50	1
Ethylbenzene	<0.00199	U F2 F1	0.00199		mg/Kg		02/22/22 14:29	02/24/22 15:50	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398		mg/Kg		02/22/22 14:29	02/24/22 15:50	1
o-Xylene	<0.00199	U F2 F1	0.00199		mg/Kg		02/22/22 14:29	02/24/22 15:50	1
Xylenes, Total	<0.00398	U F2 F1	0.00398		mg/Kg		02/22/22 14:29	02/24/22 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/22/22 14:29*	*02/24/22 15:50*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/22/22 14:29*	*02/24/22 15:50*	*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			02/18/22 14:39	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			02/17/22 13:29	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		02/16/22 08:38	02/16/22 18:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/16/22 08:38	02/16/22 18:55	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/16/22 08:38	02/16/22 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/16/22 08:38*	*02/16/22 18:55*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/16/22 08:38*	*02/16/22 18:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**89.9**		4.99		mg/Kg			02/20/22 19:17	1

Client Sample ID: SW07

Lab Sample ID: 890-1938-7
Matrix: Solid
Date Collected: 02/11/22 12:50
Date Received: 02/14/22 14:52
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		02/22/22 14:29	02/24/22 16:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/22/22 14:29	02/24/22 16:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/22/22 14:29	02/24/22 16:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/22/22 14:29	02/24/22 16:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/22/22 14:29	02/24/22 16:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/22/22 14:29	02/24/22 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/22/22 14:29*	*02/24/22 16:11*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: SW07

Date Collected: 02/11/22 12:50
Date Received: 02/14/22 14:52
Sample Depth: 0 - 5

Lab Sample ID: 890-1938-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/22/22 14:29*	*02/24/22 16:11*	*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			02/18/22 14:39	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			02/17/22 13:29	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		02/16/22 08:38	02/16/22 19:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 19:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*02/16/22 08:38*	*02/16/22 19:16*	*1*
o-Terphenyl	*92*		*70 - 130*	*02/16/22 08:38*	*02/16/22 19:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.9**		5.04		mg/Kg			02/20/22 19:36	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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)										
820-3407-A-1-G MS	Matrix Spike	130	99										
820-3407-A-1-H MSD	Matrix Spike Duplicate	100	99										
890-1937-A-1-E MS	Matrix Spike	139 S1+	85										
890-1937-A-1-F MSD	Matrix Spike Duplicate	129	105										
890-1938-1	FS64	131 S1+	75										
890-1938-2	FS65	120	80										
890-1938-3	FS66	140 S1+	106										
890-1938-4	FS67	150 S1+	93										
890-1938-5	FS68	161 S1+	92										
890-1938-6	SW08	107	98										
890-1938-6 MS	SW08	110	84										
890-1938-6 MSD	SW08	146 S1+	105										
890-1938-7	SW07	119	93										
LCS 880-19550/1-A	Lab Control Sample	128	107										
LCS 880-19726/1-A	Lab Control Sample	106	94										
LCS 880-20055/1-A	Lab Control Sample	97	102										
LCSD 880-19550/2-A	Lab Control Sample Dup	122	96										
LCSD 880-19726/2-A	Lab Control Sample Dup	113	94										
LCSD 880-20055/2-A	Lab Control Sample Dup	99	96										
MB 880-19550/5-A	Method Blank	120	92										
MB 880-19710/5-A	Method Blank	136 S1+	106										
MB 880-19726/5-A	Method Blank	120	99										
MB 880-20055/5-A	Method Blank	112	97										

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)										
880-11287-A-38-E MS	Matrix Spike	71	66 S1-										
880-11287-A-38-F MSD	Matrix Spike Duplicate	84	77										
890-1938-1	FS64	85	89										
890-1938-2	FS65	86	91										
890-1938-3	FS66	91	96										
890-1938-4	FS67	93	97										
890-1938-5	FS68	88	92										
890-1938-6	SW08	91	91										
890-1938-7	SW07	89	92										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1938-1
Project/Site: RDX 28-12 SDG: 31403360.007

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 880-19555/2-A	Lab Control Sample	108	123								
LCSD 880-19555/3-A	Lab Control Sample Dup	102	118								
MB 880-19555/1-A	Method Blank	82	91								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19550/5-A
Matrix: Solid
Analysis Batch: 19551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19550

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/16/22 07:11	02/16/22 10:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/16/22 07:11	02/16/22 10:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/16/22 07:11	02/16/22 10:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/16/22 07:11	02/16/22 10:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/16/22 07:11	02/16/22 10:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/16/22 07:11	02/16/22 10:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/16/22 07:11*	*02/16/22 10:27*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/16/22 07:11*	*02/16/22 10:27*	*1*

Lab Sample ID: LCS 880-19550/1-A
Matrix: Solid
Analysis Batch: 19551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19550

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09140		mg/Kg		91	70 - 130
Toluene	0.100	0.1084		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1057		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2056		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-19550/2-A
Matrix: Solid
Analysis Batch: 19551

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19550

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08812		mg/Kg		88	70 - 130	4	35
Toluene	0.100	0.09782		mg/Kg		98	70 - 130	10	35
Ethylbenzene	0.100	0.09610		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1958		mg/Kg		98	70 - 130	5	35
o-Xylene	0.100	0.09318		mg/Kg		93	70 - 130	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 820-3407-A-1-G MS
Matrix: Solid
Analysis Batch: 19551

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19550

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.0996	0.09093		mg/Kg		91	70 - 130
Toluene	<0.00202	U	0.0996	0.09748		mg/Kg		98	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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

Lab Sample ID: 820-3407-A-1-G MS
Matrix: Solid
Analysis Batch: 19551

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19550

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00202	U	0.0996	0.1000		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.199	0.1942		mg/Kg		98	70 - 130
o-Xylene	<0.00202	U	0.0996	0.09250		mg/Kg		93	70 - 130

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

Lab Sample ID: 820-3407-A-1-H MSD
Matrix: Solid
Analysis Batch: 19551

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19550

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08564		mg/Kg		86	70 - 130	6	35
Toluene	<0.00202	U	0.100	0.09258		mg/Kg		93	70 - 130	5	35
Ethylbenzene	<0.00202	U	0.100	0.1031		mg/Kg		103	70 - 130	3	35
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1916		mg/Kg		96	70 - 130	1	35
o-Xylene	<0.00202	U	0.100	0.09194		mg/Kg		92	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 880-19710/5-A
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19710

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/18/22 08:30	02/19/22 11:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/18/22 08:30	02/19/22 11:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/18/22 08:30	02/19/22 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/18/22 08:30	02/19/22 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/18/22 08:30	02/19/22 11:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/18/22 08:30	02/19/22 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*02/18/22 08:30*	*02/19/22 11:55*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/18/22 08:30*	*02/19/22 11:55*	*1*

Lab Sample ID: MB 880-19726/5-A
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19726

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/18/22 14:00	02/19/22 23:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/18/22 14:00	02/19/22 23:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/18/22 14:00	02/19/22 23:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/18/22 14:00	02/19/22 23:32	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-19726/5-A
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19726

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/18/22 14:00	02/19/22 23:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/18/22 14:00	02/19/22 23:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/18/22 14:00*	*02/19/22 23:32*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/18/22 14:00*	*02/19/22 23:32*	*1*

Lab Sample ID: LCS 880-19726/1-A
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19726

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08006		mg/Kg		80	70 - 130		
Toluene			0.100	0.09114		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.09514		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1787		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.08747		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-19726/2-A
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19726

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08249		mg/Kg		82	70 - 130	3	35
Toluene			0.100	0.08890		mg/Kg		89	70 - 130	2	35
Ethylbenzene			0.100	0.08914		mg/Kg		89	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1773		mg/Kg		89	70 - 130	1	35
o-Xylene			0.100	0.09142		mg/Kg		91	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 890-1937-A-1-E MS
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19726

Analyte			Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			<0.00202	U F1 F2	0.100	0.05182	F1	mg/Kg		52	70 - 130		
Toluene			<0.00202	U F1	0.100	0.05670	F1	mg/Kg		56	70 - 130		
Ethylbenzene			<0.00202	U	0.100	0.09014		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			<0.00404	U F1	0.201	0.1275	F1	mg/Kg		63	70 - 130		
o-Xylene			<0.00202	U F1	0.100	0.06332	F1	mg/Kg		63	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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

Lab Sample ID: 890-1937-A-1-E MS
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19726

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 890-1937-A-1-F MSD
Matrix: Solid
Analysis Batch: 19783

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19726

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0998	0.07961	F2	mg/Kg		80	70 - 130	42	35
Toluene	<0.00202	U F1	0.0998	0.07714		mg/Kg		77	70 - 130	31	35
Ethylbenzene	<0.00202	U	0.0998	0.09264		mg/Kg		93	70 - 130	3	35
m-Xylene & p-Xylene	<0.00404	U F1	0.200	0.1586		mg/Kg		79	70 - 130	22	35
o-Xylene	<0.00202	U F1	0.0998	0.08155		mg/Kg		82	70 - 130	25	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: MB 880-20055/5-A
Matrix: Solid
Analysis Batch: 20204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20055

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/22/22 14:29	02/24/22 15:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/22/22 14:29	02/24/22 15:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/22/22 14:29	02/24/22 15:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/22/22 14:29	02/24/22 15:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/22/22 14:29	02/24/22 15:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/22/22 14:29	02/24/22 15:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	02/22/22 14:29	02/24/22 15:28	1
1,4-Difluorobenzene (Surr)	97		70 - 130	02/22/22 14:29	02/24/22 15:28	1

Lab Sample ID: LCS 880-20055/1-A
Matrix: Solid
Analysis Batch: 20204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20055

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1071		mg/Kg		107	70 - 130		
Toluene			0.100	0.09671		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1006		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2109		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1029		mg/Kg		103	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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

Lab Sample ID: LCS 880-20055/1-A
Matrix: Solid
Analysis Batch: 20204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20055

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

Lab Sample ID: LCSD 880-20055/2-A
Matrix: Solid
Analysis Batch: 20204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20055

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1068		mg/Kg		107	70 - 130	0	35
Toluene			0.100	0.09998		mg/Kg		100	70 - 130	3	35
Ethylbenzene			0.100	0.1022		mg/Kg		102	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2139		mg/Kg		107	70 - 130	1	35
o-Xylene			0.100	0.1053		mg/Kg		105	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-1938-6 MS
Matrix: Solid
Analysis Batch: 20204

Client Sample ID: SW08
Prep Type: Total/NA
Prep Batch: 20055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U F2 F1	0.101	0.06098	F1	mg/Kg		60	70 - 130		
Toluene	<0.00199	U F2 F1	0.101	0.06528	F1	mg/Kg		65	70 - 130		
Ethylbenzene	<0.00199	U F2 F1	0.101	0.06353	F1	mg/Kg		63	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.202	0.1305	F1	mg/Kg		65	70 - 130		
o-Xylene	<0.00199	U F2 F1	0.101	0.06620	F1	mg/Kg		66	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: 890-1938-6 MSD
Matrix: Solid
Analysis Batch: 20204

Client Sample ID: SW08
Prep Type: Total/NA
Prep Batch: 20055

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0998	0.007909	F2 F1	mg/Kg		8	70 - 130	154	35
Toluene	<0.00199	U F2 F1	0.0998	<0.00200	U F2 F1	mg/Kg		2	70 - 130	189	35
Ethylbenzene	<0.00199	U F2 F1	0.0998	0.006139	F2 F1	mg/Kg		6	70 - 130	165	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.009017	F2 F1	mg/Kg		5	70 - 130	174	35
o-Xylene	<0.00199	U F2 F1	0.0998	0.003313	F2 F1	mg/Kg		3	70 - 130	181	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-19555/1-A
Matrix: Solid
Analysis Batch: 19569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19555

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		02/16/22 08:38	02/16/22 11:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 11:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/22 08:38	02/16/22 11:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*02/16/22 08:38*	*02/16/22 11:41*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/16/22 08:38*	*02/16/22 11:41*	*1*

Lab Sample ID: LCS 880-19555/2-A
Matrix: Solid
Analysis Batch: 19569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19555

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1005		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1044		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*123*		*70 - 130*

Lab Sample ID: LCSD 880-19555/3-A
Matrix: Solid
Analysis Batch: 19569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19555

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	975.8		mg/Kg		98	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1013		mg/Kg		101	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: 880-11287-A-38-E MS
Matrix: Solid
Analysis Batch: 19569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19555

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 F2	1000	933.5		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	1195		mg/Kg		120	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

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

Lab Sample ID: 880-11287-A-38-E MS
Matrix: Solid
Analysis Batch: 19569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19555

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	66	S1-	70 - 130

Lab Sample ID: 880-11287-A-38-F MSD
Matrix: Solid
Analysis Batch: 19569

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19555

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 F2	998	1256	F2	mg/Kg		123	70 - 130	29	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	1394	F1	mg/Kg		140	70 - 130	15	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	77		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19776/1-A
Matrix: Solid
Analysis Batch: 19882

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			02/20/22 17:28	1

Lab Sample ID: LCS 880-19776/2-A
Matrix: Solid
Analysis Batch: 19882

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	256.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-19776/3-A
Matrix: Solid
Analysis Batch: 19882

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	259.0		mg/Kg		104	90 - 110	1	20

Lab Sample ID: 890-1938-6 MS
Matrix: Solid
Analysis Batch: 19882

Client Sample ID: SW08
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	89.9		250	327.9		mg/Kg		95	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1938-6 MSD
Matrix: Solid
Analysis Batch: 19882

Client Sample ID: SW08
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	89.9		250	340.5		mg/Kg		100	90 - 110	4	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

GC VOA

Prep Batch: 19550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-3	FS66	Total/NA	Solid	5035	
890-1938-4	FS67	Total/NA	Solid	5035	
890-1938-5	FS68	Total/NA	Solid	5035	
MB 880-19550/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19550/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19550/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-3407-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
820-3407-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-3	FS66	Total/NA	Solid	8021B	19550
890-1938-4	FS67	Total/NA	Solid	8021B	19550
890-1938-5	FS68	Total/NA	Solid	8021B	19550
MB 880-19550/5-A	Method Blank	Total/NA	Solid	8021B	19550
LCS 880-19550/1-A	Lab Control Sample	Total/NA	Solid	8021B	19550
LCSD 880-19550/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19550
820-3407-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	19550
820-3407-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19550

Prep Batch: 19710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19710/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 19726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Total/NA	Solid	5035	
890-1938-2	FS65	Total/NA	Solid	5035	
MB 880-19726/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19726/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19726/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1937-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-1937-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Total/NA	Solid	8021B	19726
890-1938-2	FS65	Total/NA	Solid	8021B	19726
MB 880-19710/5-A	Method Blank	Total/NA	Solid	8021B	19710
MB 880-19726/5-A	Method Blank	Total/NA	Solid	8021B	19726
LCS 880-19726/1-A	Lab Control Sample	Total/NA	Solid	8021B	19726
LCSD 880-19726/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19726
890-1937-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	19726
890-1937-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19726

Analysis Batch: 19828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Total/NA	Solid	Total BTEX	
890-1938-2	FS65	Total/NA	Solid	Total BTEX	
890-1938-3	FS66	Total/NA	Solid	Total BTEX	
890-1938-4	FS67	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

GC VOA (Continued)

Analysis Batch: 19828 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-5	FS68	Total/NA	Solid	Total BTEX	
890-1938-6	SW08	Total/NA	Solid	Total BTEX	
890-1938-7	SW07	Total/NA	Solid	Total BTEX	

Prep Batch: 20055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-6	SW08	Total/NA	Solid	5035	
890-1938-7	SW07	Total/NA	Solid	5035	
MB 880-20055/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20055/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20055/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1938-6 MS	SW08	Total/NA	Solid	5035	
890-1938-6 MSD	SW08	Total/NA	Solid	5035	

Analysis Batch: 20204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-6	SW08	Total/NA	Solid	8021B	20055
890-1938-7	SW07	Total/NA	Solid	8021B	20055
MB 880-20055/5-A	Method Blank	Total/NA	Solid	8021B	20055
LCS 880-20055/1-A	Lab Control Sample	Total/NA	Solid	8021B	20055
LCSD 880-20055/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20055
890-1938-6 MS	SW08	Total/NA	Solid	8021B	20055
890-1938-6 MSD	SW08	Total/NA	Solid	8021B	20055

GC Semi VOA

Prep Batch: 19555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Total/NA	Solid	8015NM Prep	
890-1938-2	FS65	Total/NA	Solid	8015NM Prep	
890-1938-3	FS66	Total/NA	Solid	8015NM Prep	
890-1938-4	FS67	Total/NA	Solid	8015NM Prep	
890-1938-5	FS68	Total/NA	Solid	8015NM Prep	
890-1938-6	SW08	Total/NA	Solid	8015NM Prep	
890-1938-7	SW07	Total/NA	Solid	8015NM Prep	
MB 880-19555/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19555/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19555/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11287-A-38-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11287-A-38-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Total/NA	Solid	8015B NM	19555
890-1938-2	FS65	Total/NA	Solid	8015B NM	19555
890-1938-3	FS66	Total/NA	Solid	8015B NM	19555
890-1938-4	FS67	Total/NA	Solid	8015B NM	19555
890-1938-5	FS68	Total/NA	Solid	8015B NM	19555
890-1938-6	SW08	Total/NA	Solid	8015B NM	19555
890-1938-7	SW07	Total/NA	Solid	8015B NM	19555
MB 880-19555/1-A	Method Blank	Total/NA	Solid	8015B NM	19555

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

GC Semi VOA (Continued)

Analysis Batch: 19569 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-19555/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19555
LCSD 880-19555/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19555
880-11287-A-38-E MS	Matrix Spike	Total/NA	Solid	8015B NM	19555
880-11287-A-38-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19555

Analysis Batch: 19699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Total/NA	Solid	8015 NM	
890-1938-2	FS65	Total/NA	Solid	8015 NM	
890-1938-3	FS66	Total/NA	Solid	8015 NM	
890-1938-4	FS67	Total/NA	Solid	8015 NM	
890-1938-5	FS68	Total/NA	Solid	8015 NM	
890-1938-6	SW08	Total/NA	Solid	8015 NM	
890-1938-7	SW07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Soluble	Solid	DI Leach	
890-1938-2	FS65	Soluble	Solid	DI Leach	
890-1938-3	FS66	Soluble	Solid	DI Leach	
890-1938-4	FS67	Soluble	Solid	DI Leach	
890-1938-5	FS68	Soluble	Solid	DI Leach	
890-1938-6	SW08	Soluble	Solid	DI Leach	
890-1938-7	SW07	Soluble	Solid	DI Leach	
MB 880-19776/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19776/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19776/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1938-6 MS	SW08	Soluble	Solid	DI Leach	
890-1938-6 MSD	SW08	Soluble	Solid	DI Leach	

Analysis Batch: 19882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1938-1	FS64	Soluble	Solid	300.0	19776
890-1938-2	FS65	Soluble	Solid	300.0	19776
890-1938-3	FS66	Soluble	Solid	300.0	19776
890-1938-4	FS67	Soluble	Solid	300.0	19776
890-1938-5	FS68	Soluble	Solid	300.0	19776
890-1938-6	SW08	Soluble	Solid	300.0	19776
890-1938-7	SW07	Soluble	Solid	300.0	19776
MB 880-19776/1-A	Method Blank	Soluble	Solid	300.0	19776
LCS 880-19776/2-A	Lab Control Sample	Soluble	Solid	300.0	19776
LCSD 880-19776/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19776
890-1938-6 MS	SW08	Soluble	Solid	300.0	19776
890-1938-6 MSD	SW08	Soluble	Solid	300.0	19776

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: FS64

Lab Sample ID: 890-1938-1
Matrix: Solid
Date Collected: 02/11/22 13:10
Date Received: 02/14/22 14:52

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	19726	02/18/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19783	02/20/22 05:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 16:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		1			19882	02/20/22 18:45	CH	XEN MID

Client Sample ID: FS65

Lab Sample ID: 890-1938-2
Matrix: Solid
Date Collected: 02/11/22 13:15
Date Received: 02/14/22 14:52

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	19726	02/18/22 14:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19783	02/20/22 06:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 17:33	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		1			19882	02/20/22 18:51	CH	XEN MID

Client Sample ID: FS66

Lab Sample ID: 890-1938-3
Matrix: Solid
Date Collected: 02/11/22 13:25
Date Received: 02/14/22 14:52

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	19550	02/16/22 15:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19551	02/16/22 19:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 17:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		1			19882	02/21/22 13:41	CH	XEN MID

Client Sample ID: FS67

Lab Sample ID: 890-1938-4
Matrix: Solid
Date Collected: 02/11/22 13:35
Date Received: 02/14/22 14:52

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	19550	02/16/22 15:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19551	02/16/22 20:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: FS67
Date Collected: 02/11/22 13:35
Date Received: 02/14/22 14:52

Lab Sample ID: 890-1938-4
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			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 18:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		10			19882	02/20/22 19:04	CH	XEN MID

Client Sample ID: FS68
Date Collected: 02/11/22 13:40
Date Received: 02/14/22 14:52

Lab Sample ID: 890-1938-5
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			4.99 g	5 mL	19550	02/16/22 15:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19551	02/16/22 20:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 18:35	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		5			19882	02/20/22 19:10	CH	XEN MID

Client Sample ID: SW08
Date Collected: 02/11/22 13:00
Date Received: 02/14/22 14:52

Lab Sample ID: 890-1938-6
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			5.03 g	5 mL	20055	02/22/22 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20204	02/24/22 15:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 18:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		1			19882	02/20/22 19:17	CH	XEN MID

Client Sample ID: SW07
Date Collected: 02/11/22 12:50
Date Received: 02/14/22 14:52

Lab Sample ID: 890-1938-7
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	20055	02/22/22 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20204	02/24/22 16:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19828	02/18/22 14:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19699	02/17/22 13:29	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19555	02/16/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19569	02/16/22 19:16	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Client Sample ID: SW07

Date Collected: 02/11/22 12:50
Date Received: 02/14/22 14:52

Lab Sample ID: 890-1938-7

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			4.96 g	50 mL	19776	02/17/22 21:54	CH	XEN MID
Soluble	Analysis	300.0		1			19882	02/20/22 19:36	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1938-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: 890-1938-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1938-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1938-1	FS64	Solid	02/11/22 13:10	02/14/22 14:52	2 - 5
890-1938-2	FS65	Solid	02/11/22 13:15	02/14/22 14:52	2 - 4
890-1938-3	FS66	Solid	02/11/22 13:25	02/14/22 14:52	4
890-1938-4	FS67	Solid	02/11/22 13:35	02/14/22 14:52	4
890-1938-5	FS68	Solid	02/11/22 13:40	02/14/22 14:52	4
890-1938-6	SW08	Solid	02/11/22 13:00	02/14/22 14:52	0 - 4
890-1938-7	SW07	Solid	02/11/22 12:50	02/14/22 14:52	0 - 5

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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 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N 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:	RDX 28-12	Turn Around	
Project Number:	314033007.007	☒ Routine ☐ Rush	
Project Location:	nAPP2124531124	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC#: 180611208001		

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	T-NM-007		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2		
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.4		
Total Containers:		Corrected Temperature:	3.2		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont
FS64	S	2/11/22	1310	2-5'	Comp	1
FS65			1315	2-4'		1
FS66			1325	4'		1
FS67			1335	4'		1
FS68			1340	4'		1
SW08			1300	0-4'		1
SW07			1250	0-5'		1

ANALYSIS REQUEST

Parameters: TPH (EPA 8015 mod) | BTEX (EPA 8021B) | Chloride (EPA 300.0)

890-1938 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

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 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	Anna Byers		2/14/22 7:52			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 3/21/2022 1:35:04 PM

Released to Imaging: 4/20/2022 3:21:28 PM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1938-1
SDG Number: 31403360.007

Login Number: 1938
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: 890-1938-1
SDG Number: 31403360.007

Login Number: 1938
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 02/16/22 12:10 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").	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-1967-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12

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

Attn: Joseph Hernandez

Authorized for release by:
2/28/2022 3:17:26 PM

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

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

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

Client: WSP USA Inc.
Project/Site: RDX 28-12

Laboratory Job ID: 890-1967-1
SDG: 31403360.007

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1967-1
Project/Site: RDX 28-12 SDG: 31403360.007

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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.

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: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Job ID: 890-1967-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1967-1

Receipt
The samples were received on 2/17/2022 1:12 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 3.0°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19824 and analytical batch 880-19889 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS69 (890-1967-1), FS70 (890-1967-2) and SW09 (890-1967-7). 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: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS69

Lab Sample ID: 890-1967-1
Matrix: Solid
Date Collected: 02/16/22 09:40
Date Received: 02/17/22 13:12
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		02/24/22 08:30	02/26/22 08:59	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		02/24/22 08:30	02/26/22 08:59	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		02/24/22 08:30	02/26/22 08:59	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		02/24/22 08:30	02/26/22 08:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 08:59	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		02/24/22 08:30	02/26/22 08:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/24/22 08:30*	*02/26/22 08:59*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*02/24/22 08:30*	*02/26/22 08:59*	*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			02/28/22 10:23	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			02/22/22 16:01	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		02/18/22 14:27	02/21/22 14:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/18/22 14:27	02/21/22 14:26	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/18/22 14:27	02/21/22 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*02/18/22 14:27*	*02/21/22 14:26*	*1*
o-Terphenyl	*80*		*70 - 130*	*02/18/22 14:27*	*02/21/22 14:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7280**		50.1		mg/Kg			02/21/22 03:07	10

Client Sample ID: FS70

Lab Sample ID: 890-1967-2
Matrix: Solid
Date Collected: 02/16/22 11:55
Date Received: 02/17/22 13:12
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		02/24/22 08:30	02/26/22 09:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 09:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 09:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/24/22 08:30	02/26/22 09:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 09:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/24/22 08:30	02/26/22 09:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/24/22 08:30*	*02/26/22 09:20*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS70

Lab Sample ID: 890-1967-2
Matrix: Solid
Date Collected: 02/16/22 11:55
Date Received: 02/17/22 13:12
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/24/22 08:30*	*02/26/22 09:20*	*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			02/28/22 10:23	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			02/22/22 16:01	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		02/18/22 14:27	02/21/22 14:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 14:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 14:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*65*	*S1-*	*70 - 130*	*02/18/22 14:27*	*02/21/22 14:47*	*1*
o-Terphenyl	*72*		*70 - 130*	*02/18/22 14:27*	*02/21/22 14:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1270**		24.9		mg/Kg			02/21/22 03:26	5

Client Sample ID: FS71

Lab Sample ID: 890-1967-3
Matrix: Solid
Date Collected: 02/16/22 12:00
Date Received: 02/17/22 13:12
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		02/24/22 08:30	02/26/22 09:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 09:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 09:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/24/22 08:30	02/26/22 09:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 09:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/24/22 08:30	02/26/22 09:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*02/24/22 08:30*	*02/26/22 09:41*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*02/24/22 08:30*	*02/26/22 09:41*	*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			02/28/22 10:23	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			02/22/22 16:01	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS71

Lab Sample ID: 890-1967-3
Matrix: Solid
Date Collected: 02/16/22 12:00
Date Received: 02/17/22 13:12
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		02/18/22 14:27	02/21/22 15:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 15:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*02/18/22 14:27*	*02/21/22 15:08*	*1*
o-Terphenyl	*75*		*70 - 130*	*02/18/22 14:27*	*02/21/22 15:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**804**		5.05		mg/Kg			02/21/22 03:32	1

Client Sample ID: FS72

Lab Sample ID: 890-1967-4
Matrix: Solid
Date Collected: 02/16/22 12:05
Date Received: 02/17/22 13:12
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		02/24/22 08:30	02/26/22 10:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 10:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 10:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/24/22 08:30	02/26/22 10:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 10:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/24/22 08:30	02/26/22 10:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/24/22 08:30*	*02/26/22 10:01*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*02/24/22 08:30*	*02/26/22 10:01*	*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			02/28/22 10:23	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			02/22/22 16:01	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		02/18/22 14:27	02/21/22 15:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 15:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*02/18/22 14:27*	*02/21/22 15:28*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/18/22 14:27*	*02/21/22 15:28*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS72

Lab Sample ID: 890-1967-4
Matrix: Solid
Date Collected: 02/16/22 12:05
Date Received: 02/17/22 13:12
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6750**		50.0		mg/Kg			02/21/22 03:38	10

Client Sample ID: FS73

Lab Sample ID: 890-1967-5
Matrix: Solid
Date Collected: 02/16/22 12:10
Date Received: 02/17/22 13:12
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		02/24/22 08:30	02/26/22 10:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 10:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 10:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/24/22 08:30	02/26/22 10:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/24/22 08:30	02/26/22 10:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/24/22 08:30	02/26/22 10:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*02/24/22 08:30*	*02/26/22 10:22*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/24/22 08:30*	*02/26/22 10:22*	*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			02/28/22 10:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**260**		49.9		mg/Kg			02/22/22 16:01	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	**260**		49.9		mg/Kg		02/18/22 14:27	02/21/22 16:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/18/22 14:27	02/21/22 16:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/18/22 14:27	02/21/22 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*02/18/22 14:27*	*02/21/22 16:09*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/18/22 14:27*	*02/21/22 16:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5270**		49.9		mg/Kg			02/21/22 03:45	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS74

Lab Sample ID: 890-1967-6
Matrix: Solid
Date Collected: 02/16/22 12:15
Date Received: 02/17/22 13:12
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		02/24/22 08:30	02/26/22 10:43	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/24/22 08:30	02/26/22 10:43	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/24/22 08:30	02/26/22 10:43	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/24/22 08:30	02/26/22 10:43	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/24/22 08:30	02/26/22 10:43	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/24/22 08:30	02/26/22 10:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/24/22 08:30*	*02/26/22 10:43*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*02/24/22 08:30*	*02/26/22 10:43*	*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			02/28/22 10:23	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			02/22/22 16:01	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		02/18/22 14:27	02/21/22 16:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 16:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*02/18/22 14:27*	*02/21/22 16:30*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/18/22 14:27*	*02/21/22 16:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9100**		99.4		mg/Kg			02/21/22 03:51	20

Client Sample ID: SW09

Lab Sample ID: 890-1967-7
Matrix: Solid
Date Collected: 02/16/22 12:20
Date Received: 02/17/22 13:12
Sample Depth: 0 - 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		02/24/22 08:30	02/26/22 11:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 11:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 11:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/24/22 08:30	02/26/22 11:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 11:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/24/22 08:30	02/26/22 11:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/24/22 08:30*	*02/26/22 11:04*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: SW09

Lab Sample ID: 890-1967-7
Matrix: Solid
Date Collected: 02/16/22 12:20
Date Received: 02/17/22 13:12
Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/24/22 08:30*	*02/26/22 11:04*	*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			02/28/22 10:23	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			02/22/22 16:01	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		02/18/22 14:27	02/21/22 16:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 16:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*02/18/22 14:27*	*02/21/22 16:50*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*02/18/22 14:27*	*02/21/22 16:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**85.6**		4.98		mg/Kg			02/21/22 03:57	1

Client Sample ID: SW10

Lab Sample ID: 890-1967-8
Matrix: Solid
Date Collected: 02/16/22 12:25
Date Received: 02/17/22 13:12
Sample Depth: 0 - 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		02/24/22 08:30	02/26/22 11:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 11:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 11:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/24/22 08:30	02/26/22 11:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 11:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/24/22 08:30	02/26/22 11:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*02/24/22 08:30*	*02/26/22 11:25*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/24/22 08:30*	*02/26/22 11:25*	*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			02/28/22 10:23	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			02/22/22 16:01	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: SW10

Lab Sample ID: 890-1967-8
Date Collected: 02/16/22 12:25
Matrix: Solid
Date Received: 02/17/22 13:12
Sample Depth: 0 - 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		02/18/22 14:27	02/21/22 17:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 17:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*02/18/22 14:27*	*02/21/22 17:11*	*1*
o-Terphenyl	*79*		*70 - 130*	*02/18/22 14:27*	*02/21/22 17:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.6**		5.02		mg/Kg			02/21/22 04:04	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

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)
890-1967-1	FS69	100	118
890-1967-1 MS	FS69	97	115
890-1967-1 MSD	FS69	101	118
890-1967-2	FS70	107	114
890-1967-3	FS71	153 S1+	82
890-1967-4	FS72	104	115
890-1967-5	FS73	101	116
890-1967-6	FS74	100	112
890-1967-7	SW09	100	116
890-1967-8	SW10	97	116
LCS 880-19711/1-A	Lab Control Sample	96	103
LCSD 880-19711/2-A	Lab Control Sample Dup	97	107
MB 880-19711/5-A	Method Blank	115	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)
890-1966-A-1-E MS	Matrix Spike	75	65 S1-
890-1966-A-1-F MSD	Matrix Spike Duplicate	61 S1-	53 S1-
890-1967-1	FS69	69 S1-	80
890-1967-2	FS70	65 S1-	72
890-1967-3	FS71	70	75
890-1967-4	FS72	78	88
890-1967-5	FS73	79	91
890-1967-6	FS74	74	86
890-1967-7	SW09	60 S1-	65 S1-
890-1967-8	SW10	72	79
LCS 880-19824/2-A	Lab Control Sample	111	117
LCSD 880-19824/3-A	Lab Control Sample Dup	109	118
MB 880-19824/1-A	Method Blank	75	89

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19711/5-A
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 08:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 08:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 08:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/24/22 08:30	02/26/22 08:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/24/22 08:30	02/26/22 08:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/24/22 08:30	02/26/22 08:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*02/24/22 08:30*	*02/26/22 08:37*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*02/24/22 08:30*	*02/26/22 08:37*	*1*

Lab Sample ID: LCS 880-19711/1-A
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19711

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09405		mg/Kg		94	70 - 130		
Toluene			0.100	0.08541		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.08723		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene			0.200	0.1794		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09139		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-19711/2-A
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19711

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1072		mg/Kg		107	70 - 130	13	35
Toluene			0.100	0.09105		mg/Kg		91	70 - 130	6	35
Ethylbenzene			0.100	0.09125		mg/Kg		91	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1861		mg/Kg		93	70 - 130	4	35
o-Xylene			0.100	0.09413		mg/Kg		94	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-1967-1 MS
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: FS69
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.0994	0.09142		mg/Kg		92	70 - 130		
Toluene	<0.00199	U F1	0.0994	0.06487	F1	mg/Kg		65	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

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

Lab Sample ID: 890-1967-1 MS
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: FS69
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U F1	0.0994	0.06677	F1	mg/Kg		67	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1318	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00199	U	0.0994	0.07148		mg/Kg		72	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: 890-1967-1 MSD
Matrix: Solid
Analysis Batch: 20287

Client Sample ID: FS69
Prep Type: Total/NA
Prep Batch: 19711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.09905		mg/Kg		99	70 - 130	8	35
Toluene	<0.00199	U F1	0.0998	0.06894	F1	mg/Kg		69	70 - 130	6	35
Ethylbenzene	<0.00199	U F1	0.0998	0.06734	F1	mg/Kg		67	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1358	F1	mg/Kg		68	70 - 130	3	35
o-Xylene	<0.00199	U	0.0998	0.07305		mg/Kg		73	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

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

Lab Sample ID: MB 880-19824/1-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19824

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		02/18/22 14:27	02/21/22 10:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 10:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/18/22 14:27	02/21/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*02/18/22 14:27*	*02/21/22 10:40*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/18/22 14:27*	*02/21/22 10:40*	*1*

Lab Sample ID: LCS 880-19824/2-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	881.2		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1086		mg/Kg		109	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

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

Lab Sample ID: LCS 880-19824/2-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19824

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-19824/3-A
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19824

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	891.1		mg/Kg		89	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1087		mg/Kg		109	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 890-1966-A-1-E MS
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19824

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 F1 F2	1000	1505	F1	mg/Kg		148	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F2	1000	1256		mg/Kg		121	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	65	S1-	70 - 130

Lab Sample ID: 890-1966-A-1-F MSD
Matrix: Solid
Analysis Batch: 19889

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 19824

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 F1 F2	998	956.2	F2	mg/Kg		94	70 - 130	45	20
Diesel Range Organics (Over C10-C28)	<50.0	U F2	998	1011	F2	mg/Kg		97	70 - 130	22	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	61	S1-	70 - 130
o-Terphenyl	53	S1-	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19801/1-A
Matrix: Solid
Analysis Batch: 19884

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			02/21/22 00:53	1

Lab Sample ID: LCS 880-19801/2-A
Matrix: Solid
Analysis Batch: 19884

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	257.3		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-19801/3-A
Matrix: Solid
Analysis Batch: 19884

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	265.6		mg/Kg		106	90 - 110	3	20

Lab Sample ID: 880-11355-A-1-G MS
Matrix: Solid
Analysis Batch: 19884

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	21.8		249	288.1		mg/Kg		107	90 - 110		

Lab Sample ID: 880-11355-A-1-H MSD
Matrix: Solid
Analysis Batch: 19884

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	21.8		249	290.3		mg/Kg		108	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

GC VOA

Prep Batch: 19711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Total/NA	Solid	5035	
890-1967-2	FS70	Total/NA	Solid	5035	
890-1967-3	FS71	Total/NA	Solid	5035	
890-1967-4	FS72	Total/NA	Solid	5035	
890-1967-5	FS73	Total/NA	Solid	5035	
890-1967-6	FS74	Total/NA	Solid	5035	
890-1967-7	SW09	Total/NA	Solid	5035	
890-1967-8	SW10	Total/NA	Solid	5035	
MB 880-19711/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19711/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19711/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1967-1 MS	FS69	Total/NA	Solid	5035	
890-1967-1 MSD	FS69	Total/NA	Solid	5035	

Analysis Batch: 20287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Total/NA	Solid	8021B	19711
890-1967-2	FS70	Total/NA	Solid	8021B	19711
890-1967-3	FS71	Total/NA	Solid	8021B	19711
890-1967-4	FS72	Total/NA	Solid	8021B	19711
890-1967-5	FS73	Total/NA	Solid	8021B	19711
890-1967-6	FS74	Total/NA	Solid	8021B	19711
890-1967-7	SW09	Total/NA	Solid	8021B	19711
890-1967-8	SW10	Total/NA	Solid	8021B	19711
MB 880-19711/5-A	Method Blank	Total/NA	Solid	8021B	19711
LCS 880-19711/1-A	Lab Control Sample	Total/NA	Solid	8021B	19711
LCSD 880-19711/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19711
890-1967-1 MS	FS69	Total/NA	Solid	8021B	19711
890-1967-1 MSD	FS69	Total/NA	Solid	8021B	19711

Analysis Batch: 20442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Total/NA	Solid	Total BTEX	
890-1967-2	FS70	Total/NA	Solid	Total BTEX	
890-1967-3	FS71	Total/NA	Solid	Total BTEX	
890-1967-4	FS72	Total/NA	Solid	Total BTEX	
890-1967-5	FS73	Total/NA	Solid	Total BTEX	
890-1967-6	FS74	Total/NA	Solid	Total BTEX	
890-1967-7	SW09	Total/NA	Solid	Total BTEX	
890-1967-8	SW10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 19824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Total/NA	Solid	8015NM Prep	
890-1967-2	FS70	Total/NA	Solid	8015NM Prep	
890-1967-3	FS71	Total/NA	Solid	8015NM Prep	
890-1967-4	FS72	Total/NA	Solid	8015NM Prep	
890-1967-5	FS73	Total/NA	Solid	8015NM Prep	
890-1967-6	FS74	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

GC Semi VOA (Continued)

Prep Batch: 19824 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-7	SW09	Total/NA	Solid	8015NM Prep	
890-1967-8	SW10	Total/NA	Solid	8015NM Prep	
MB 880-19824/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19824/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19824/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1966-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1966-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Total/NA	Solid	8015B NM	19824
890-1967-2	FS70	Total/NA	Solid	8015B NM	19824
890-1967-3	FS71	Total/NA	Solid	8015B NM	19824
890-1967-4	FS72	Total/NA	Solid	8015B NM	19824
890-1967-5	FS73	Total/NA	Solid	8015B NM	19824
890-1967-6	FS74	Total/NA	Solid	8015B NM	19824
890-1967-7	SW09	Total/NA	Solid	8015B NM	19824
890-1967-8	SW10	Total/NA	Solid	8015B NM	19824
MB 880-19824/1-A	Method Blank	Total/NA	Solid	8015B NM	19824
LCS 880-19824/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19824
LCSD 880-19824/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19824
890-1966-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	19824
890-1966-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19824

Analysis Batch: 20079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Total/NA	Solid	8015 NM	
890-1967-2	FS70	Total/NA	Solid	8015 NM	
890-1967-3	FS71	Total/NA	Solid	8015 NM	
890-1967-4	FS72	Total/NA	Solid	8015 NM	
890-1967-5	FS73	Total/NA	Solid	8015 NM	
890-1967-6	FS74	Total/NA	Solid	8015 NM	
890-1967-7	SW09	Total/NA	Solid	8015 NM	
890-1967-8	SW10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Soluble	Solid	DI Leach	
890-1967-2	FS70	Soluble	Solid	DI Leach	
890-1967-3	FS71	Soluble	Solid	DI Leach	
890-1967-4	FS72	Soluble	Solid	DI Leach	
890-1967-5	FS73	Soluble	Solid	DI Leach	
890-1967-6	FS74	Soluble	Solid	DI Leach	
890-1967-7	SW09	Soluble	Solid	DI Leach	
890-1967-8	SW10	Soluble	Solid	DI Leach	
MB 880-19801/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19801/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19801/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11355-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

HPLC/IC (Continued)

Leach Batch: 19801 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11355-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1967-1	FS69	Soluble	Solid	300.0	19801
890-1967-2	FS70	Soluble	Solid	300.0	19801
890-1967-3	FS71	Soluble	Solid	300.0	19801
890-1967-4	FS72	Soluble	Solid	300.0	19801
890-1967-5	FS73	Soluble	Solid	300.0	19801
890-1967-6	FS74	Soluble	Solid	300.0	19801
890-1967-7	SW09	Soluble	Solid	300.0	19801
890-1967-8	SW10	Soluble	Solid	300.0	19801
MB 880-19801/1-A	Method Blank	Soluble	Solid	300.0	19801
LCS 880-19801/2-A	Lab Control Sample	Soluble	Solid	300.0	19801
LCSD 880-19801/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19801
880-11355-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	19801
880-11355-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19801

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS69

Date Collected: 02/16/22 09:40
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-1

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	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 08:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 14:26	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		10			19884	02/21/22 03:07	CH	XEN MID

Client Sample ID: FS70

Date Collected: 02/16/22 11:55
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-2

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	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 09:20	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 14:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		5			19884	02/21/22 03:26	CH	XEN MID

Client Sample ID: FS71

Date Collected: 02/16/22 12:00
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-3

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			5.00 g	5 mL	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 09:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 15:08	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1			19884	02/21/22 03:32	CH	XEN MID

Client Sample ID: FS72

Date Collected: 02/16/22 12:05
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-4

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			5.01 g	5 mL	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 10:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: FS72

Date Collected: 02/16/22 12:05
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-4

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			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 15:28	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		10			19884	02/21/22 03:38	CH	XEN MID

Client Sample ID: FS73

Date Collected: 02/16/22 12:10
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-5

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	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 10:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 16:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		10			19884	02/21/22 03:45	CH	XEN MID

Client Sample ID: FS74

Date Collected: 02/16/22 12:15
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-6

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			4.96 g	5 mL	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 10:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 16:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		20			19884	02/21/22 03:51	CH	XEN MID

Client Sample ID: SW09

Date Collected: 02/16/22 12:20
Date Received: 02/17/22 13:12

Lab Sample ID: 890-1967-7

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	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 11:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 16:50	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Client Sample ID: SW09

Lab Sample ID: 890-1967-7

Date Collected: 02/16/22 12:20
Matrix: Solid
Date Received: 02/17/22 13:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1			19884	02/21/22 03:57	CH	XEN MID

Client Sample ID: SW10

Lab Sample ID: 890-1967-8

Date Collected: 02/16/22 12:25
Matrix: Solid
Date Received: 02/17/22 13:12

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	19711	02/24/22 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20287	02/26/22 11:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20442	02/28/22 10:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20079	02/22/22 16:01	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19824	02/18/22 14:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19889	02/21/22 17:11	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	19801	02/18/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1			19884	02/21/22 04:04	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1967-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

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: RDX 28-12

Job ID: 890-1967-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1967-1	FS69	Solid	02/16/22 09:40	02/17/22 13:12	0.5
890-1967-2	FS70	Solid	02/16/22 11:55	02/17/22 13:12	4
890-1967-3	FS71	Solid	02/16/22 12:00	02/17/22 13:12	4
890-1967-4	FS72	Solid	02/16/22 12:05	02/17/22 13:12	4
890-1967-5	FS73	Solid	02/16/22 12:10	02/17/22 13:12	4
890-1967-6	FS74	Solid	02/16/22 12:15	02/17/22 13:12	4
890-1967-7	SW09	Solid	02/16/22 12:20	02/17/22 13:12	0 - 4
890-1967-8	SW10	Solid	02/16/22 12:25	02/17/22 13:12	0 - 4

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

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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 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX Energy
Address:	3300 N 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:	ROX 28-12	Turn Around	
Project Number:	31403360.007	☒ Routine ☐ Rush	
Project Location:	NM 21 24 5311 24	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	1061120501		

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	1-NA-007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.2
Total Containers:		Corrected Temperature:	3.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
FS69	S	2/16/22	0940	0.5'	Comp	1				
FS70			1155	4'		1				
FS71			1200	4'		1				
FS72			1205	4'		1				
FS73			1210	4'		1				
FS74			1215	4'		1				
SW04			1220	0-4'		1				
SW19			1225	0-4'		1				

890-1967 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

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 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 Anna Byers		2/17/22 1:17	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1967-1
SDG Number: 31403360.007

Login Number: 1967
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: 890-1967-1
SDG Number: 31403360.007

Login Number: 1967
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/18/22 11:34 AM

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: 890-2042-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12
Revision: 1

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
3/11/2022 8:52:51 AM

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

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

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

Client: WSP USA Inc.
Project/Site: RDX 28-12

Laboratory Job ID: 890-2042-1
SDG: 31403360.007

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2042-1
Project/Site: RDX 28-12 SDG: 31403360.007

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Job ID: 890-2042-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2042-1

REVISION

The report being provided is a revision of the original report sent on 3/10/2022. The report (revision 1) is being revised due to Per client email, corrected sample name from BH06 to PH06 to reflect COC.

Report revision history

Receipt
The samples were received on 3/3/2022 4:03 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 1.2°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: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH10
Date Collected: 03/02/22 13:30
Date Received: 03/03/22 16:03
Sample Depth: 1

Lab Sample ID: 890-2042-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1	0.00198		mg/Kg		03/08/22 09:57	03/09/22 03:13	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		03/08/22 09:57	03/09/22 03:13	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		03/08/22 09:57	03/09/22 03:13	1
m-Xylene & p-Xylene	<0.00397	U F1	0.00397		mg/Kg		03/08/22 09:57	03/09/22 03:13	1
o-Xylene	<0.00198	U F1	0.00198		mg/Kg		03/08/22 09:57	03/09/22 03:13	1
Xylenes, Total	<0.00397	U F1	0.00397		mg/Kg		03/08/22 09:57	03/09/22 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/08/22 09:57*	*03/09/22 03:13*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/08/22 09:57*	*03/09/22 03:13*	*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			03/09/22 20:08	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			03/08/22 06:22	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		03/07/22 17:48	03/08/22 01:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 01:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/07/22 17:48*	*03/08/22 01:19*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/07/22 17:48*	*03/08/22 01:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.6**		4.95		mg/Kg			03/10/22 08:55	1

Client Sample ID: BH10
Date Collected: 03/02/22 13:35
Date Received: 03/03/22 16:03
Sample Depth: 4

Lab Sample ID: 890-2042-2
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		03/08/22 09:57	03/09/22 03:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 03:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 03:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 03:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 03:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 03:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/08/22 09:57*	*03/09/22 03:33*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH10
Date Collected: 03/02/22 13:35
Date Received: 03/03/22 16:03
Sample Depth: 4

Lab Sample ID: 890-2042-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/08/22 09:57*	*03/09/22 03:33*	*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			03/09/22 20:08	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			03/08/22 06:22	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		03/07/22 17:48	03/08/22 01:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 01:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/07/22 17:48*	*03/08/22 01:40*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/07/22 17:48*	*03/08/22 01:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			03/10/22 09:04	1

Client Sample ID: BH11
Date Collected: 03/02/22 14:00
Date Received: 03/03/22 16:03
Sample Depth: 1

Lab Sample ID: 890-2042-3
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		03/08/22 09:57	03/09/22 03:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/08/22 09:57	03/09/22 03:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/08/22 09:57	03/09/22 03:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/08/22 09:57	03/09/22 03:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/08/22 09:57	03/09/22 03:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/08/22 09:57	03/09/22 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*03/08/22 09:57*	*03/09/22 03:54*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/08/22 09:57*	*03/09/22 03:54*	*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			03/09/22 20:08	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			03/08/22 06:22	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH11
Date Collected: 03/02/22 14:00
Date Received: 03/03/22 16:03
Sample Depth: 1

Lab Sample ID: 890-2042-3
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	<49.8	U	49.8		mg/Kg		03/07/22 17:48	03/08/22 02:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/07/22 17:48	03/08/22 02:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/07/22 17:48	03/08/22 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/07/22 17:48*	*03/08/22 02:01*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/07/22 17:48*	*03/08/22 02:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.49**		5.00		mg/Kg			03/10/22 09:13	1

Client Sample ID: BH11
Date Collected: 03/02/22 14:20
Date Received: 03/03/22 16:03
Sample Depth: 4

Lab Sample ID: 890-2042-4
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		03/08/22 09:57	03/09/22 04:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/08/22 09:57	03/09/22 04:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/08/22 09:57	03/09/22 04:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/08/22 09:57	03/09/22 04:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/08/22 09:57	03/09/22 04:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/08/22 09:57	03/09/22 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/08/22 09:57*	*03/09/22 04:14*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/08/22 09:57*	*03/09/22 04:14*	*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			03/09/22 20:08	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			03/08/22 06:22	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		03/07/22 17:48	03/08/22 02:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 02:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/07/22 17:48*	*03/08/22 02:42*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/07/22 17:48*	*03/08/22 02:42*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH11
Date Collected: 03/02/22 14:20
Date Received: 03/03/22 16:03
Sample Depth: 4

Lab Sample ID: 890-2042-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.2		4.99		mg/Kg			03/10/22 09:22	1

Client Sample ID: BH12
Date Collected: 03/02/22 15:00
Date Received: 03/03/22 16:03
Sample Depth: 1

Lab Sample ID: 890-2042-5
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		03/08/22 09:57	03/09/22 04:35	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/08/22 09:57	03/09/22 04:35	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/08/22 09:57	03/09/22 04:35	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/08/22 09:57	03/09/22 04:35	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/08/22 09:57	03/09/22 04:35	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/08/22 09:57	03/09/22 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/08/22 09:57*	*03/09/22 04:35*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/08/22 09:57*	*03/09/22 04:35*	*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			03/09/22 20:08	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			03/08/22 06:22	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		03/07/22 17:48	03/08/22 03:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/07/22 17:48	03/08/22 03:03	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/07/22 17:48	03/08/22 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/07/22 17:48*	*03/08/22 03:03*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/07/22 17:48*	*03/08/22 03:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.1		5.00		mg/Kg			03/10/22 09:48	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH12

Date Collected: 03/02/22 15:15
Date Received: 03/03/22 16:03
Sample Depth: 4

Lab Sample ID: 890-2042-6
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		03/08/22 09:57	03/09/22 04:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/08/22 09:57	03/09/22 04:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/08/22 09:57	03/09/22 04:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/08/22 09:57	03/09/22 04:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/08/22 09:57	03/09/22 04:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/08/22 09:57	03/09/22 04:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/08/22 09:57*	*03/09/22 04:55*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/08/22 09:57*	*03/09/22 04:55*	*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			03/09/22 20:08	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			03/08/22 06:22	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		03/07/22 17:48	03/08/22 03:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/07/22 17:48	03/08/22 03:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/07/22 17:48	03/08/22 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*03/07/22 17:48*	*03/08/22 03:23*	*1*
o-Terphenyl	*126*		*70 - 130*	*03/07/22 17:48*	*03/08/22 03:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.3**		4.98		mg/Kg			03/10/22 09:57	1

Client Sample ID: PH06

Date Collected: 03/02/22 13:40
Date Received: 03/03/22 16:03
Sample Depth: 0.5

Lab Sample ID: 890-2042-7
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		03/08/22 09:57	03/09/22 05:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 05:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 05:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 05:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 05:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 05:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/08/22 09:57*	*03/09/22 05:16*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: PH06
Date Collected: 03/02/22 13:40
Date Received: 03/03/22 16:03
Sample Depth: 0.5

Lab Sample ID: 890-2042-7
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/08/22 09:57*	*03/09/22 05:16*	*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			03/09/22 20:08	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			03/08/22 06:22	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		03/07/22 17:48	03/08/22 03:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 03:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/08/22 03:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*101*		*70 - 130*	*03/07/22 17:48*	*03/08/22 03:44*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/07/22 17:48*	*03/08/22 03:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**546**		4.96		mg/Kg			03/10/22 10:24	1

Client Sample ID: PH06
Date Collected: 03/02/22 13:45
Date Received: 03/03/22 16:03
Sample Depth: 1

Lab Sample ID: 890-2042-8
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		03/08/22 09:57	03/09/22 05:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 05:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 05:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 05:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 05:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 05:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/08/22 09:57*	*03/09/22 05:36*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/08/22 09:57*	*03/09/22 05:36*	*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			03/09/22 20:08	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			03/08/22 06:22	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: PH06

Date Collected: 03/02/22 13:45
Date Received: 03/03/22 16:03
Sample Depth: 1

Lab Sample ID: 890-2042-8

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		03/07/22 17:48	03/08/22 04:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/07/22 17:48	03/08/22 04:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/07/22 17:48	03/08/22 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/07/22 17:48*	*03/08/22 04:05*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/07/22 17:48*	*03/08/22 04:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.98**		5.05		mg/Kg			03/10/22 10:32	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

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)
890-2042-1	BH10	100	93
890-2042-1 MS	BH10	101	101
890-2042-1 MSD	BH10	108	96
890-2042-2	BH10	110	105
890-2042-3	BH11	113	94
890-2042-4	BH11	108	98
890-2042-5	BH12	98	97
890-2042-6	BH12	105	99
890-2042-7	PH06	110	96
890-2042-8	PH06	109	90
LCS 880-21013/1-A	Lab Control Sample	98	103
LCSD 880-21013/2-A	Lab Control Sample Dup	97	101
MB 880-21013/5-A	Method Blank	99	100
MB 880-21114/5-A	Method Blank	98	98

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)
890-2041-A-1-E MS	Matrix Spike	114	98
890-2041-A-1-F MSD	Matrix Spike Duplicate	117	99
890-2042-1	BH10	104	109
890-2042-2	BH10	106	109
890-2042-3	BH11	109	112
890-2042-4	BH11	107	112
890-2042-5	BH12	102	107
890-2042-6	BH12	119	126
890-2042-7	PH06	101	104
890-2042-8	PH06	99	92
LCS 880-21055/2-A	Lab Control Sample	113	100
LCSD 880-21055/3-A	Lab Control Sample Dup	109	95
MB 880-21055/1-A	Method Blank	104	107

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21013/5-A
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21013

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 02:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 02:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 02:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 02:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 09:57	03/09/22 02:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 09:57	03/09/22 02:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/08/22 09:57*	*03/09/22 02:44*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/08/22 09:57*	*03/09/22 02:44*	*1*

Lab Sample ID: LCS 880-21013/1-A
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21013

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1110		mg/Kg		111	70 - 130		
Toluene			0.100	0.1037		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09979		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.2298		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1133		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-21013/2-A
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21013

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1066		mg/Kg		107	70 - 130	4	35
Toluene			0.100	0.1018		mg/Kg		102	70 - 130	2	35
Ethylbenzene			0.100	0.09896		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2238		mg/Kg		112	70 - 130	3	35
o-Xylene			0.100	0.1103		mg/Kg		110	70 - 130	3	35

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

Lab Sample ID: 890-2042-1 MS
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: BH10
Prep Type: Total/NA
Prep Batch: 21013

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U F1	0.101	0.06538	F1	mg/Kg		64	70 - 130		
Toluene	<0.00198	U F1	0.101	0.06331	F1	mg/Kg		61	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

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

Lab Sample ID: 890-2042-1 MS
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: BH10
Prep Type: Total/NA
Prep Batch: 21013

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00198	U F1	0.101	0.06404	F1	mg/Kg		63	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.202	0.1501		mg/Kg		74	70 - 130
o-Xylene	<0.00198	U F1	0.101	0.07585		mg/Kg		75	70 - 130

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

Lab Sample ID: 890-2042-1 MSD
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: BH10
Prep Type: Total/NA
Prep Batch: 21013

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.101	0.04967	F1	mg/Kg		49	70 - 130	27	35
Toluene	<0.00198	U F1	0.101	0.05166	F1	mg/Kg		50	70 - 130	20	35
Ethylbenzene	<0.00198	U F1	0.101	0.05608	F1	mg/Kg		55	70 - 130	13	35
m-Xylene & p-Xylene	<0.00397	U F1	0.202	0.1323	F1	mg/Kg		65	70 - 130	13	35
o-Xylene	<0.00198	U F1	0.101	0.06763	F1	mg/Kg		66	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-21114/5-A
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21114

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 08:59	03/08/22 15:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/08/22 08:59*	*03/08/22 15:07*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/08/22 08:59*	*03/08/22 15:07*	*1*

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

Lab Sample ID: MB 880-21055/1-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21055

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		03/07/22 17:48	03/07/22 21:09	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-21055/1-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21055

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		03/07/22 17:48	03/07/22 21:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/07/22 17:48	03/07/22 21:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/07/22 17:48*	*03/07/22 21:09*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/07/22 17:48*	*03/07/22 21:09*	*1*

Lab Sample ID: LCS 880-21055/2-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21055

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1244		mg/Kg		124	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1015		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Lab Sample ID: LCSD 880-21055/3-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21055

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1191		mg/Kg		119	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	953.6		mg/Kg		95	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: 890-2041-A-1-E MS
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1165		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	851.0		mg/Kg		82	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

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

Lab Sample ID: 890-2041-A-1-F MSD
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21055

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	<49.8	U	998	1202		mg/Kg		117	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	872.5		mg/Kg		84	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21027/1-A
Matrix: Solid
Analysis Batch: 21142

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 19:43	1

Lab Sample ID: LCS 880-21027/2-A
Matrix: Solid
Analysis Batch: 21142

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.3		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-21027/3-A
Matrix: Solid
Analysis Batch: 21142

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	243.9		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-2042-4 MS
Matrix: Solid
Analysis Batch: 21142

Client Sample ID: BH11
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19.2		250	290.8		mg/Kg		109	90 - 110

Lab Sample ID: 890-2042-4 MSD
Matrix: Solid
Analysis Batch: 21142

Client Sample ID: BH11
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19.2		250	275.2		mg/Kg		103	90 - 110	5	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

GC VOA

Prep Batch: 21013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Total/NA	Solid	5035	
890-2042-2	BH10	Total/NA	Solid	5035	
890-2042-3	BH11	Total/NA	Solid	5035	
890-2042-4	BH11	Total/NA	Solid	5035	
890-2042-5	BH12	Total/NA	Solid	5035	
890-2042-6	BH12	Total/NA	Solid	5035	
890-2042-7	PH06	Total/NA	Solid	5035	
890-2042-8	PH06	Total/NA	Solid	5035	
MB 880-21013/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21013/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21013/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2042-1 MS	BH10	Total/NA	Solid	5035	
890-2042-1 MSD	BH10	Total/NA	Solid	5035	

Analysis Batch: 21110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Total/NA	Solid	8021B	21013
890-2042-2	BH10	Total/NA	Solid	8021B	21013
890-2042-3	BH11	Total/NA	Solid	8021B	21013
890-2042-4	BH11	Total/NA	Solid	8021B	21013
890-2042-5	BH12	Total/NA	Solid	8021B	21013
890-2042-6	BH12	Total/NA	Solid	8021B	21013
890-2042-7	PH06	Total/NA	Solid	8021B	21013
890-2042-8	PH06	Total/NA	Solid	8021B	21013
MB 880-21013/5-A	Method Blank	Total/NA	Solid	8021B	21013
MB 880-21114/5-A	Method Blank	Total/NA	Solid	8021B	21114
LCS 880-21013/1-A	Lab Control Sample	Total/NA	Solid	8021B	21013
LCSD 880-21013/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21013
890-2042-1 MS	BH10	Total/NA	Solid	8021B	21013
890-2042-1 MSD	BH10	Total/NA	Solid	8021B	21013

Prep Batch: 21114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21114/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 21263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Total/NA	Solid	Total BTEX	
890-2042-2	BH10	Total/NA	Solid	Total BTEX	
890-2042-3	BH11	Total/NA	Solid	Total BTEX	
890-2042-4	BH11	Total/NA	Solid	Total BTEX	
890-2042-5	BH12	Total/NA	Solid	Total BTEX	
890-2042-6	BH12	Total/NA	Solid	Total BTEX	
890-2042-7	PH06	Total/NA	Solid	Total BTEX	
890-2042-8	PH06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 21016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Total/NA	Solid	8015B NM	21055

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

GC Semi VOA (Continued)

Analysis Batch: 21016 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-2	BH10	Total/NA	Solid	8015B NM	21055
890-2042-3	BH11	Total/NA	Solid	8015B NM	21055
890-2042-4	BH11	Total/NA	Solid	8015B NM	21055
890-2042-5	BH12	Total/NA	Solid	8015B NM	21055
890-2042-6	BH12	Total/NA	Solid	8015B NM	21055
890-2042-7	PH06	Total/NA	Solid	8015B NM	21055
890-2042-8	PH06	Total/NA	Solid	8015B NM	21055
MB 880-21055/1-A	Method Blank	Total/NA	Solid	8015B NM	21055
LCS 880-21055/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21055
LCSD 880-21055/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21055
890-2041-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	21055
890-2041-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21055

Prep Batch: 21055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Total/NA	Solid	8015NM Prep	
890-2042-2	BH10	Total/NA	Solid	8015NM Prep	
890-2042-3	BH11	Total/NA	Solid	8015NM Prep	
890-2042-4	BH11	Total/NA	Solid	8015NM Prep	
890-2042-5	BH12	Total/NA	Solid	8015NM Prep	
890-2042-6	BH12	Total/NA	Solid	8015NM Prep	
890-2042-7	PH06	Total/NA	Solid	8015NM Prep	
890-2042-8	PH06	Total/NA	Solid	8015NM Prep	
MB 880-21055/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21055/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21055/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2041-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2041-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Total/NA	Solid	8015 NM	
890-2042-2	BH10	Total/NA	Solid	8015 NM	
890-2042-3	BH11	Total/NA	Solid	8015 NM	
890-2042-4	BH11	Total/NA	Solid	8015 NM	
890-2042-5	BH12	Total/NA	Solid	8015 NM	
890-2042-6	BH12	Total/NA	Solid	8015 NM	
890-2042-7	PH06	Total/NA	Solid	8015 NM	
890-2042-8	PH06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Soluble	Solid	DI Leach	
890-2042-2	BH10	Soluble	Solid	DI Leach	
890-2042-3	BH11	Soluble	Solid	DI Leach	
890-2042-4	BH11	Soluble	Solid	DI Leach	
890-2042-5	BH12	Soluble	Solid	DI Leach	
890-2042-6	BH12	Soluble	Solid	DI Leach	
890-2042-7	PH06	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

HPLC/IC (Continued)

Leach Batch: 21027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-8	PH06	Soluble	Solid	DI Leach	
MB 880-21027/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21027/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21027/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2042-4 MS	BH11	Soluble	Solid	DI Leach	
890-2042-4 MSD	BH11	Soluble	Solid	DI Leach	

Analysis Batch: 21142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2042-1	BH10	Soluble	Solid	300.0	21027
890-2042-2	BH10	Soluble	Solid	300.0	21027
890-2042-3	BH11	Soluble	Solid	300.0	21027
890-2042-4	BH11	Soluble	Solid	300.0	21027
890-2042-5	BH12	Soluble	Solid	300.0	21027
890-2042-6	BH12	Soluble	Solid	300.0	21027
890-2042-7	PH06	Soluble	Solid	300.0	21027
890-2042-8	PH06	Soluble	Solid	300.0	21027
MB 880-21027/1-A	Method Blank	Soluble	Solid	300.0	21027
LCS 880-21027/2-A	Lab Control Sample	Soluble	Solid	300.0	21027
LCSD 880-21027/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21027
890-2042-4 MS	BH11	Soluble	Solid	300.0	21027
890-2042-4 MSD	BH11	Soluble	Solid	300.0	21027

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH10
Date Collected: 03/02/22 13:30
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-1
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			5.04 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 03:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 01:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 08:55	CH	XEN MID

Client Sample ID: BH10
Date Collected: 03/02/22 13:35
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-2
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	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 03:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 01:40	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 09:04	CH	XEN MID

Client Sample ID: BH11
Date Collected: 03/02/22 14:00
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-3
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			5.02 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 03:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 02:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 09:13	CH	XEN MID

Client Sample ID: BH11
Date Collected: 03/02/22 14:20
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-4
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			4.97 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 04:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: BH11
Date Collected: 03/02/22 14:20
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-4
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			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 02:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 09:22	CH	XEN MID

Client Sample ID: BH12
Date Collected: 03/02/22 15:00
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-5
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			4.96 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 04:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 03:03	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 09:48	CH	XEN MID

Client Sample ID: BH12
Date Collected: 03/02/22 15:15
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-6
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			5.03 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 04:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 03:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 09:57	CH	XEN MID

Client Sample ID: PH06
Date Collected: 03/02/22 13:40
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-7
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			5.00 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 05:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 03:44	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Client Sample ID: PH06
Date Collected: 03/02/22 13:40
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-7
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	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 10:24	CH	XEN MID

Client Sample ID: PH06
Date Collected: 03/02/22 13:45
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2042-8
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			5.00 g	5 mL	21013	03/08/22 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/09/22 05:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21263	03/09/22 20:08	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21101	03/08/22 06:22	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21055	03/07/22 17:48	AM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/08/22 04:05	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 10:32	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: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

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: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

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: RDX 28-12

Job ID: 890-2042-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2042-1	BH10	Solid	03/02/22 13:30	03/03/22 16:03	1
890-2042-2	BH10	Solid	03/02/22 13:35	03/03/22 16:03	4
890-2042-3	BH11	Solid	03/02/22 14:00	03/03/22 16:03	1
890-2042-4	BH11	Solid	03/02/22 14:20	03/03/22 16:03	4
890-2042-5	BH12	Solid	03/02/22 15:00	03/03/22 16:03	1
890-2042-6	BH12	Solid	03/02/22 15:15	03/03/22 16:03	4
890-2042-7	PH06	Solid	03/02/22 13:40	03/03/22 16:03	0.5
890-2042-8	PH06	Solid	03/02/22 13:45	03/03/22 16:03	1

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

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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: _____

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(28.) 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:	ROX 28-12	Turn Around	
Project Number:	3140336Ø.ØØ7	☒ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC# 10161120801		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	~~Yes~~ No	Thermometer ID:	IWM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.4	
Total Containers:		Corrected Temperature:	1.2	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
BH10	S	3/2/22	1330	1'	Grab	1				
BH10			1335	4'		1				
BH11			1400	1'		1				
BH11			1420	4'		1				
BH12			1500	1'		1				
BH12			1515	4'		1				
PH06			1340	0.5'		1				
PH06			1345	1'		1				

890-2042 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

Sample Comments
Incident ID: nAPP2124531124

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 Anna Byers	Clint Cup	3.3.22 1603			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

3/11/2022 (Rev. 1)

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-652 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2042-1
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: RDX 28-12	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	8016MOD_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 (890-2042-1)	3/2/22	13 30 Mountain		Solid			X	X	X	X	X	1	
BH10 (890-2042-2)	3/2/22	13 35 Mountain		Solid			X	X	X	X	X	1	
BH11 (890-2042-3)	3/2/22	14 00 Mountain		Solid			X	X	X	X	X	1	
BH11 (890-2042-4)	3/2/22	14 20 Mountain		Solid			X	X	X	X	X	1	
BH12 (890-2042-5)	3/2/22	15 00 Mountain		Solid			X	X	X	X	X	1	
BH12 (890-2042-6)	3/2/22	15 15 Mountain		Solid			X	X	X	X	X	1	
BH06 (890-2042-7)	3/2/22	13 40 Mountain		Solid			X	X	X	X	X	1	
BH06 (890-2042-8)	3/2/22	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
				3.4.22 13:15	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

Received by OCD: 3/21/2022 1:35:04 PM

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3/11/2022 (Rev. 1)

Released to Imaging: 4/20/2022 3:21:28 PM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2042-1
SDG Number: 31403360.007

Login Number: 2042
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: 890-2042-1
SDG Number: 31403360.007

Login Number: 2042
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 03/04/22 01:22 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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2043-1
Laboratory Sample Delivery Group: 31403360.007
Client Project/Site: RDX 28-12

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
3/11/2022 5:18:14 PM

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

LINKS

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

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

Client: WSP USA Inc.
Project/Site: RDX 28-12

Laboratory Job ID: 890-2043-1
SDG: 31403360.007

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Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2043-1
Project/Site: RDX 28-12 SDG: 31403360.007

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Job ID: 890-2043-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2043-1

Receipt
The samples were received on 3/3/2022 4:03 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 1.2°C

GC VOA
Method 8021B: Batch preparation batch 880-21114 and analytical batch 880-21110 is reported without a matrix spike/matrix spike duplicate (MS/MSD). The batch MS/MSD was originally performed on another client's sample, and this test was not reportable. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20927 and analytical batch 880-21016 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-20926/2-A), (LCS 880-21111/2-A), (LCSD 880-20926/3-A) and (LCSD 880-21111/3-A). 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: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW11

Lab Sample ID: 890-2043-1
Matrix: Solid
Date Collected: 03/02/22 11:35
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/08/22 22:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/08/22 22:58	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		03/07/22 13:02	03/08/22 22:58	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/07/22 13:02	03/08/22 22:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/08/22 22:58	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/07/22 13:02	03/08/22 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/07/22 13:02*	*03/08/22 22:58*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/07/22 13:02*	*03/08/22 22:58*	*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			03/06/22 20:58	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			03/07/22 21:40	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 F1	50.0		mg/Kg		03/04/22 15:14	03/07/22 12:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 12:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/04/22 15:14*	*03/07/22 12:47*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/04/22 15:14*	*03/07/22 12:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.5**		4.97		mg/Kg			03/10/22 10:41	1

Client Sample ID: SW12

Lab Sample ID: 890-2043-2
Matrix: Solid
Date Collected: 03/02/22 11:40
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/08/22 23:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 23:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 23:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/08/22 23:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 23:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/08/22 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/07/22 13:02*	*03/08/22 23:19*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW12

Lab Sample ID: 890-2043-2
Matrix: Solid
Date Collected: 03/02/22 11:40
Date Received: 03/03/22 16:03
Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/07/22 13:02*	*03/08/22 23:19*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 13:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 13:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*107*		*70 - 130*	*03/04/22 15:14*	*03/07/22 13:50*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/04/22 15:14*	*03/07/22 13:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.6**		4.98		mg/Kg			03/10/22 10:50	1

Client Sample ID: SW13

Lab Sample ID: 890-2043-3
Matrix: Solid
Date Collected: 03/02/22 11:45
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/08/22 23:39	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/08/22 23:39	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/08/22 23:39	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/07/22 13:02	03/08/22 23:39	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/08/22 23:39	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/07/22 13:02	03/08/22 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 13:02*	*03/08/22 23:39*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/07/22 13:02*	*03/08/22 23:39*	*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			03/06/22 20:58	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			03/07/22 21:40	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW13

Lab Sample ID: 890-2043-3
Matrix: Solid
Date Collected: 03/02/22 11:45
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 14:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 14:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*03/04/22 15:14*	*03/07/22 14:10*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/04/22 15:14*	*03/07/22 14:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/10/22 10:59	1

Client Sample ID: SW14

Lab Sample ID: 890-2043-4
Matrix: Solid
Date Collected: 03/02/22 11:50
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 00:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 00:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 00:00	1
m-Xylene & p-Xylene	**0.00412**		0.00398		mg/Kg		03/07/22 13:02	03/09/22 00:00	1
o-Xylene	**0.00240**		0.00199		mg/Kg		03/07/22 13:02	03/09/22 00:00	1
Xylenes, Total	**0.00652**		0.00398		mg/Kg		03/07/22 13:02	03/09/22 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*03/07/22 13:02*	*03/09/22 00:00*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 13:02*	*03/09/22 00:00*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00652**		0.00398		mg/Kg			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 14:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 14:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/04/22 15:14*	*03/07/22 14:30*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/04/22 15:14*	*03/07/22 14:30*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW14

Lab Sample ID: 890-2043-4
Matrix: Solid
Date Collected: 03/02/22 11:50
Date Received: 03/03/22 16:03
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.8		4.99		mg/Kg			03/10/22 11:08	1

Client Sample ID: SW15

Lab Sample ID: 890-2043-5
Matrix: Solid
Date Collected: 03/02/22 11:55
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 00:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 00:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 00:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 00:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 00:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/07/22 13:02*	*03/09/22 00:21*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/07/22 13:02*	*03/09/22 00:21*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 14:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 14:51	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/04/22 15:14*	*03/07/22 14:51*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/04/22 15:14*	*03/07/22 14:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.2		4.96		mg/Kg			03/10/22 11:17	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW16

Lab Sample ID: 890-2043-6
Matrix: Solid
Date Collected: 03/02/22 12:00
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 00:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 00:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 00:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/07/22 13:02	03/09/22 00:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 00:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/07/22 13:02	03/09/22 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 13:02*	*03/09/22 00:41*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/07/22 13:02*	*03/09/22 00:41*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 15:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 15:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*03/04/22 15:14*	*03/07/22 15:11*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/04/22 15:14*	*03/07/22 15:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.2**		4.99		mg/Kg			03/09/22 20:11	1

Client Sample ID: SW17

Lab Sample ID: 890-2043-7
Matrix: Solid
Date Collected: 03/02/22 12:05
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 01:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 01:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 01:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 01:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 01:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 13:02*	*03/09/22 01:02*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW17

Lab Sample ID: 890-2043-7
Matrix: Solid
Date Collected: 03/02/22 12:05
Date Received: 03/03/22 16:03
Sample Depth: 0 - 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/07/22 13:02*	*03/09/22 01:02*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 15:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 15:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/04/22 15:14*	*03/07/22 15:32*	*1*
o-Terphenyl	*89*		*70 - 130*	*03/04/22 15:14*	*03/07/22 15:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8780**		100		mg/Kg			03/09/22 20:38	20

Client Sample ID: SW18

Lab Sample ID: 890-2043-8
Matrix: Solid
Date Collected: 03/02/22 12:10
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 01:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/07/22 13:02	03/09/22 01:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/07/22 13:02	03/09/22 01:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/07/22 13:02	03/09/22 01:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/07/22 13:02	03/09/22 01:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/07/22 13:02	03/09/22 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/07/22 13:02*	*03/09/22 01:23*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/07/22 13:02*	*03/09/22 01:23*	*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			03/06/22 20:58	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			03/07/22 21:40	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW18

Lab Sample ID: 890-2043-8
Matrix: Solid
Date Collected: 03/02/22 12:10
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 15:14	03/07/22 15:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 15:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*03/04/22 15:14*	*03/07/22 15:53*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/04/22 15:14*	*03/07/22 15:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.8**		4.95		mg/Kg			03/09/22 20:48	1

Client Sample ID: SW19

Lab Sample ID: 890-2043-9
Matrix: Solid
Date Collected: 03/02/22 12:15
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 01:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 01:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 01:43	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/07/22 13:02	03/09/22 01:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 01:43	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/07/22 13:02	03/09/22 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/07/22 13:02*	*03/09/22 01:43*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/07/22 13:02*	*03/09/22 01:43*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 16:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 16:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/04/22 15:14*	*03/07/22 16:14*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/04/22 15:14*	*03/07/22 16:14*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW19

Lab Sample ID: 890-2043-9
Matrix: Solid
Date Collected: 03/02/22 12:15
Date Received: 03/03/22 16:03
Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.9		5.04		mg/Kg			03/09/22 20:57	1

Client Sample ID: SW20

Lab Sample ID: 890-2043-10
Matrix: Solid
Date Collected: 03/02/22 12:20
Date Received: 03/03/22 16:03
Sample Depth: 0 - 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 13:02	03/09/22 02:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 02:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 02:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/09/22 02:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 02:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/09/22 02:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/07/22 13:02*	*03/09/22 02:04*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/07/22 13:02*	*03/09/22 02:04*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 16:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 16:36	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/04/22 15:14*	*03/07/22 16:36*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/04/22 15:14*	*03/07/22 16:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.7		4.97		mg/Kg			03/09/22 21:06	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS75

Lab Sample ID: 890-2043-11
Matrix: Solid
Date Collected: 03/02/22 14:50
Date Received: 03/03/22 16:03
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 13:02	03/09/22 03:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 03:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 03:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/07/22 13:02	03/09/22 03:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 03:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/07/22 13:02	03/09/22 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 13:02*	*03/09/22 03:28*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/07/22 13:02*	*03/09/22 03:28*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 17:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 17:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*03/04/22 15:14*	*03/07/22 17:19*	*1*
o-Terphenyl	*84*		*70 - 130*	*03/04/22 15:14*	*03/07/22 17:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7780**		99.2		mg/Kg			03/09/22 21:33	20

Client Sample ID: FS76

Lab Sample ID: 890-2043-12
Matrix: Solid
Date Collected: 03/02/22 14:52
Date Received: 03/03/22 16:03
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		03/07/22 13:02	03/09/22 03:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/07/22 13:02	03/09/22 03:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/07/22 13:02	03/09/22 03:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/07/22 13:02	03/09/22 03:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/07/22 13:02	03/09/22 03:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/07/22 13:02	03/09/22 03:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 13:02*	*03/09/22 03:48*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS76

Lab Sample ID: 890-2043-12
Matrix: Solid
Date Collected: 03/02/22 14:52
Date Received: 03/03/22 16:03
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/07/22 13:02*	*03/09/22 03:48*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 17:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 17:40	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*89*		*70 - 130*	*03/04/22 15:14*	*03/07/22 17:40*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/04/22 15:14*	*03/07/22 17:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3920**		50.0		mg/Kg			03/09/22 21:43	10

Client Sample ID: FS77

Lab Sample ID: 890-2043-13
Matrix: Solid
Date Collected: 03/02/22 14:55
Date Received: 03/03/22 16:03
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 13:02	03/09/22 04:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 04:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 04:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 04:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 04:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 04:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/07/22 13:02*	*03/09/22 04:09*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/07/22 13:02*	*03/09/22 04:09*	*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			03/06/22 20:58	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			03/07/22 21:40	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS77

Lab Sample ID: 890-2043-13
Matrix: Solid
Date Collected: 03/02/22 14:55
Date Received: 03/03/22 16:03
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 15:14	03/07/22 18:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 18:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/04/22 15:14*	*03/07/22 18:02*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/04/22 15:14*	*03/07/22 18:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10400**		99.6		mg/Kg			03/09/22 21:52	20

Client Sample ID: FS78

Lab Sample ID: 890-2043-14
Matrix: Solid
Date Collected: 03/02/22 14:57
Date Received: 03/03/22 16:03
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 13:02	03/09/22 04:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 04:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 04:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/09/22 04:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 04:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/09/22 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/07/22 13:02*	*03/09/22 04:30*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/07/22 13:02*	*03/09/22 04:30*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 18:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 18:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*03/04/22 15:14*	*03/07/22 18:23*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/04/22 15:14*	*03/07/22 18:23*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS78

Lab Sample ID: 890-2043-14
Matrix: Solid
Date Collected: 03/02/22 14:57
Date Received: 03/03/22 16:03
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1090		25.0		mg/Kg			03/09/22 22:01	5

Client Sample ID: FS79

Lab Sample ID: 890-2043-15
Matrix: Solid
Date Collected: 03/02/22 15:00
Date Received: 03/03/22 16:03
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 13:02	03/09/22 04:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/09/22 04:50	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/09/22 04:50	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/07/22 13:02	03/09/22 04:50	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/09/22 04:50	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/07/22 13:02	03/09/22 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/07/22 13:02*	*03/09/22 04:50*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/07/22 13:02*	*03/09/22 04:50*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 18:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 18:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/04/22 15:14*	*03/07/22 18:45*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/04/22 15:14*	*03/07/22 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	842		25.1		mg/Kg			03/09/22 22:10	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS80

Lab Sample ID: 890-2043-16
Matrix: Solid
Date Collected: 03/02/22 15:02
Date Received: 03/03/22 16:03
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 13:02	03/09/22 05:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 05:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 05:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/07/22 13:02	03/09/22 05:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/09/22 05:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/07/22 13:02	03/09/22 05:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/07/22 13:02*	*03/09/22 05:11*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/07/22 13:02*	*03/09/22 05:11*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 19:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 19:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*03/04/22 15:14*	*03/07/22 19:06*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/04/22 15:14*	*03/07/22 19:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2060**		24.9		mg/Kg			03/09/22 22:19	5

Client Sample ID: FS81

Lab Sample ID: 890-2043-17
Matrix: Solid
Date Collected: 03/02/22 15:05
Date Received: 03/03/22 16:03
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 13:02	03/09/22 05:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 05:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 05:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 05:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 05:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 05:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/07/22 13:02*	*03/09/22 05:32*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS81

Lab Sample ID: 890-2043-17
Matrix: Solid
Date Collected: 03/02/22 15:05
Date Received: 03/03/22 16:03
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*	*03/07/22 13:02*	*03/09/22 05:32*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 19:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 19:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:14	03/07/22 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*102*		*70 - 130*	*03/04/22 15:14*	*03/07/22 19:27*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/04/22 15:14*	*03/07/22 19:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.5**		5.00		mg/Kg			03/09/22 22:46	1

Client Sample ID: FS82

Lab Sample ID: 890-2043-18
Matrix: Solid
Date Collected: 03/02/22 15:07
Date Received: 03/03/22 16:03
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 13:02	03/09/22 05:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/09/22 05:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/09/22 05:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/07/22 13:02	03/09/22 05:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/07/22 13:02	03/09/22 05:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/07/22 13:02	03/09/22 05:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*03/07/22 13:02*	*03/09/22 05:52*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/07/22 13:02*	*03/09/22 05:52*	*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			03/06/22 20:58	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			03/07/22 21:40	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS82

Lab Sample ID: 890-2043-18
Matrix: Solid
Date Collected: 03/02/22 15:07
Date Received: 03/03/22 16:03
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 15:14	03/07/22 19:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/04/22 15:14	03/07/22 19:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/04/22 15:14	03/07/22 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/04/22 15:14*	*03/07/22 19:48*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/04/22 15:14*	*03/07/22 19:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**748**		4.95		mg/Kg			03/09/22 22:56	1

Client Sample ID: FS83

Lab Sample ID: 890-2043-19
Matrix: Solid
Date Collected: 03/02/22 15:10
Date Received: 03/03/22 16:03
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 13:02	03/09/22 06:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 06:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 06:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 06:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 06:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/07/22 13:02*	*03/09/22 06:13*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/07/22 13:02*	*03/09/22 06:13*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 20:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 20:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/04/22 15:14*	*03/07/22 20:08*	*1*
o-Terphenyl	*88*		*70 - 130*	*03/04/22 15:14*	*03/07/22 20:08*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS83

Lab Sample ID: 890-2043-19
Matrix: Solid
Date Collected: 03/02/22 15:10
Date Received: 03/03/22 16:03
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2370		25.1		mg/Kg			03/09/22 23:23	5

Client Sample ID: FS84

Lab Sample ID: 890-2043-20
Matrix: Solid
Date Collected: 03/02/22 15:12
Date Received: 03/03/22 16:03
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 13:02	03/09/22 06:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 06:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 06:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 06:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/07/22 13:02	03/09/22 06:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/07/22 13:02	03/09/22 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/07/22 13:02*	*03/09/22 06:33*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/07/22 13:02*	*03/09/22 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			03/06/22 20:58	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			03/07/22 21:40	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 15:14	03/07/22 20:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 20:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/04/22 15:14*	*03/07/22 20:28*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/04/22 15:14*	*03/07/22 20:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2050		24.9		mg/Kg			03/09/22 23:32	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS85

Lab Sample ID: 890-2043-21
Matrix: Solid
Date Collected: 03/02/22 15:15
Date Received: 03/03/22 16:03
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		03/08/22 08:59	03/08/22 22:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 22:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 22:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/08/22 08:59	03/08/22 22:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 22:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/08/22 08:59	03/08/22 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/08/22 08:59*	*03/08/22 22:33*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/08/22 08:59*	*03/08/22 22:33*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 15:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 15:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/04/22 15:11*	*03/08/22 15:41*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/04/22 15:11*	*03/08/22 15:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**514**		24.8		mg/Kg			03/09/22 23:41	5

Client Sample ID: FS86

Lab Sample ID: 890-2043-22
Matrix: Solid
Date Collected: 03/02/22 15:17
Date Received: 03/03/22 16:03
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		03/08/22 08:59	03/08/22 22:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/08/22 08:59	03/08/22 22:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/08/22 08:59	03/08/22 22:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/08/22 08:59	03/08/22 22:53	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/08/22 08:59	03/08/22 22:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/08/22 08:59	03/08/22 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/08/22 08:59*	*03/08/22 22:53*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS86

Lab Sample ID: 890-2043-22
Matrix: Solid
Date Collected: 03/02/22 15:17
Date Received: 03/03/22 16:03
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*	*03/08/22 08:59*	*03/08/22 22:53*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 16:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 16:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*105*		*70 - 130*	*03/04/22 15:11*	*03/08/22 16:01*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/04/22 15:11*	*03/08/22 16:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**567**		24.8		mg/Kg			03/09/22 23:51	5

Client Sample ID: FS87

Lab Sample ID: 890-2043-23
Matrix: Solid
Date Collected: 03/02/22 15:20
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/05/22 23:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/22 12:37	03/05/22 23:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/22 12:37	03/05/22 23:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/22 12:37	03/05/22 23:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/22 12:37	03/05/22 23:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/22 12:37	03/05/22 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*03/04/22 12:37*	*03/05/22 23:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/22 12:37*	*03/05/22 23:24*	*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			03/06/22 20:58	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			03/07/22 21:40	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS87

Lab Sample ID: 890-2043-23
Matrix: Solid
Date Collected: 03/02/22 15:20
Date Received: 03/03/22 16:03
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 15:11	03/08/22 16:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 16:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*03/04/22 15:11*	*03/08/22 16:22*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/04/22 15:11*	*03/08/22 16:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**406**		4.95		mg/Kg			03/11/22 08:59	1

Client Sample ID: FS88

Lab Sample ID: 890-2043-24
Matrix: Solid
Date Collected: 03/02/22 15:25
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/05/22 23:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 23:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 23:45	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/22 12:37	03/05/22 23:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 23:45	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/22 12:37	03/05/22 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/22 12:37*	*03/05/22 23:45*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/22 12:37*	*03/05/22 23:45*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 16:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 16:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*03/04/22 15:11*	*03/08/22 16:42*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/04/22 15:11*	*03/08/22 16:42*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS88

Lab Sample ID: 890-2043-24
Matrix: Solid
Date Collected: 03/02/22 15:25
Date Received: 03/03/22 16:03
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	222		5.00		mg/Kg			03/11/22 09:05	1

Client Sample ID: FS89

Lab Sample ID: 890-2043-25
Matrix: Solid
Date Collected: 03/02/22 15:30
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 01:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 01:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 01:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 01:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 01:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/22 12:37*	*03/06/22 01:06*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:37*	*03/06/22 01:06*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 17:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 17:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/04/22 15:11*	*03/08/22 17:23*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/04/22 15:11*	*03/08/22 17:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7300		49.8		mg/Kg			03/10/22 00:18	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS90

Lab Sample ID: 890-2043-26
Matrix: Solid
Date Collected: 03/02/22 15:32
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 01:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 12:37	03/06/22 01:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 12:37	03/06/22 01:27	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/04/22 12:37	03/06/22 01:27	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 12:37	03/06/22 01:27	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/04/22 12:37	03/06/22 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/22 12:37*	*03/06/22 01:27*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:37*	*03/06/22 01:27*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:11	03/08/22 17:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:11	03/08/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*03/04/22 15:11*	*03/08/22 17:44*	*1*
o-Terphenyl	*85*		*70 - 130*	*03/04/22 15:11*	*03/08/22 17:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1040**		24.8		mg/Kg			03/09/22 10:15	5

Client Sample ID: FS91

Lab Sample ID: 890-2043-27
Matrix: Solid
Date Collected: 03/02/22 15:35
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 01:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 01:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 01:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 01:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 01:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/22 12:37*	*03/06/22 01:47*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS91

Lab Sample ID: 890-2043-27
Matrix: Solid
Date Collected: 03/02/22 15:35
Date Received: 03/03/22 16:03
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*	*03/04/22 12:37*	*03/06/22 01:47*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 18:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 18:05	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*93*		*70 - 130*	*03/04/22 15:11*	*03/08/22 18:05*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/04/22 15:11*	*03/08/22 18:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**516**		25.2		mg/Kg			03/09/22 10:24	5

Client Sample ID: FS92

Lab Sample ID: 890-2043-28
Matrix: Solid
Date Collected: 03/02/22 15:37
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 02:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 02:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 02:08	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/04/22 12:37	03/06/22 02:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 02:08	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/04/22 12:37	03/06/22 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/04/22 12:37*	*03/06/22 02:08*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:37*	*03/06/22 02:08*	*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			03/06/22 20:58	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			03/07/22 21:40	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS92

Lab Sample ID: 890-2043-28
Matrix: Solid
Date Collected: 03/02/22 15:37
Date Received: 03/03/22 16:03
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 15:11	03/08/22 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 18:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/04/22 15:11*	*03/08/22 18:25*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/04/22 15:11*	*03/08/22 18:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**427**		24.9		mg/Kg			03/10/22 11:43	5

Client Sample ID: FS93

Lab Sample ID: 890-2043-29
Matrix: Solid
Date Collected: 03/02/22 15:40
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 02:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 12:37	03/06/22 02:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 12:37	03/06/22 02:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/04/22 12:37	03/06/22 02:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 12:37	03/06/22 02:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/04/22 12:37	03/06/22 02:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/22 12:37*	*03/06/22 02:28*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/22 12:37*	*03/06/22 02:28*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 18:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:11	03/08/22 18:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:11	03/08/22 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/04/22 15:11*	*03/08/22 18:46*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/04/22 15:11*	*03/08/22 18:46*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS93

Lab Sample ID: 890-2043-29
Matrix: Solid
Date Collected: 03/02/22 15:40
Date Received: 03/03/22 16:03
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1630		24.9		mg/Kg			03/09/22 10:42	5

Client Sample ID: FS94

Lab Sample ID: 890-2043-30
Matrix: Solid
Date Collected: 03/02/22 15:45
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 02:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/04/22 12:37	03/06/22 02:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/04/22 12:37	03/06/22 02:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/04/22 12:37	03/06/22 02:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/04/22 12:37	03/06/22 02:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/04/22 12:37	03/06/22 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/04/22 12:37*	*03/06/22 02:48*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:37*	*03/06/22 02:48*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 19:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 19:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*03/04/22 15:11*	*03/08/22 19:06*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/04/22 15:11*	*03/08/22 19:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	365		25.0		mg/Kg			03/09/22 10:51	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS95

Lab Sample ID: 890-2043-31
Matrix: Solid
Date Collected: 03/02/22 15:47
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 03:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 03:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 03:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 03:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 03:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/04/22 12:37*	*03/06/22 03:09*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/22 12:37*	*03/06/22 03:09*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 19:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/04/22 15:11	03/08/22 19:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/04/22 15:11	03/08/22 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/04/22 15:11*	*03/08/22 19:27*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/04/22 15:11*	*03/08/22 19:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2020**		50.1		mg/Kg			03/09/22 11:17	10

Client Sample ID: FS96

Lab Sample ID: 890-2043-32
Matrix: Solid
Date Collected: 03/02/22 15:50
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 03:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 03:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 03:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/04/22 12:37	03/06/22 03:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 03:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/04/22 12:37	03/06/22 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/04/22 12:37*	*03/06/22 03:29*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS96

Lab Sample ID: 890-2043-32
Matrix: Solid
Date Collected: 03/02/22 15:50
Date Received: 03/03/22 16:03
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/04/22 12:37*	*03/06/22 03:29*	*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			03/06/22 20:58	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			03/07/22 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/04/22 15:11	03/08/22 19:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/04/22 15:11	03/08/22 19:47	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/04/22 15:11	03/08/22 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*95*		*70 - 130*	*03/04/22 15:11*	*03/08/22 19:47*	*1*
o-Terphenyl	*92*		*70 - 130*	*03/04/22 15:11*	*03/08/22 19:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**378**		4.99		mg/Kg			03/09/22 13:12	1

Client Sample ID: FS97

Lab Sample ID: 890-2043-33
Matrix: Solid
Date Collected: 03/02/22 15:52
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 03:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 03:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 03:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 03:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/04/22 12:37	03/06/22 03:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/04/22 12:37	03/06/22 03:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/04/22 12:37*	*03/06/22 03:50*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/22 12:37*	*03/06/22 03:50*	*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			03/06/22 20:58	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			03/07/22 21:40	1

Eurofins Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS97

Lab Sample ID: 890-2043-33
Matrix: Solid
Date Collected: 03/02/22 15:52
Date Received: 03/03/22 16:03
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 15:11	03/08/22 20:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 20:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/04/22 15:11*	*03/08/22 20:08*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/04/22 15:11*	*03/08/22 20:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**943**		24.9		mg/Kg			03/09/22 11:53	5

Client Sample ID: FS98

Lab Sample ID: 890-2043-34
Matrix: Solid
Date Collected: 03/02/22 15:55
Date Received: 03/03/22 16:03
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		03/04/22 12:37	03/06/22 04:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 04:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 04:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/04/22 12:37	03/06/22 04:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/06/22 04:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/04/22 12:37	03/06/22 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/04/22 12:37*	*03/06/22 04:10*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/04/22 12:37*	*03/06/22 04:10*	*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			03/06/22 20:58	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			03/07/22 21:40	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 15:11	03/08/22 20:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 20:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/04/22 15:11*	*03/08/22 20:28*	*1*
o-Terphenyl	*94*		*70 - 130*	*03/04/22 15:11*	*03/08/22 20:28*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS98

Lab Sample ID: 890-2043-34
Matrix: Solid
Date Collected: 03/02/22 15:55
Date Received: 03/03/22 16:03
Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2290		99.4		mg/Kg			03/09/22 12:02	20

Client Sample ID: FS99

Lab Sample ID: 890-2043-35
Matrix: Solid
Date Collected: 03/02/22 16:00
Date Received: 03/03/22 16:03
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		03/08/22 08:59	03/08/22 23:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 23:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 23:14	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/08/22 08:59	03/08/22 23:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 23:14	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/08/22 08:59	03/08/22 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/08/22 08:59*	*03/08/22 23:14*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/08/22 08:59*	*03/08/22 23:14*	*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			03/06/22 20:58	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			03/07/22 21:40	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		03/08/22 08:38	03/09/22 00:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		03/08/22 08:38	03/09/22 00:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/08/22 08:38	03/09/22 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/08/22 08:38*	*03/09/22 00:22*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/08/22 08:38*	*03/09/22 00:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2410		99.0		mg/Kg			03/09/22 12:10	20

Client Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS100

Date Collected: 03/02/22 00:00
Date Received: 03/03/22 16:03
Sample Depth: 4

Lab Sample ID: 890-2043-36

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		03/08/22 08:59	03/08/22 23:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 23:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 23:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/08/22 08:59	03/08/22 23:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 23:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/08/22 08:59	03/08/22 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/08/22 08:59*	*03/08/22 23:34*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/08/22 08:59*	*03/08/22 23:34*	*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			03/06/22 20:58	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			03/07/22 21:40	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 14:54	03/06/22 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 14:54	03/06/22 19:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:54	03/06/22 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/04/22 14:54*	*03/06/22 19:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/04/22 14:54*	*03/06/22 19:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1190**		49.5		mg/Kg			03/09/22 12:19	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11926-A-3-D MS	Matrix Spike	101	101
880-11926-A-3-E MSD	Matrix Spike Duplicate	104	102
880-12112-A-1-C MSD	Matrix Spike Duplicate	105	102
880-12112-A-1-D MS	Matrix Spike	102	101
890-2043-1	SW11	111	100
890-2043-1 MS	SW11	103	100
890-2043-1 MSD	SW11	107	92
890-2043-2	SW12	107	100
890-2043-3	SW13	109	102
890-2043-4	SW14	71	109
890-2043-5	SW15	106	96
890-2043-6	SW16	108	101
890-2043-7	SW17	108	100
890-2043-8	SW18	106	100
890-2043-9	SW19	106	96
890-2043-10	SW20	107	96
890-2043-11	FS75	109	99
890-2043-12	FS76	109	90
890-2043-13	FS77	111	101
890-2043-14	FS78	105	97
890-2043-15	FS79	103	97
890-2043-16	FS80	108	99
890-2043-17	FS81	109	101
890-2043-18	FS82	113	104
890-2043-19	FS83	107	101
890-2043-20	FS84	106	98
890-2043-21	FS85	110	102
890-2043-22	FS86	110	98
890-2043-23	FS87	116	97
890-2043-24	FS88	106	97
890-2043-25	FS89	106	99
890-2043-26	FS90	106	99
890-2043-27	FS91	106	98
890-2043-28	FS92	105	99
890-2043-29	FS93	106	98
890-2043-30	FS94	108	99
890-2043-31	FS95	109	98
890-2043-32	FS96	114	90
890-2043-33	FS97	106	97
890-2043-34	FS98	107	99
890-2043-35	FS99	105	104
890-2043-36	FS100	109	103
LCS 880-20904/1-A	Lab Control Sample	102	91
LCS 880-20914/1-A	Lab Control Sample	101	101
LCS 880-21114/1-A	Lab Control Sample	97	101
LCSD 880-20904/2-A	Lab Control Sample Dup	100	102
LCSD 880-20914/2-A	Lab Control Sample Dup	102	101
LCSD 880-21114/2-A	Lab Control Sample Dup	96	98
MB 880-20683/5-A	Method Blank	100	94

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2043-1
Project/Site: RDX 28-12 SDG: 31403360.007

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
MB 880-20786/5-A	Method Blank	105	94
MB 880-20904/5-A	Method Blank	91	93
MB 880-20914/5-A	Method Blank	100	94
MB 880-21114/5-A	Method Blank	98	98

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**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
820-3565-A-1-C MS	Matrix Spike	96	76
820-3565-A-1-D MSD	Matrix Spike Duplicate	97	79
880-12049-A-1-F MS	Matrix Spike	117	107
880-12049-A-1-G MSD	Matrix Spike Duplicate	114	104
880-12068-A-1-C MS	Matrix Spike	102	94
880-12068-A-1-D MSD	Matrix Spike Duplicate	116	108
890-2043-1	SW11	94	88
890-2043-1 MS	SW11	124	108
890-2043-1 MSD	SW11	111	91
890-2043-2	SW12	107	99
890-2043-3	SW13	111	107
890-2043-4	SW14	91	86
890-2043-5	SW15	92	90
890-2043-6	SW16	95	94
890-2043-7	SW17	91	89
890-2043-8	SW18	90	93
890-2043-9	SW19	110	110
890-2043-10	SW20	109	112
890-2043-11	FS75	86	84
890-2043-12	FS76	89	86
890-2043-13	FS77	107	111
890-2043-14	FS78	90	93
890-2043-15	FS79	103	105
890-2043-16	FS80	90	93
890-2043-17	FS81	102	101
890-2043-18	FS82	107	109
890-2043-19	FS83	92	88
890-2043-20	FS84	96	93
890-2043-21	FS85	106	101
890-2043-22	FS86	105	107
890-2043-23	FS87	95	90
890-2043-24	FS88	95	95
890-2043-25	FS89	100	101
890-2043-26	FS90	83	85
890-2043-27	FS91	93	90
890-2043-28	FS92	103	102

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2043-1
Project/Site: RDX 28-12 SDG: 31403360.007

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2043-29	FS93	94	94
890-2043-30	FS94	115	115
890-2043-31	FS95	98	96
890-2043-32	FS96	95	92
890-2043-33	FS97	96	94
890-2043-34	FS98	93	94
890-2043-35	FS99	93	95
890-2043-36	FS100	98	95
LCS 880-20922/2-A	Lab Control Sample	110	107
LCS 880-20927/2-A	Lab Control Sample	104	91
LCSD 880-20922/3-A	Lab Control Sample Dup	115	105
LCSD 880-20927/3-A	Lab Control Sample Dup	115	101
MB 880-20922/1-A	Method Blank	123	139 S1+
MB 880-20927/1-A	Method Blank	107	111

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-20926/2-A	Lab Control Sample	115	141 S1+
LCS 880-21111/2-A	Lab Control Sample	125	142 S1+
LCSD 880-20926/3-A	Lab Control Sample Dup	115	135 S1+
LCSD 880-21111/3-A	Lab Control Sample Dup	122	141 S1+
MB 880-20926/1-A	Method Blank	108	113
MB 880-21111/1-A	Method Blank	109	115

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20683/5-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 13:00	03/05/22 09:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/22 13:00	03/05/22 09:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/02/22 13:00*	*03/05/22 09:22*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/02/22 13:00*	*03/05/22 09:22*	*1*

Lab Sample ID: MB 880-20786/5-A
Matrix: Solid
Analysis Batch: 21109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:30	03/08/22 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:30	03/08/22 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:30	03/08/22 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 08:30	03/08/22 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:30	03/08/22 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 08:30	03/08/22 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/08/22 08:30*	*03/08/22 11:43*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/08/22 08:30*	*03/08/22 11:43*	*1*

Lab Sample ID: MB 880-20904/5-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20904

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 20:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 20:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 20:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 12:37	03/05/22 20:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 12:37	03/05/22 20:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 12:37	03/05/22 20:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*03/04/22 12:37*	*03/05/22 20:18*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/04/22 12:37*	*03/05/22 20:18*	*1*

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: LCS 880-20904/1-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20904

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1101		mg/Kg		110	70 - 130		
Toluene			0.100	0.1095		mg/Kg		109	70 - 130		
Ethylbenzene			0.100	0.1070		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2204		mg/Kg		110	70 - 130		
o-Xylene			0.100	0.1079		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 880-20904/2-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20904

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1130		mg/Kg		113	70 - 130	3	35
Toluene			0.100	0.1091		mg/Kg		109	70 - 130	0	35
Ethylbenzene			0.100	0.1064		mg/Kg		106	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2189		mg/Kg		109	70 - 130	1	35
o-Xylene			0.100	0.1075		mg/Kg		108	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-11926-A-3-D MS
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20904

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.0990	0.09366		mg/Kg		95	70 - 130		
Toluene	<0.00198	U	0.0990	0.08959		mg/Kg		90	70 - 130		
Ethylbenzene	<0.00198	U	0.0990	0.08838		mg/Kg		89	70 - 130		
m-Xylene & p-Xylene	<0.00396	U	0.198	0.1829		mg/Kg		92	70 - 130		
o-Xylene	<0.00198	U	0.0990	0.08986		mg/Kg		91	70 - 130		

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

Lab Sample ID: 880-11926-A-3-E MSD
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20904

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0994	0.07872		mg/Kg		79	70 - 130	17	35
Toluene	<0.00198	U	0.0994	0.07646		mg/Kg		76	70 - 130	16	35
Ethylbenzene	<0.00198	U	0.0994	0.07636		mg/Kg		77	70 - 130	15	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: 880-11926-A-3-E MSD
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20904

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00396	U	0.199	0.1589		mg/Kg		80	70 - 130	14	35
o-Xylene	<0.00198	U	0.0994	0.07905		mg/Kg		80	70 - 130	13	35

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

Lab Sample ID: MB 880-20914/5-A
Matrix: Solid
Analysis Batch: 21109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 22:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 22:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 22:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/08/22 22:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/07/22 13:02	03/08/22 22:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/07/22 13:02	03/08/22 22:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/07/22 13:02*	*03/08/22 22:36*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/07/22 13:02*	*03/08/22 22:36*	*1*

Lab Sample ID: LCS 880-20914/1-A
Matrix: Solid
Analysis Batch: 21109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1040		mg/Kg		104	70 - 130
Toluene	0.100	0.09961		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.09682		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2000		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09747		mg/Kg		97	70 - 130

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

Lab Sample ID: LCSD 880-20914/2-A
Matrix: Solid
Analysis Batch: 21109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20914

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1080		mg/Kg		108	70 - 130	4	35
Toluene	0.100	0.1031		mg/Kg		103	70 - 130	3	35
Ethylbenzene	0.100	0.1012		mg/Kg		101	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2090		mg/Kg		105	70 - 130	4	35
o-Xylene	0.100	0.1020		mg/Kg		102	70 - 130	5	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

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

Lab Sample ID: 890-2043-1 MS — **Client Sample ID: SW11**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21109 — **Prep Batch: 20914**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U	0.101	0.07410		mg/Kg		74	70 - 130
Toluene	<0.00198	U	0.101	0.07167		mg/Kg		71	70 - 130
Ethylbenzene	<0.00198	U F1	0.101	0.06884	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00397	U	0.201	0.1441		mg/Kg		72	70 - 130
o-Xylene	<0.00198	U	0.101	0.07266		mg/Kg		72	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-2043-1 MSD — **Client Sample ID: SW11**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21109 — **Prep Batch: 20914**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0990	0.09945		mg/Kg		100	70 - 130	29	35
Toluene	<0.00198	U	0.0990	0.09743		mg/Kg		98	70 - 130	30	35
Ethylbenzene	<0.00198	U F1	0.0990	0.09417		mg/Kg		95	70 - 130	31	35
m-Xylene & p-Xylene	<0.00397	U	0.198	0.1938		mg/Kg		98	70 - 130	29	35
o-Xylene	<0.00198	U	0.0990	0.09471		mg/Kg		96	70 - 130	26	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: MB 880-21114/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21110 — **Prep Batch: 21114**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/22 08:59	03/08/22 15:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/22 08:59	03/08/22 15:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/08/22 08:59	03/08/22 15:07	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/08/22 08:59	03/08/22 15:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: LCS 880-21114/1-A
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21114

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1005		mg/Kg		101	70 - 130		
Toluene			0.100	0.09834		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.09830		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.2302		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1115		mg/Kg		111	70 - 130		

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

Lab Sample ID: LCSD 880-21114/2-A
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21114

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09654		mg/Kg		97	70 - 130	4	35
Toluene			0.100	0.09767		mg/Kg		98	70 - 130	1	35
Ethylbenzene			0.100	0.09749		mg/Kg		97	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2285		mg/Kg		114	70 - 130	1	35
o-Xylene			0.100	0.1112		mg/Kg		111	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-12112-A-1-C MSD
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21114

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.09620		mg/Kg					
Toluene	0.00280		0.100	0.08505		mg/Kg					
Ethylbenzene	0.00736		0.100	0.07556		mg/Kg					
m-Xylene & p-Xylene	0.0251		0.201	0.1742		mg/Kg					
o-Xylene	0.0134		0.100	0.08581		mg/Kg					

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

Lab Sample ID: 880-12112-A-1-D MS
Matrix: Solid
Analysis Batch: 21110

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21114

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-20922/1-A
Matrix: Solid
Analysis Batch: 20971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20922

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 14:54	03/06/22 11:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 14:54	03/06/22 11:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 14:54	03/06/22 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*03/04/22 14:54*	*03/06/22 11:11*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*03/04/22 14:54*	*03/06/22 11:11*	*1*

Lab Sample ID: LCS 880-20922/2-A
Matrix: Solid
Analysis Batch: 20971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1146		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1000		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: LCSD 880-20922/3-A
Matrix: Solid
Analysis Batch: 20971

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20922

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1195		mg/Kg		119	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1015		mg/Kg		101	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: 820-3565-A-1-C MS
Matrix: Solid
Analysis Batch: 20971

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20922

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	972.6		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1040		mg/Kg		102	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: 820-3565-A-1-C MS
Matrix: Solid
Analysis Batch: 20971

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20922

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	76		70 - 130

Lab Sample ID: 820-3565-A-1-D MSD
Matrix: Solid
Analysis Batch: 20971

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20922

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	992.0		mg/Kg		99	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1073		mg/Kg		105	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: MB 880-20926/1-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20926

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 15:11	03/08/22 11:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 11:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:11	03/08/22 11:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	03/04/22 15:11	03/08/22 11:57	1
o-Terphenyl	113		70 - 130	03/04/22 15:11	03/08/22 11:57	1

Lab Sample ID: LCS 880-20926/2-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	791.4		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1293		mg/Kg		129	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	141	S1+	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: LCSD 880-20926/3-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20926

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	858.9		mg/Kg		86	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	1253		mg/Kg		125	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*135*	*S1+*	*70 - 130*

Lab Sample ID: 880-12049-A-1-F MS
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20926

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 F2	1000	844.6		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	90.3		1000	1097		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: 880-12049-A-1-G MSD
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20926

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 F2	998	1138	F2	mg/Kg		114	70 - 130	30	20
Diesel Range Organics (Over C10-C28)	90.3		998	1085		mg/Kg		100	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: MB 880-20927/1-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20927

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 15:14	03/07/22 11:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 11:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/04/22 15:14	03/07/22 11:45	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: MB 880-20927/1-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20927

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	03/04/22 15:14	03/07/22 11:45	1
o-Terphenyl	111		70 - 130	03/04/22 15:14	03/07/22 11:45	1

Lab Sample ID: LCS 880-20927/2-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20927

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1182		mg/Kg		118	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	894.1		mg/Kg		89	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-20927/3-A
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20927

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1284		mg/Kg		128	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	990.1		mg/Kg		99	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-2043-1 MS
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: SW11
Prep Type: Total/NA
Prep Batch: 20927

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 F1	1000	1397	F1	mg/Kg		136	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1068		mg/Kg		103	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	108		70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: 890-2043-1 MSD
Matrix: Solid
Analysis Batch: 21016

Client Sample ID: SW11
Prep Type: Total/NA
Prep Batch: 20927

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 F1	998	1348	F1	mg/Kg		132	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	903.6		mg/Kg		87	70 - 130	17	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: MB 880-21111/1-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21111

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		03/08/22 08:38	03/08/22 21:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/08/22 08:38	03/08/22 21:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/08/22 08:38	03/08/22 21:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/08/22 08:38*	*03/08/22 21:10*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/08/22 08:38*	*03/08/22 21:10*	*1*

Lab Sample ID: LCS 880-21111/2-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21111

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	809.6		mg/Kg		81	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1347	*+	mg/Kg		135	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*125*		*70 - 130*
o-Terphenyl	*142*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-21111/3-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21111

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	813.6		mg/Kg		81	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1330	*+	mg/Kg		133	70 - 130	1	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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

Lab Sample ID: LCSD 880-21111/3-A
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21111

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	141	S1+	70 - 130

Lab Sample ID: 880-12068-A-1-C MS
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F2	998	910.0		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U *+	998	918.3		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-12068-A-1-D MSD
Matrix: Solid
Analysis Batch: 21120

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21111

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	<49.8	U F2	998	1152	F2	mg/Kg		115	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	<49.8	U *+	998	1064		mg/Kg		105	70 - 130	15	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	108		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21024/1-A
Matrix: Solid
Analysis Batch: 21138

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 19:44	1

Lab Sample ID: LCS 880-21024/2-A
Matrix: Solid
Analysis Batch: 21138

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	237.1		mg/Kg		95	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-21024/3-A
Matrix: Solid
Analysis Batch: 21138

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	264.9		mg/Kg		106	90 - 110	11	20

Lab Sample ID: 890-2043-6 MS
Matrix: Solid
Analysis Batch: 21138

Client Sample ID: SW16
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.2		250	276.7		mg/Kg		104	90 - 110

Lab Sample ID: 890-2043-6 MSD
Matrix: Solid
Analysis Batch: 21138

Client Sample ID: SW16
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16.2		250	284.0		mg/Kg		107	90 - 110	3	20

Lab Sample ID: 890-2043-16 MS
Matrix: Solid
Analysis Batch: 21138

Client Sample ID: FS80
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2060		1250	3313		mg/Kg		100	90 - 110

Lab Sample ID: 890-2043-16 MSD
Matrix: Solid
Analysis Batch: 21138

Client Sample ID: FS80
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2060		1250	3393		mg/Kg		107	90 - 110	2	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

QC Sample Results

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2043-30 MS
Matrix: Solid
Analysis Batch: 21139

Client Sample ID: FS94
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	365		1250	1607		mg/Kg		99	90 - 110

Lab Sample ID: 890-2043-30 MSD
Matrix: Solid
Analysis Batch: 21139

Client Sample ID: FS94
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	365		1250	1625		mg/Kg		101	90 - 110	1	20

Lab Sample ID: MB 880-21027/1-A
Matrix: Solid
Analysis Batch: 21142

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 19:43	1

Lab Sample ID: LCS 880-21027/2-A
Matrix: Solid
Analysis Batch: 21142

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.3		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-21027/3-A
Matrix: Solid
Analysis Batch: 21142

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	243.9		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-2042-A-4-E MS
Matrix: Solid
Analysis Batch: 21142

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19.2		250	290.8		mg/Kg		109	90 - 110

Lab Sample ID: 890-2042-A-4-F MSD
Matrix: Solid
Analysis Batch: 21142

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19.2		250	275.2		mg/Kg		103	90 - 110	5	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC VOA

Prep Batch: 20683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20683/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 20786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20786/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 20854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-23	FS87	Total/NA	Solid	8021B	20904
890-2043-24	FS88	Total/NA	Solid	8021B	20904
890-2043-25	FS89	Total/NA	Solid	8021B	20904
890-2043-26	FS90	Total/NA	Solid	8021B	20904
890-2043-27	FS91	Total/NA	Solid	8021B	20904
890-2043-28	FS92	Total/NA	Solid	8021B	20904
890-2043-29	FS93	Total/NA	Solid	8021B	20904
890-2043-30	FS94	Total/NA	Solid	8021B	20904
890-2043-31	FS95	Total/NA	Solid	8021B	20904
890-2043-32	FS96	Total/NA	Solid	8021B	20904
890-2043-33	FS97	Total/NA	Solid	8021B	20904
890-2043-34	FS98	Total/NA	Solid	8021B	20904
MB 880-20683/5-A	Method Blank	Total/NA	Solid	8021B	20683
MB 880-20904/5-A	Method Blank	Total/NA	Solid	8021B	20904
LCS 880-20904/1-A	Lab Control Sample	Total/NA	Solid	8021B	20904
LCSD 880-20904/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20904
880-11926-A-3-D MS	Matrix Spike	Total/NA	Solid	8021B	20904
880-11926-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20904

Prep Batch: 20904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-23	FS87	Total/NA	Solid	5035	
890-2043-24	FS88	Total/NA	Solid	5035	
890-2043-25	FS89	Total/NA	Solid	5035	
890-2043-26	FS90	Total/NA	Solid	5035	
890-2043-27	FS91	Total/NA	Solid	5035	
890-2043-28	FS92	Total/NA	Solid	5035	
890-2043-29	FS93	Total/NA	Solid	5035	
890-2043-30	FS94	Total/NA	Solid	5035	
890-2043-31	FS95	Total/NA	Solid	5035	
890-2043-32	FS96	Total/NA	Solid	5035	
890-2043-33	FS97	Total/NA	Solid	5035	
890-2043-34	FS98	Total/NA	Solid	5035	
MB 880-20904/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20904/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20904/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11926-A-3-D MS	Matrix Spike	Total/NA	Solid	5035	
880-11926-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 20914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Total/NA	Solid	5035	
890-2043-2	SW12	Total/NA	Solid	5035	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC VOA (Continued)

Prep Batch: 20914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-3	SW13	Total/NA	Solid	5035	
890-2043-4	SW14	Total/NA	Solid	5035	
890-2043-5	SW15	Total/NA	Solid	5035	
890-2043-6	SW16	Total/NA	Solid	5035	
890-2043-7	SW17	Total/NA	Solid	5035	
890-2043-8	SW18	Total/NA	Solid	5035	
890-2043-9	SW19	Total/NA	Solid	5035	
890-2043-10	SW20	Total/NA	Solid	5035	
890-2043-11	FS75	Total/NA	Solid	5035	
890-2043-12	FS76	Total/NA	Solid	5035	
890-2043-13	FS77	Total/NA	Solid	5035	
890-2043-14	FS78	Total/NA	Solid	5035	
890-2043-15	FS79	Total/NA	Solid	5035	
890-2043-16	FS80	Total/NA	Solid	5035	
890-2043-17	FS81	Total/NA	Solid	5035	
890-2043-18	FS82	Total/NA	Solid	5035	
890-2043-19	FS83	Total/NA	Solid	5035	
890-2043-20	FS84	Total/NA	Solid	5035	
MB 880-20914/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20914/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20914/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2043-1 MS	SW11	Total/NA	Solid	5035	
890-2043-1 MSD	SW11	Total/NA	Solid	5035	

Analysis Batch: 21001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Total/NA	Solid	Total BTEX	
890-2043-2	SW12	Total/NA	Solid	Total BTEX	
890-2043-3	SW13	Total/NA	Solid	Total BTEX	
890-2043-4	SW14	Total/NA	Solid	Total BTEX	
890-2043-5	SW15	Total/NA	Solid	Total BTEX	
890-2043-6	SW16	Total/NA	Solid	Total BTEX	
890-2043-7	SW17	Total/NA	Solid	Total BTEX	
890-2043-8	SW18	Total/NA	Solid	Total BTEX	
890-2043-9	SW19	Total/NA	Solid	Total BTEX	
890-2043-10	SW20	Total/NA	Solid	Total BTEX	
890-2043-11	FS75	Total/NA	Solid	Total BTEX	
890-2043-12	FS76	Total/NA	Solid	Total BTEX	
890-2043-13	FS77	Total/NA	Solid	Total BTEX	
890-2043-14	FS78	Total/NA	Solid	Total BTEX	
890-2043-15	FS79	Total/NA	Solid	Total BTEX	
890-2043-16	FS80	Total/NA	Solid	Total BTEX	
890-2043-17	FS81	Total/NA	Solid	Total BTEX	
890-2043-18	FS82	Total/NA	Solid	Total BTEX	
890-2043-19	FS83	Total/NA	Solid	Total BTEX	
890-2043-20	FS84	Total/NA	Solid	Total BTEX	
890-2043-21	FS85	Total/NA	Solid	Total BTEX	
890-2043-22	FS86	Total/NA	Solid	Total BTEX	
890-2043-23	FS87	Total/NA	Solid	Total BTEX	
890-2043-24	FS88	Total/NA	Solid	Total BTEX	
890-2043-25	FS89	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC VOA (Continued)

Analysis Batch: 21001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-26	FS90	Total/NA	Solid	Total BTEX	
890-2043-27	FS91	Total/NA	Solid	Total BTEX	
890-2043-28	FS92	Total/NA	Solid	Total BTEX	
890-2043-29	FS93	Total/NA	Solid	Total BTEX	
890-2043-30	FS94	Total/NA	Solid	Total BTEX	
890-2043-31	FS95	Total/NA	Solid	Total BTEX	
890-2043-32	FS96	Total/NA	Solid	Total BTEX	
890-2043-33	FS97	Total/NA	Solid	Total BTEX	
890-2043-34	FS98	Total/NA	Solid	Total BTEX	
890-2043-35	FS99	Total/NA	Solid	Total BTEX	
890-2043-36	FS100	Total/NA	Solid	Total BTEX	

Analysis Batch: 21109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Total/NA	Solid	8021B	20914
890-2043-2	SW12	Total/NA	Solid	8021B	20914
890-2043-3	SW13	Total/NA	Solid	8021B	20914
890-2043-4	SW14	Total/NA	Solid	8021B	20914
890-2043-5	SW15	Total/NA	Solid	8021B	20914
890-2043-6	SW16	Total/NA	Solid	8021B	20914
890-2043-7	SW17	Total/NA	Solid	8021B	20914
890-2043-8	SW18	Total/NA	Solid	8021B	20914
890-2043-9	SW19	Total/NA	Solid	8021B	20914
890-2043-10	SW20	Total/NA	Solid	8021B	20914
890-2043-11	FS75	Total/NA	Solid	8021B	20914
890-2043-12	FS76	Total/NA	Solid	8021B	20914
890-2043-13	FS77	Total/NA	Solid	8021B	20914
890-2043-14	FS78	Total/NA	Solid	8021B	20914
890-2043-15	FS79	Total/NA	Solid	8021B	20914
890-2043-16	FS80	Total/NA	Solid	8021B	20914
890-2043-17	FS81	Total/NA	Solid	8021B	20914
890-2043-18	FS82	Total/NA	Solid	8021B	20914
890-2043-19	FS83	Total/NA	Solid	8021B	20914
890-2043-20	FS84	Total/NA	Solid	8021B	20914
MB 880-20786/5-A	Method Blank	Total/NA	Solid	8021B	20786
MB 880-20914/5-A	Method Blank	Total/NA	Solid	8021B	20914
LCS 880-20914/1-A	Lab Control Sample	Total/NA	Solid	8021B	20914
LCSD 880-20914/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20914
890-2043-1 MS	SW11	Total/NA	Solid	8021B	20914
890-2043-1 MSD	SW11	Total/NA	Solid	8021B	20914

Analysis Batch: 21110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-21	FS85	Total/NA	Solid	8021B	21114
890-2043-22	FS86	Total/NA	Solid	8021B	21114
890-2043-35	FS99	Total/NA	Solid	8021B	21114
890-2043-36	FS100	Total/NA	Solid	8021B	21114
MB 880-21114/5-A	Method Blank	Total/NA	Solid	8021B	21114
LCS 880-21114/1-A	Lab Control Sample	Total/NA	Solid	8021B	21114
LCSD 880-21114/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21114
880-12112-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21114

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC VOA (Continued)

Analysis Batch: 21110 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12112-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	21114

Prep Batch: 21114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-21	FS85	Total/NA	Solid	5035	
890-2043-22	FS86	Total/NA	Solid	5035	
890-2043-35	FS99	Total/NA	Solid	5035	
890-2043-36	FS100	Total/NA	Solid	5035	
MB 880-21114/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21114/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21114/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12112-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
880-12112-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 20922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-36	FS100	Total/NA	Solid	8015NM Prep	
MB 880-20922/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20922/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20922/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-3565-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-3565-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 20926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-21	FS85	Total/NA	Solid	8015NM Prep	
890-2043-22	FS86	Total/NA	Solid	8015NM Prep	
890-2043-23	FS87	Total/NA	Solid	8015NM Prep	
890-2043-24	FS88	Total/NA	Solid	8015NM Prep	
890-2043-25	FS89	Total/NA	Solid	8015NM Prep	
890-2043-26	FS90	Total/NA	Solid	8015NM Prep	
890-2043-27	FS91	Total/NA	Solid	8015NM Prep	
890-2043-28	FS92	Total/NA	Solid	8015NM Prep	
890-2043-29	FS93	Total/NA	Solid	8015NM Prep	
890-2043-30	FS94	Total/NA	Solid	8015NM Prep	
890-2043-31	FS95	Total/NA	Solid	8015NM Prep	
890-2043-32	FS96	Total/NA	Solid	8015NM Prep	
890-2043-33	FS97	Total/NA	Solid	8015NM Prep	
890-2043-34	FS98	Total/NA	Solid	8015NM Prep	
MB 880-20926/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20926/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12049-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12049-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 20927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Total/NA	Solid	8015NM Prep	
890-2043-2	SW12	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC Semi VOA (Continued)

Prep Batch: 20927 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-3	SW13	Total/NA	Solid	8015NM Prep	
890-2043-4	SW14	Total/NA	Solid	8015NM Prep	
890-2043-5	SW15	Total/NA	Solid	8015NM Prep	
890-2043-6	SW16	Total/NA	Solid	8015NM Prep	
890-2043-7	SW17	Total/NA	Solid	8015NM Prep	
890-2043-8	SW18	Total/NA	Solid	8015NM Prep	
890-2043-9	SW19	Total/NA	Solid	8015NM Prep	
890-2043-10	SW20	Total/NA	Solid	8015NM Prep	
890-2043-11	FS75	Total/NA	Solid	8015NM Prep	
890-2043-12	FS76	Total/NA	Solid	8015NM Prep	
890-2043-13	FS77	Total/NA	Solid	8015NM Prep	
890-2043-14	FS78	Total/NA	Solid	8015NM Prep	
890-2043-15	FS79	Total/NA	Solid	8015NM Prep	
890-2043-16	FS80	Total/NA	Solid	8015NM Prep	
890-2043-17	FS81	Total/NA	Solid	8015NM Prep	
890-2043-18	FS82	Total/NA	Solid	8015NM Prep	
890-2043-19	FS83	Total/NA	Solid	8015NM Prep	
890-2043-20	FS84	Total/NA	Solid	8015NM Prep	
MB 880-20927/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20927/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20927/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2043-1 MS	SW11	Total/NA	Solid	8015NM Prep	
890-2043-1 MSD	SW11	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-36	FS100	Total/NA	Solid	8015B NM	20922
MB 880-20922/1-A	Method Blank	Total/NA	Solid	8015B NM	20922
LCS 880-20922/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20922
LCSD 880-20922/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20922
820-3565-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	20922
820-3565-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20922

Analysis Batch: 21016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Total/NA	Solid	8015B NM	20927
890-2043-2	SW12	Total/NA	Solid	8015B NM	20927
890-2043-3	SW13	Total/NA	Solid	8015B NM	20927
890-2043-4	SW14	Total/NA	Solid	8015B NM	20927
890-2043-5	SW15	Total/NA	Solid	8015B NM	20927
890-2043-6	SW16	Total/NA	Solid	8015B NM	20927
890-2043-7	SW17	Total/NA	Solid	8015B NM	20927
890-2043-8	SW18	Total/NA	Solid	8015B NM	20927
890-2043-9	SW19	Total/NA	Solid	8015B NM	20927
890-2043-10	SW20	Total/NA	Solid	8015B NM	20927
890-2043-11	FS75	Total/NA	Solid	8015B NM	20927
890-2043-12	FS76	Total/NA	Solid	8015B NM	20927
890-2043-13	FS77	Total/NA	Solid	8015B NM	20927
890-2043-14	FS78	Total/NA	Solid	8015B NM	20927
890-2043-15	FS79	Total/NA	Solid	8015B NM	20927
890-2043-16	FS80	Total/NA	Solid	8015B NM	20927

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC Semi VOA (Continued)

Analysis Batch: 21016 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-17	FS81	Total/NA	Solid	8015B NM	20927
890-2043-18	FS82	Total/NA	Solid	8015B NM	20927
890-2043-19	FS83	Total/NA	Solid	8015B NM	20927
890-2043-20	FS84	Total/NA	Solid	8015B NM	20927
MB 880-20927/1-A	Method Blank	Total/NA	Solid	8015B NM	20927
LCS 880-20927/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20927
LCSD 880-20927/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20927
890-2043-1 MS	SW11	Total/NA	Solid	8015B NM	20927
890-2043-1 MSD	SW11	Total/NA	Solid	8015B NM	20927

Analysis Batch: 21078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Total/NA	Solid	8015 NM	
890-2043-2	SW12	Total/NA	Solid	8015 NM	
890-2043-3	SW13	Total/NA	Solid	8015 NM	
890-2043-4	SW14	Total/NA	Solid	8015 NM	
890-2043-5	SW15	Total/NA	Solid	8015 NM	
890-2043-6	SW16	Total/NA	Solid	8015 NM	
890-2043-7	SW17	Total/NA	Solid	8015 NM	
890-2043-8	SW18	Total/NA	Solid	8015 NM	
890-2043-9	SW19	Total/NA	Solid	8015 NM	
890-2043-10	SW20	Total/NA	Solid	8015 NM	
890-2043-11	FS75	Total/NA	Solid	8015 NM	
890-2043-12	FS76	Total/NA	Solid	8015 NM	
890-2043-13	FS77	Total/NA	Solid	8015 NM	
890-2043-14	FS78	Total/NA	Solid	8015 NM	
890-2043-15	FS79	Total/NA	Solid	8015 NM	
890-2043-16	FS80	Total/NA	Solid	8015 NM	
890-2043-17	FS81	Total/NA	Solid	8015 NM	
890-2043-18	FS82	Total/NA	Solid	8015 NM	
890-2043-19	FS83	Total/NA	Solid	8015 NM	
890-2043-20	FS84	Total/NA	Solid	8015 NM	
890-2043-21	FS85	Total/NA	Solid	8015 NM	
890-2043-22	FS86	Total/NA	Solid	8015 NM	
890-2043-23	FS87	Total/NA	Solid	8015 NM	
890-2043-24	FS88	Total/NA	Solid	8015 NM	
890-2043-25	FS89	Total/NA	Solid	8015 NM	
890-2043-26	FS90	Total/NA	Solid	8015 NM	
890-2043-27	FS91	Total/NA	Solid	8015 NM	
890-2043-28	FS92	Total/NA	Solid	8015 NM	
890-2043-29	FS93	Total/NA	Solid	8015 NM	
890-2043-30	FS94	Total/NA	Solid	8015 NM	
890-2043-31	FS95	Total/NA	Solid	8015 NM	
890-2043-32	FS96	Total/NA	Solid	8015 NM	
890-2043-33	FS97	Total/NA	Solid	8015 NM	
890-2043-34	FS98	Total/NA	Solid	8015 NM	
890-2043-35	FS99	Total/NA	Solid	8015 NM	
890-2043-36	FS100	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

GC Semi VOA

Prep Batch: 21111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-35	FS99	Total/NA	Solid	8015NM Prep	
MB 880-21111/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21111/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21111/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12068-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12068-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-21	FS85	Total/NA	Solid	8015B NM	20926
890-2043-22	FS86	Total/NA	Solid	8015B NM	20926
890-2043-23	FS87	Total/NA	Solid	8015B NM	20926
890-2043-24	FS88	Total/NA	Solid	8015B NM	20926
890-2043-25	FS89	Total/NA	Solid	8015B NM	20926
890-2043-26	FS90	Total/NA	Solid	8015B NM	20926
890-2043-27	FS91	Total/NA	Solid	8015B NM	20926
890-2043-28	FS92	Total/NA	Solid	8015B NM	20926
890-2043-29	FS93	Total/NA	Solid	8015B NM	20926
890-2043-30	FS94	Total/NA	Solid	8015B NM	20926
890-2043-31	FS95	Total/NA	Solid	8015B NM	20926
890-2043-32	FS96	Total/NA	Solid	8015B NM	20926
890-2043-33	FS97	Total/NA	Solid	8015B NM	20926
890-2043-34	FS98	Total/NA	Solid	8015B NM	20926
890-2043-35	FS99	Total/NA	Solid	8015B NM	21111
MB 880-20926/1-A	Method Blank	Total/NA	Solid	8015B NM	20926
MB 880-21111/1-A	Method Blank	Total/NA	Solid	8015B NM	21111
LCS 880-20926/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20926
LCS 880-21111/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21111
LCSD 880-20926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20926
LCSD 880-21111/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21111
880-12049-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	20926
880-12049-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20926
880-12068-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	21111
880-12068-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21111

HPLC/IC

Leach Batch: 21024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-6	SW16	Soluble	Solid	DI Leach	
890-2043-7	SW17	Soluble	Solid	DI Leach	
890-2043-8	SW18	Soluble	Solid	DI Leach	
890-2043-9	SW19	Soluble	Solid	DI Leach	
890-2043-10	SW20	Soluble	Solid	DI Leach	
890-2043-11	FS75	Soluble	Solid	DI Leach	
890-2043-12	FS76	Soluble	Solid	DI Leach	
890-2043-13	FS77	Soluble	Solid	DI Leach	
890-2043-14	FS78	Soluble	Solid	DI Leach	
890-2043-15	FS79	Soluble	Solid	DI Leach	
890-2043-16	FS80	Soluble	Solid	DI Leach	
890-2043-17	FS81	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

HPLC/IC (Continued)

Leach Batch: 21024 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-18	FS82	Soluble	Solid	DI Leach	
890-2043-19	FS83	Soluble	Solid	DI Leach	
890-2043-20	FS84	Soluble	Solid	DI Leach	
890-2043-21	FS85	Soluble	Solid	DI Leach	
890-2043-22	FS86	Soluble	Solid	DI Leach	
890-2043-23	FS87	Soluble	Solid	DI Leach	
890-2043-24	FS88	Soluble	Solid	DI Leach	
890-2043-25	FS89	Soluble	Solid	DI Leach	
MB 880-21024/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21024/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21024/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2043-6 MS	SW16	Soluble	Solid	DI Leach	
890-2043-6 MSD	SW16	Soluble	Solid	DI Leach	
890-2043-16 MS	FS80	Soluble	Solid	DI Leach	
890-2043-16 MSD	FS80	Soluble	Solid	DI Leach	

Leach Batch: 21025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-26	FS90	Soluble	Solid	DI Leach	
890-2043-27	FS91	Soluble	Solid	DI Leach	
890-2043-28	FS92	Soluble	Solid	DI Leach	
890-2043-29	FS93	Soluble	Solid	DI Leach	
890-2043-30	FS94	Soluble	Solid	DI Leach	
890-2043-31	FS95	Soluble	Solid	DI Leach	
890-2043-32	FS96	Soluble	Solid	DI Leach	
890-2043-33	FS97	Soluble	Solid	DI Leach	
890-2043-34	FS98	Soluble	Solid	DI Leach	
890-2043-35	FS99	Soluble	Solid	DI Leach	
890-2043-36	FS100	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	
890-2043-30 MS	FS94	Soluble	Solid	DI Leach	
890-2043-30 MSD	FS94	Soluble	Solid	DI Leach	

Leach Batch: 21027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Soluble	Solid	DI Leach	
890-2043-2	SW12	Soluble	Solid	DI Leach	
890-2043-3	SW13	Soluble	Solid	DI Leach	
890-2043-4	SW14	Soluble	Solid	DI Leach	
890-2043-5	SW15	Soluble	Solid	DI Leach	
MB 880-21027/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21027/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21027/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2042-A-4-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2042-A-4-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 21138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-6	SW16	Soluble	Solid	300.0	21024

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

HPLC/IC (Continued)

Analysis Batch: 21138 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-7	SW17	Soluble	Solid	300.0	21024
890-2043-8	SW18	Soluble	Solid	300.0	21024
890-2043-9	SW19	Soluble	Solid	300.0	21024
890-2043-10	SW20	Soluble	Solid	300.0	21024
890-2043-11	FS75	Soluble	Solid	300.0	21024
890-2043-12	FS76	Soluble	Solid	300.0	21024
890-2043-13	FS77	Soluble	Solid	300.0	21024
890-2043-14	FS78	Soluble	Solid	300.0	21024
890-2043-15	FS79	Soluble	Solid	300.0	21024
890-2043-16	FS80	Soluble	Solid	300.0	21024
890-2043-17	FS81	Soluble	Solid	300.0	21024
890-2043-18	FS82	Soluble	Solid	300.0	21024
890-2043-19	FS83	Soluble	Solid	300.0	21024
890-2043-20	FS84	Soluble	Solid	300.0	21024
890-2043-21	FS85	Soluble	Solid	300.0	21024
890-2043-22	FS86	Soluble	Solid	300.0	21024
890-2043-23	FS87	Soluble	Solid	300.0	21024
890-2043-24	FS88	Soluble	Solid	300.0	21024
890-2043-25	FS89	Soluble	Solid	300.0	21024
MB 880-21024/1-A	Method Blank	Soluble	Solid	300.0	21024
LCS 880-21024/2-A	Lab Control Sample	Soluble	Solid	300.0	21024
LCSD 880-21024/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21024
890-2043-6 MS	SW16	Soluble	Solid	300.0	21024
890-2043-6 MSD	SW16	Soluble	Solid	300.0	21024
890-2043-16 MS	FS80	Soluble	Solid	300.0	21024
890-2043-16 MSD	FS80	Soluble	Solid	300.0	21024

Analysis Batch: 21139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-26	FS90	Soluble	Solid	300.0	21025
890-2043-27	FS91	Soluble	Solid	300.0	21025
890-2043-28	FS92	Soluble	Solid	300.0	21025
890-2043-29	FS93	Soluble	Solid	300.0	21025
890-2043-30	FS94	Soluble	Solid	300.0	21025
890-2043-31	FS95	Soluble	Solid	300.0	21025
890-2043-32	FS96	Soluble	Solid	300.0	21025
890-2043-33	FS97	Soluble	Solid	300.0	21025
890-2043-34	FS98	Soluble	Solid	300.0	21025
890-2043-35	FS99	Soluble	Solid	300.0	21025
890-2043-36	FS100	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
890-2043-30 MS	FS94	Soluble	Solid	300.0	21025
890-2043-30 MSD	FS94	Soluble	Solid	300.0	21025

Analysis Batch: 21142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-1	SW11	Soluble	Solid	300.0	21027
890-2043-2	SW12	Soluble	Solid	300.0	21027
890-2043-3	SW13	Soluble	Solid	300.0	21027

QC Association Summary

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

HPLC/IC (Continued)

Analysis Batch: 21142 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2043-4	SW14	Soluble	Solid	300.0	21027
890-2043-5	SW15	Soluble	Solid	300.0	21027
MB 880-21027/1-A	Method Blank	Soluble	Solid	300.0	21027
LCS 880-21027/2-A	Lab Control Sample	Soluble	Solid	300.0	21027
LCSD 880-21027/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21027
890-2042-A-4-E MS	Matrix Spike	Soluble	Solid	300.0	21027
890-2042-A-4-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	21027

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW11
Date Collected: 03/02/22 11:35
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-1
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			5.04 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/08/22 22:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 12:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 10:41	CH	XEN MID

Client Sample ID: SW12
Date Collected: 03/02/22 11:40
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-2
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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/08/22 23:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 13:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 10:50	CH	XEN MID

Client Sample ID: SW13
Date Collected: 03/02/22 11:45
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-3
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			5.05 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/08/22 23:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 14:10	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 10:59	CH	XEN MID

Client Sample ID: SW14
Date Collected: 03/02/22 11:50
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-4
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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 00:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW14
Date Collected: 03/02/22 11:50
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-4
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			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 14:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 11:08	CH	XEN MID

Client Sample ID: SW15
Date Collected: 03/02/22 11:55
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-5
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			5.02 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 00:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21027	03/07/22 10:42	CH	XEN MID
Soluble	Analysis	300.0		1			21142	03/10/22 11:17	CH	XEN MID

Client Sample ID: SW16
Date Collected: 03/02/22 12:00
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-6
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			4.99 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 00:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 15:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/09/22 20:11	CH	XEN MID

Client Sample ID: SW17
Date Collected: 03/02/22 12:05
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-7
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			5.03 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 01:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 15:32	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: SW17

Lab Sample ID: 890-2043-7
Matrix: Solid
Date Collected: 03/02/22 12:05
Date Received: 03/03/22 16:03

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	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		20			21138	03/09/22 20:38	CH	XEN MID

Client Sample ID: SW18

Lab Sample ID: 890-2043-8
Matrix: Solid
Date Collected: 03/02/22 12:10
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 01:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 15:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/09/22 20:48	CH	XEN MID

Client Sample ID: SW19

Lab Sample ID: 890-2043-9
Matrix: Solid
Date Collected: 03/02/22 12:15
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 01:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 16:14	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/09/22 20:57	CH	XEN MID

Client Sample ID: SW20

Lab Sample ID: 890-2043-10
Matrix: Solid
Date Collected: 03/02/22 12:20
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 02:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 16:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/09/22 21:06	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS75

Lab Sample ID: 890-2043-11
Matrix: Solid
Date Collected: 03/02/22 14:50
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 03:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 17:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		20			21138	03/09/22 21:33	CH	XEN MID

Client Sample ID: FS76

Lab Sample ID: 890-2043-12
Matrix: Solid
Date Collected: 03/02/22 14:52
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 03:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 17:40	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		10			21138	03/09/22 21:43	CH	XEN MID

Client Sample ID: FS77

Lab Sample ID: 890-2043-13
Matrix: Solid
Date Collected: 03/02/22 14:55
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 04:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 18:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		20			21138	03/09/22 21:52	CH	XEN MID

Client Sample ID: FS78

Lab Sample ID: 890-2043-14
Matrix: Solid
Date Collected: 03/02/22 14:57
Date Received: 03/03/22 16:03

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	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 04:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS78

Date Collected: 03/02/22 14:57
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-14
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			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 18:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 22:01	CH	XEN MID

Client Sample ID: FS79

Date Collected: 03/02/22 15:00
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-15
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			5.05 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 04:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 18:45	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 22:10	CH	XEN MID

Client Sample ID: FS80

Date Collected: 03/02/22 15:02
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-16
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			5.01 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 05:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 19:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 22:19	CH	XEN MID

Client Sample ID: FS81

Date Collected: 03/02/22 15:05
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-17
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			5.02 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 05:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 19:27	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS81

Date Collected: 03/02/22 15:05
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-17
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	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/09/22 22:46	CH	XEN MID

Client Sample ID: FS82

Date Collected: 03/02/22 15:07
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-18
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			5.05 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 05:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 19:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/09/22 22:56	CH	XEN MID

Client Sample ID: FS83

Date Collected: 03/02/22 15:10
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-19
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			5.03 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 06:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 20:08	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 23:23	CH	XEN MID

Client Sample ID: FS84

Date Collected: 03/02/22 15:12
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-20
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			5.03 g	5 mL	20914	03/07/22 13:02	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21109	03/09/22 06:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20927	03/04/22 15:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21016	03/07/22 20:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 23:32	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS85
Date Collected: 03/02/22 15:15
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-21
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	21114	03/08/22 08:59	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/08/22 22:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 15:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 23:41	CH	XEN MID

Client Sample ID: FS86
Date Collected: 03/02/22 15:17
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-22
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	21114	03/08/22 08:59	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/08/22 22:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 16:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		5			21138	03/09/22 23:51	CH	XEN MID

Client Sample ID: FS87
Date Collected: 03/02/22 15:20
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-23
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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 23:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 16:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/11/22 08:59	CH	XEN MID

Client Sample ID: FS88
Date Collected: 03/02/22 15:25
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-24
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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 23:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS88
Date Collected: 03/02/22 15:25
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-24
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			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		1			21138	03/11/22 09:05	CH	XEN MID

Client Sample ID: FS89
Date Collected: 03/02/22 15:30
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-25
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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 01:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 17:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21024	03/07/22 10:30	CH	XEN MID
Soluble	Analysis	300.0		10			21138	03/10/22 00:18	CH	XEN MID

Client Sample ID: FS90
Date Collected: 03/02/22 15:32
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-26
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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 01:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 17:44	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		5			21139	03/09/22 10:15	CH	XEN MID

Client Sample ID: FS91
Date Collected: 03/02/22 15:35
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-27
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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 01:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 18:05	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS91

Lab Sample ID: 890-2043-27
Matrix: Solid
Date Collected: 03/02/22 15:35
Date Received: 03/03/22 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		5			21139	03/09/22 10:24	CH	XEN MID

Client Sample ID: FS92

Lab Sample ID: 890-2043-28
Matrix: Solid
Date Collected: 03/02/22 15:37
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 02:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 18:25	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		5			21139	03/10/22 11:43	CH	XEN MID

Client Sample ID: FS93

Lab Sample ID: 890-2043-29
Matrix: Solid
Date Collected: 03/02/22 15:40
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 02:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 18:46	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		5			21139	03/09/22 10:42	CH	XEN MID

Client Sample ID: FS94

Lab Sample ID: 890-2043-30
Matrix: Solid
Date Collected: 03/02/22 15:45
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 02:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 19:06	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		5			21139	03/09/22 10:51	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS95

Lab Sample ID: 890-2043-31

Date Collected: 03/02/22 15:47
Matrix: Solid
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 03:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 19:27	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	21025	03/07/22 10:32	CH	XEN MID
Soluble	Analysis	300.0		10			21139	03/09/22 11:17	CH	XEN MID

Client Sample ID: FS96

Lab Sample ID: 890-2043-32

Date Collected: 03/02/22 15:50
Matrix: Solid
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 03:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 19:47	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		1			21139	03/09/22 13:12	CH	XEN MID

Client Sample ID: FS97

Lab Sample ID: 890-2043-33

Date Collected: 03/02/22 15:52
Matrix: Solid
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 03:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 20:08	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		5			21139	03/09/22 11:53	CH	XEN MID

Client Sample ID: FS98

Lab Sample ID: 890-2043-34

Date Collected: 03/02/22 15:55
Matrix: Solid
Date Received: 03/03/22 16:03

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	20904	03/04/22 12:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/06/22 04:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Client Sample ID: FS98
Date Collected: 03/02/22 15:55
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-34
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			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20926	03/04/22 15:11	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/08/22 20:28	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		20			21139	03/09/22 12:02	CH	XEN MID

Client Sample ID: FS99
Date Collected: 03/02/22 16:00
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-35
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	21114	03/08/22 08:59	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/08/22 23:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21111	03/08/22 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21120	03/09/22 00:22	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 12:10	CH	XEN MID

Client Sample ID: FS100
Date Collected: 03/02/22 00:00
Date Received: 03/03/22 16:03

Lab Sample ID: 890-2043-36
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	21114	03/08/22 08:59	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21110	03/08/22 23:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21001	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21078	03/07/22 21:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20922	03/04/22 14:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20971	03/06/22 19:59	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		10			21139	03/09/22 12:19	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-2043-1
Project/Site: RDX 28-12 SDG: 31403360.007

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: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

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: RDX 28-12

Job ID: 890-2043-1
SDG: 31403360.007

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2043-1	SW11	Solid	03/02/22 11:35	03/03/22 16:03	0 - 4
890-2043-2	SW12	Solid	03/02/22 11:40	03/03/22 16:03	0 - 4
890-2043-3	SW13	Solid	03/02/22 11:45	03/03/22 16:03	0 - 4
890-2043-4	SW14	Solid	03/02/22 11:50	03/03/22 16:03	0 - 4
890-2043-5	SW15	Solid	03/02/22 11:55	03/03/22 16:03	0 - 4
890-2043-6	SW16	Solid	03/02/22 12:00	03/03/22 16:03	0 - 4
890-2043-7	SW17	Solid	03/02/22 12:05	03/03/22 16:03	0 - 4
890-2043-8	SW18	Solid	03/02/22 12:10	03/03/22 16:03	0 - 4
890-2043-9	SW19	Solid	03/02/22 12:15	03/03/22 16:03	0 - 4
890-2043-10	SW20	Solid	03/02/22 12:20	03/03/22 16:03	0 - 4
890-2043-11	FS75	Solid	03/02/22 14:50	03/03/22 16:03	4
890-2043-12	FS76	Solid	03/02/22 14:52	03/03/22 16:03	4
890-2043-13	FS77	Solid	03/02/22 14:55	03/03/22 16:03	4
890-2043-14	FS78	Solid	03/02/22 14:57	03/03/22 16:03	4
890-2043-15	FS79	Solid	03/02/22 15:00	03/03/22 16:03	4
890-2043-16	FS80	Solid	03/02/22 15:02	03/03/22 16:03	4
890-2043-17	FS81	Solid	03/02/22 15:05	03/03/22 16:03	4
890-2043-18	FS82	Solid	03/02/22 15:07	03/03/22 16:03	4
890-2043-19	FS83	Solid	03/02/22 15:10	03/03/22 16:03	0.5
890-2043-20	FS84	Solid	03/02/22 15:12	03/03/22 16:03	4
890-2043-21	FS85	Solid	03/02/22 15:15	03/03/22 16:03	4
890-2043-22	FS86	Solid	03/02/22 15:17	03/03/22 16:03	4
890-2043-23	FS87	Solid	03/02/22 15:20	03/03/22 16:03	4
890-2043-24	FS88	Solid	03/02/22 15:25	03/03/22 16:03	4
890-2043-25	FS89	Solid	03/02/22 15:30	03/03/22 16:03	4
890-2043-26	FS90	Solid	03/02/22 15:32	03/03/22 16:03	4
890-2043-27	FS91	Solid	03/02/22 15:35	03/03/22 16:03	4
890-2043-28	FS92	Solid	03/02/22 15:37	03/03/22 16:03	4
890-2043-29	FS93	Solid	03/02/22 15:40	03/03/22 16:03	4
890-2043-30	FS94	Solid	03/02/22 15:45	03/03/22 16:03	4
890-2043-31	FS95	Solid	03/02/22 15:47	03/03/22 16:03	4
890-2043-32	FS96	Solid	03/02/22 15:50	03/03/22 16:03	4
890-2043-33	FS97	Solid	03/02/22 15:52	03/03/22 16:03	4
890-2043-34	FS98	Solid	03/02/22 15:55	03/03/22 16:03	4
890-2043-35	FS99	Solid	03/02/22 16:00	03/03/22 16:03	4
890-2043-36	FS100	Solid	03/02/22 00:00	03/03/22 16:03	4

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

eurofins | Environment Testing Xenco

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 4

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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:	RDX 28-12	Turn Around	Pres. Code
Project Number:	3140336Ø.ØØ7	☒ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC # 1001128981		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TNMA7
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.4
Total Containers:		Corrected Temperature:	1.2

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont
SW11	S	3/2/22	1135	Ø-4'	Comp	1
SW12			1140			1
SW13			1145			1
SW14			1150			1
SW15			1155			1
SW16			1200			1
SW17			1205			1
SW18			1210			1
SW19			1215			1
SW20	↓	↓	1220	↓	↓	1

Parameters: TPH (EPA 8015 Mod), BTEx (EPA 8021 B), Chloride (EPA 300.0')

ANALYSIS REQUEST

890-2043 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

Sample Comments
Incident ID: ~~3RP~~ nAPP2124531124

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 Anna Byers		3/3/22 4:03	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 4/20/2022 3:21:28 PM
Received by OCD: 3/21/2022 1:35:04 PM

eurofins | Environment Testing Xenco

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 2 of 4

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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:	RDX 28-12	Turn Around	
Project Number:	314033600.0007	☒ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC#	1061120801	

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:		
Total Containers:		Corrected Temperature:		

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
FS75	S	3/2/22	1450	4'	Comp	1					Incident ID:
FS76			1452	4'		1					nAPP2124531124
FS77			1455	4'		1					
FS78			1457	4'		1					
FS79			1500	4'		1					
FS80			1502	4'		1					
FS81			1505	4'		1					
FS82			1507	4'		1					
FS83			1510	0.5'		1					
FS84			1512	4'		1					

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Otte	3/3/22 4:04	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 3/21/2022 1:35:04 PM

eurofins | Environment Testing Xenco

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 3 of 4

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N 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:	ROX 28-12	Turn Around	
Project Number:	3140336b.007	☑ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	~~1061128~~ AB		

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:	See 1st page	
Total Containers:		Corrected Temperature:		

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
FS85	S	3/2/22	1515	4'	Comp	1			
FS86			1517			1			
FS87			1520			1			
FS88			1525			1			
FS 89			1527			1			
FS90			1530			1			
FS91			1532			1			
FS92			1535			1			
FS93			1537			1			
FS94			1540			1			

Sample Comments
Cost Center #:
1061128001
Incident ID:
nAPP2124531124

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. [illegible]	3/3/22 9:04	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 3/21/2022 1:35:04 PM

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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 4 of 4

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP	Company Name:	WPX
Address:	3300 N A Street	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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:	RDX 28-12	Turn Around	Pres. Code
Project Number:	314P336P.P07	☑ Routine ☐ Rush	
Project Location:	Eddy County	Due Date:	
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm	
PO#:	CC#: 1206112P8P1		

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:	0.0
Sample Custody Seals:	Yes No N/A	Temperature Reading:	0.5
Total Containers:		Corrected Temperature:	0.5

ANALYSIS REQUEST

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH (EPA 8015Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
FS95	S	3/2/22	1545	4'	Comp	1	X	X	X	Incident ID:
FS96			1547			1				nAPP2124531124
FS97			1550			1				
FS98			1552			1				
FS99			1555			1				
FS100	↓	↓	1600	↓	↓	1				

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 Anna Byers		3/3/22 4:01	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2043-1
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: RDX 28-12	Project #: 88000203			
Site	SSOW#:			

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:

Analysis Requested

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:										
SW11 (890-2043-1)	3/2/22	11 35 Mountain		Solid			X	X	X	X	X	1	
SW12 (890-2043-2)	3/2/22	11 40 Mountain		Solid			X	X	X	X	X	1	
SW13 (890-2043-3)	3/2/22	11 45 Mountain		Solid			X	X	X	X	X	1	
SW14 (890-2043-4)	3/2/22	11 50 Mountain		Solid			X	X	X	X	X	1	
SW15 (890-2043-5)	3/2/22	11 55 Mountain		Solid			X	X	X	X	X	1	
SW16 (890-2043-6)	3/2/22	12 00 Mountain		Solid			X	X	X	X	X	1	
SW17 (890-2043-7)	3/2/22	12 05 Mountain		Solid			X	X	X	X	X	1	
SW18 (890-2043-8)	3/2/22	12 10 Mountain		Solid			X	X	X	X	X	1	
SW19 (890-2043-9)	3/2/22	12 15 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: Cloe Cuy 3422	Date/Time:	Company	Received by:	Date/Time: 3.4.22 1315	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

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3/11/2022
Page 78 of 83
Released to Imaging: 4/20/2022 3:21:28 PM

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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 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2043-1
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: RDX 28-12	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	8016MOD_NM/8016NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
SW20 (890-2043-10)	3/2/22	12 20 Mountain		Solid			X	X	X	X	X	1	
FS75 (890-2043-11)	3/2/22	14 50 Mountain		Solid			X	X	X	X	X	1	
FS76 (890-2043-12)	3/2/22	14 52 Mountain		Solid			X	X	X	X	X	1	
FS77 (890-2043-13)	3/2/22	14 55 Mountain		Solid			X	X	X	X	X	1	
FS78 (890-2043-14)	3/2/22	14 57 Mountain		Solid			X	X	X	X	X	1	
FS79 (890-2043-15)	3/2/22	15 00 Mountain		Solid			X	X	X	X	X	1	
FS80 (890-2043-16)	3/2/22	15 02 Mountain		Solid			X	X	X	X	X	1	
FS81 (890-2043-17)	3/2/22	15 05 Mountain		Solid			X	X	X	X	X	1	
FS82 (890-2043-18)	3/2/22	15 07 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
Clee Cyp 3427			RF	3.4.22 13:15	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

Received by OCD: 3/21/2022 1:35:04 PM
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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 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2043-1
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: RDX 28-12	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	8016MOD_NM/8015NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
FS83 (890-2043-19)	3/2/22	15 10 Mountain		Solid			X	X	X	X	X	1	
FS84 (890-2043-20)	3/2/22	15 12 Mountain		Solid			X	X	X	X	X	1	
FS85 (890-2043-21)	3/2/22	15 15 Mountain		Solid			X	X	X	X	X	1	
FS86 (890-2043-22)	3/2/22	15 17 Mountain		Solid			X	X	X	X	X	1	
FS87 (890-2043-23)	3/2/22	15 20 Mountain		Solid			X	X	X	X	X	1	
FS88 (890-2043-24)	3/2/22	15 25 Mountain		Solid			X	X	X	X	X	1	
FS89 (890-2043-25)	3/2/22	15 30 Mountain		Solid			X	X	X	X	X	1	
FS90 (890-2043-26)	3/2/22	15 32 Mountain		Solid			X	X	X	X	X	1	
FS91 (890-2043-27)	3/2/22	15 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: Cloe Cdp 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

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Released to Imaging: 4/20/2022 3:21:28 PM

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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 4
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 4 of 4
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2043-1
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: RDX 28-12	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	8016MOD_NM/8016NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	8015MOD_Calc	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
FS92 (890-2043-28)	3/2/22	15 37 Mountain		Solid			X	X	X	X	X	1	
FS93 (890-2043-29)	3/2/22	15 40 Mountain		Solid			X	X	X	X	X	1	
FS94 (890-2043-30)	3/2/22	15 45 Mountain		Solid			X	X	X	X	X	1	
FS95 (890-2043-31)	3/2/22	15 47 Mountain		Solid			X	X	X	X	X	1	
FS96 (890-2043-32)	3/2/22	15 50 Mountain		Solid			X	X	X	X	X	1	
FS97 (890-2043-33)	3/2/22	15 52 Mountain		Solid			X	X	X	X	X	1	
FS98 (890-2043-34)	3/2/22	15 55 Mountain		Solid			X	X	X	X	X	1	
FS99 (890-2043-35)	3/2/22	16 00 Mountain		Solid			X	X	X	X	X	1	
FS100 (890-2043-36)	3/2/22	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: Cloe Cup 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

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Released to Imaging: 4/20/2022 3:21:28 PM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2043-1
SDG Number: 31403360.007

Login Number: 2043
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: 890-2043-1
SDG Number: 31403360.007

Login Number: 2043
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Midland
List Creation: 03/04/22 01:22 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	

ENSOLUM

APPENDIX F

Correspondence Emails

Moreno, Gilbert

From: Byers, Anna
Sent: Wednesday, March 9, 2022 9:31 AM
To: Moreno, Gilbert
Subject: FW: Updated WPX site activities for the week of September 27, 2021

Anna Byers
Consultant, Geologist
Office + 1 575-887-0101
Mobile + 1 575-200-6754

From: Byers, Anna
Sent: Monday, September 27, 2021 9:48 AM
To: ocd.enviro@state.nm.us
Cc: jim.raley@dvn.com; Hernandez, Joseph <Joe.Hernandez@wsp.com>
Subject: Updated WPX site activities for the week of September 27, 2021

All,

WPX anticipates completing final confirmation sampling for the following sites from 9/29/2021 through 10/1/2021.

WSP

Site: EAST PECOS FEDERAL 22 #005H
API: 30-015-42270
Incident Number: nAPP2126345192

Site: RDX FEDERAL 28 #012
API: 30-015-42110
Incident Number: nAPP2124531124

WPX anticipates completing a liner inspection for the following site on 9/28/2021.

WSP

Site: RDX FEDERAL 21 #042
API: 30-015-40643
Incident Number: nAPP2124349541

Thank you,

Anna Byers
Consultant, Geologist
Please note the new email address.

Email: anna.byers@wsp.com
Office: + 1 575-887-0101

Mobile: + 1 575-200-6754

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

wsp.com

Moreno, Gilbert

From: Byers, Anna
Sent: Wednesday, March 9, 2022 9:29 AM
To: Moreno, Gilbert
Subject: FW: WPX Site Activities for Week Ending February 4, 2022

Anna Byers
Consultant, Geologist
Office + 1 575-887-0101
Mobile + 1 575-200-6754

From: Byers, Anna
Sent: Thursday, January 27, 2022 9:55 AM
To: ocd.enviro@state.nm.us
Cc: Raley, Jim <Jim.Raley@dvn.com>; Hernandez, Joseph <Joe.Hernandez@wsp.com>
Subject: WPX Site Activities for Week Ending February 4, 2022

Good morning,

WPX anticipates completing final sampling activities at the following sites during Jan 31th through Feb 18th, 2022:

WSP

Site: RDX FEDERAL 28 #012
API: 30-015-42110
Incident Number: nAPP2124531124
Release Date: 8/30/2021

Thank you,

Anna Byers
Consultant, Geologist
Please note the new email address.

Email: anna.byers@wsp.com
Office: + 1 575-887-0101
Mobile: + 1 575-200-6754

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

wsp.com

Moreno, Gilbert

From: Byers, Anna
Sent: Wednesday, March 9, 2022 9:29 AM
To: Moreno, Gilbert
Subject: FW: WPX Site Activity Updates for Week Ending February 11, 2022

Anna Byers
Consultant, Geologist
Office + 1 575-887-0101
Mobile + 1 575-200-6754

From: Byers, Anna
Sent: Thursday, February 3, 2022 4:03 PM
To: ocd.enviro@state.nm.us
Cc: Hernandez, Joseph <Joe.Hernandez@wsp.com>; Raley, Jim <Jim.Raley@dvn.com>
Subject: WPX Site Activity Updates for Week Ending February 11, 2022

Good morning,

WPX anticipates completing final sampling activities at the following sites during Feb 7th through Feb 18th, 2022:

WSP

Site: RDX FEDERAL 28 #012
API: 30-015-42110
Incident Number: nAPP2124531124
Release Date: 8/30/2021

Site: RDX 17 Federal Com #006H
API: 30-015-39308
Incident ID: NRM2019548894
Release Date: 07/05/2020

Thank you,

Anna Byers
Consultant, Geologist
Please note the new email address.

Email: anna.byers@wsp.com
Office: + 1 575-887-0101
Mobile: + 1 575-200-6754

WSP USA
508 West Stevens Street

Carlsbad, New Mexico 88220

wsp.com

Moreno, Gilbert

From: Byers, Anna
Sent: Wednesday, March 9, 2022 9:29 AM
To: Moreno, Gilbert
Subject: FW: WPX Activities for Week Ending 3/4/2022

Anna Byers
Consultant, Geologist
Office + 1 575-887-0101
Mobile + 1 575-200-6754

From: Byers, Anna
Sent: Friday, February 25, 2022 12:32 PM
To: ocd.enviro@state.nm.us
Cc: Hernandez, Joseph <Joe.Hernandez@wsp.com>; Raley, Jim <jim.raley@dvn.com>
Subject: WPX Activities for Week Ending 3/4/2022

Good Morning,

WPX anticipates completing final sampling activities at the following sites during 3/2 through 3/4, 2022

WSP

Site: RDX FEDERAL 28 #012
API: 30-015-42110
Incident ID: nAPP2124531124
Release Date: 08/30/2021

Thank you,
Anna

Get Outlook for iOS

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 91667

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 91667
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved.	4/20/2022