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	NAB1902951984
District RP	2RP-5207
Facility ID	
Application ID	pAB1902951654

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)* NAB1902951984
Contact mailing address: 5315 Buena Vista Dr, Carlsbad, NM, 88220	

Location of Release Source

Latitude 32.01226 Longitude -103.85824
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Ross Draw Unit 14	Site Type: Well Pad
Date Release Discovered: 10/30/18	API# *(if applicable)* *30-015-25208*

Unit Letter	Section	Township	Range	County
L	26	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): 8	Volume Recovered (bbls): 5
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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
The spill was caused by a stuffing box failure.

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

State of New Mexico
Oil Conservation Division

Incident ID	NAB1902951984
District RP	2RP-5207
Facility ID	
Application ID	pAB1902951654

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

Initial Response

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

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

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

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

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 11/11/2022

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1902951984
District RP	2RP-5207
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and 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	NAB1902951984
District RP	2RP-5207
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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 11/11/2022

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

OCD Only

Received by: Jocelyn Harimon Date: 11/14/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAB1902951984
District RP	2RP-5207
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: 11/11/2022

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

OCD Only

Received by: Jocelyn Harimon Date: 11/14/2022

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: Brittany Hall Date: 1/19/2023

Printed Name: Brittany Hall Title: Environmental Specialist

ENSOLUM

CLOSURE REQUEST REPORT

Site Location:

Ross Draw Unit 14
Eddy County, New Mexico
Incident Numbers:
nAB1504757628, nAB1636431146, and nAB1902951984

November 10, 2022
Ensolum Project No. 03A1987035

Prepared for:

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

Prepared by:

Benjamin J. Belill
Project Geologist

Ashley L Ager, M.S., P.G.
Principal

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Site Description

Ensolum, LLC (Ensolum) has prepared this Closure Request Report (CRR) to document site assessment, soil sampling activities, and corrective actions performed to date by WPX Energy Permian, LLC (WPX) at the Ross Draw Unit 14 (Site) in Unit L, Section 26, Township 26 South, Range 30 East, in Eddy County, New Mexico (**Figure 1** in **Appendix A**). Based on all remedial actions and results of the soil sampling events completed for the three separate releases of crude oil and produced water at the Site, WPX respectfully requests no further action (NFA) for Incident Numbers nAB1504757628, nAB1636431146 and nAB1902951984.

On December 30, 2020, a Closure Request (CR), authored by WSP USA Inc. (WSP), was submitted to the New Mexico Oil Conservation Division (NMOCD) for the three subject releases; however, WPX did not receive a response from NMOCD. As a result, WPX reassessed field activities previously completed and determined additional remedial actions were warranted to address the NMOCD's current application of the reclamation requirement in an area off pad. As such, WPX conducted additional remediation activities at the Site. All previous remediation activities and soil sample analytical results for the three subject releases can be referenced in the original CR and other submitted deliverable documents uploaded to NMOCD and Centrestack portal.

1.2 Release Backgrounds

nAB1504757628

On February 11, 2015, tubing and casing valves were inadvertently closed, causing the wellbore to overpressure and blow out the packing. Approximately 12 barrels (bbls) of oil and produced water were released to the ground surface of the well pad. A vacuum truck was immediately dispatched to the Site and recovered all fluids. The incident was reported to the NMOCD on a Release Notification and Corrective Action Form (Form C-141) on February 12, 2015 and was subsequently assigned Incident Number nAB1504757628.

nAB1636431146

On December 11, 2016, pump failure caused a tank to overflow and release approximately 130 bbls of crude oil and produced water into an earthen berm containment. Misting occurred on the east side of the containment. All fluids were contained to the well pad. Approximately 95 bbls of crude oil and 10 bbls of produced water were recovered through the use of a vacuum truck. The incident was reported to NMOCD immediately via email and on a subsequent Form C-141 on December 16, 2016 and was subsequently assigned Incident Number nAB1636431146.

nAB1902951984

On October 30, 2018, a stuffing box failed and caused approximately 8 bbls of crude oil to be released to the area surrounding the well pad and adjacent pasture. Approximately 5 bbls of crude oil were recovered through the use of a vacuum truck. The incident was reported to NMOCD on a Form C-141 on November 12, 2018 and was subsequently assigned Incident Number nAB1902951984.

1.3 Site Characterization

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

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on a soil boring (MW-1) that was drilled by Talon LPE for WPX on December 9, 2020, located approximately 0.4 miles northwest of the Site. The soil boring location is labeled as RDU 55 on **Figure 1** in **Appendix A**. Using a truck mounted drill rig equipped with hollow stem augers, the soil boring was advanced to a total depth of 106.7 feet bgs. No fluids were observed within the soil boring after at least 72 hours. Following the observation period, the boring was properly plugged and abandoned. The well log is provided in **Appendix B**.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 4,118 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, and wetland. The Site is greater than 1,000 feet from a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area).

Based on the desktop review of nearby receptors and depth to groundwater determination at the Site, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum Hydrocarbon (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- Total Petroleum Hydrocarbon (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 of the pasture area that was impacted by the release.

2.0 REMEDIATION ACTIONS

2.1 Previously Completed Site Activities

The release extents from all three events are depicted on **Figure 2** in **Appendix A**. From June to December of 2020, LT Environmental, Inc. (LTE) perfomed delineation and excavation activities at the Site. A total of 11 boreholes (BH01 through BH11) were advanced with the subsequent collection of two soil samples from each borehole; the samples were collected at the depth exhibiting the highest observed field screening and the terminus of the borehole. The location of the delineation soil samples are shown on **Figure 2** in **Appendix A**.

Laboratory analytical results from delineation soil samples collected from borehole BH10 from ground surface to 4 feet bgs indicated concentrations of TPH-GRO+TPH-DRO and total TPH exceeded the Site Closure Criteria. Laboratory analytical results from delineation soil sample BH05 at 0.5-foot to 1-foot bgs indicated concentrations of TPH exceeded the reclamation requirement.

Laboratory analytical results for all other delineation soil samples indicated all chemicals of concern (COCs) were below the applicable Closure Criteria and assisted with defining the lateral extent of impacts at the Site. Based on impacted soil in soil samples BH10 and BH05, additional remedial actions appeared warranted.

In December of 2020, WSP oversaw excavation of impacted soil as indicated by visual observations, field screening activities, and laboratory analytical results for the delineation soil samples. WSP collected 5-point composite samples from the floor and sidewalls of the excavation. Composite soil samples FS01 through FS30 were collected from the floor of the excavation at depths ranging from 0.5-foot to 4.5 feet bgs. Composite soil samples SW01 through SW10 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4.5 feet bgs.

The aerial extent of the excavation measured approximately 6,022 square feet of the Site pad and pasture areas, to total depths ranging from 0.5-foot to 4.5 feet bgs. Approximately 900 cubic yards of soil were transported to the R360 Halfway Facility in Orla, Texas, for disposal under WPX-approved manifests. The excavation was backfilled with locally sourced caliche and topsoil to match pre-existing Site conditions. The excavation confirmation soil samples submitted in December 2020 are depicted on **Figure 3A** included in **Appendix A.**

Since WPX did not receive feedback from NMOCD regarding the December 2020 CR, remedial actions were reviewed to identify any potential deficiencies that could exist. It was noted that confirmation floor sample FS07 collected at 1.5 feet to 4 feet bgs, exceeded the reclamation requirement in the top 4 feet for TPH. As a result, WPX tasked Ensolum to oversee excavation of residual waste-containing soil in the vicinity of FS07.

2.2 2022 Excavation Activities

On July 13, 2022, Ensolum was onsite to oversee additional excavation activities. Excavation activities were performed utilizing heavy equipment. Excavation activities were directed by referencing laboratory analytical results for FS07 and field screening for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

The final excavation area associated with FS07 extended approximately 135 square feet to a total depth of approximately 4 feet bgs, eliminating the residual shallow impacts. Approximately 26 cubic yards of waste-containing soil were excavated and hauled to an R360 landfill facility located in Orla, Texas under WPX-approved manifests. The excavation was backfilled with locally sourced topsoil to match pre-existing Site conditions. The excavation and confirmation soil samples are depicted on **Figure 3B** included in **Appendix A**. A photographic log of the excavation is included as **Appendix C**.

Following the removal of impacted soil, Ensolum collected 5-point composite samples from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation floor sample FS07 was collected at 4 feet bgs and confirmation sidewall samples SW11 and SW12 were collected from the sidewalls at depths ranging from the ground surface to 4 feet bgs.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C), under strict chain-of-custody procedures, to Eurofins LLC (Eurofins) in Carlsbad, New Mexico, for analysis of the COCs: BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0.

2.3 Laboratory Analytical Results

Analytical results indicated all COCs were in compliance with the Site Closure Criteria and the reclamation requirement in soil samples collected within the top four feet of pasture area. As a result, no further remedial actions were required. The analytical results are summarized on **Table 1** 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 subject releases.

3.0 CLOSURE REQUEST

The primary objectives of Ensolum's scope of services were to document remediation activities performed at the Site in accordance with the applicable NMOCD regulatory guidelines. Based on the results documented in this report, the following findings and conclusions regarding the three subject releases are presented:

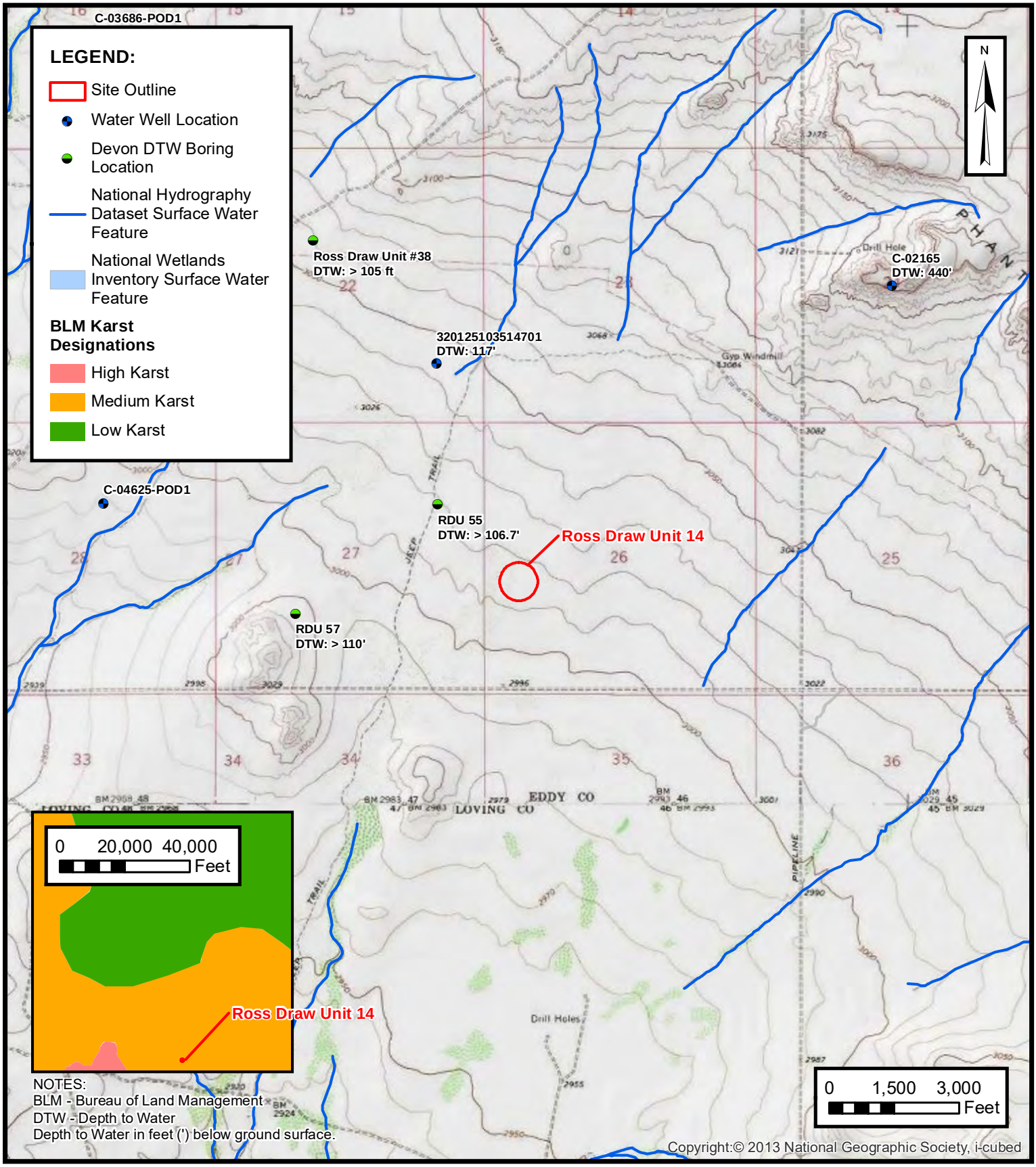
- Previously completed remedial actions from June to December 2020 indicated impacted soil was observed in soil from borehole BH10 ranging in depths from ground surface to approximately 4 feet bgs, and BH05 from 0.5 to 1-foot bgs;
- Delineation soil samples from boreholes BH01 through BH04, BH06 through BH09, and BH11 were in compliance with the Site Closure Criteria and assisted with the lateral definition of soil impacts;
- Upon further review by Ensolum, following the 2020 excavation activities completed by WSP, confirmation floor sample FS07 collected at 1.5 feet to 4 feet bgs, exceeded the reclamation requirement in the top 4 feet for TPH and additional excavation activities were warranted;
- Based on excavation confirmation soil analytical results over an aerial extent of 6,022 square feet including additional excavation of 135 square feet, an estimated total of **926 cubic yards** of impacted soil has been removed from the Site and hauled to a R360 landfill facility located in Orla, Texas under WPX-approved manifests;
- The excavation has been backfilled with locally sourced topsoil to match pre-existing Site conditions.

Based on the conclusions presented, WPX believes the remediation activities described above have met the requirements set forth in NMAC 19.15.29.13 to be protective of human health, the environment, and groundwater. As such, WPX respectfully requests closure of Incident Numbers nAB1504757628, nAB1636431146 and nAB1902951984.

ENSOLUM

APPENDIX A

Figures

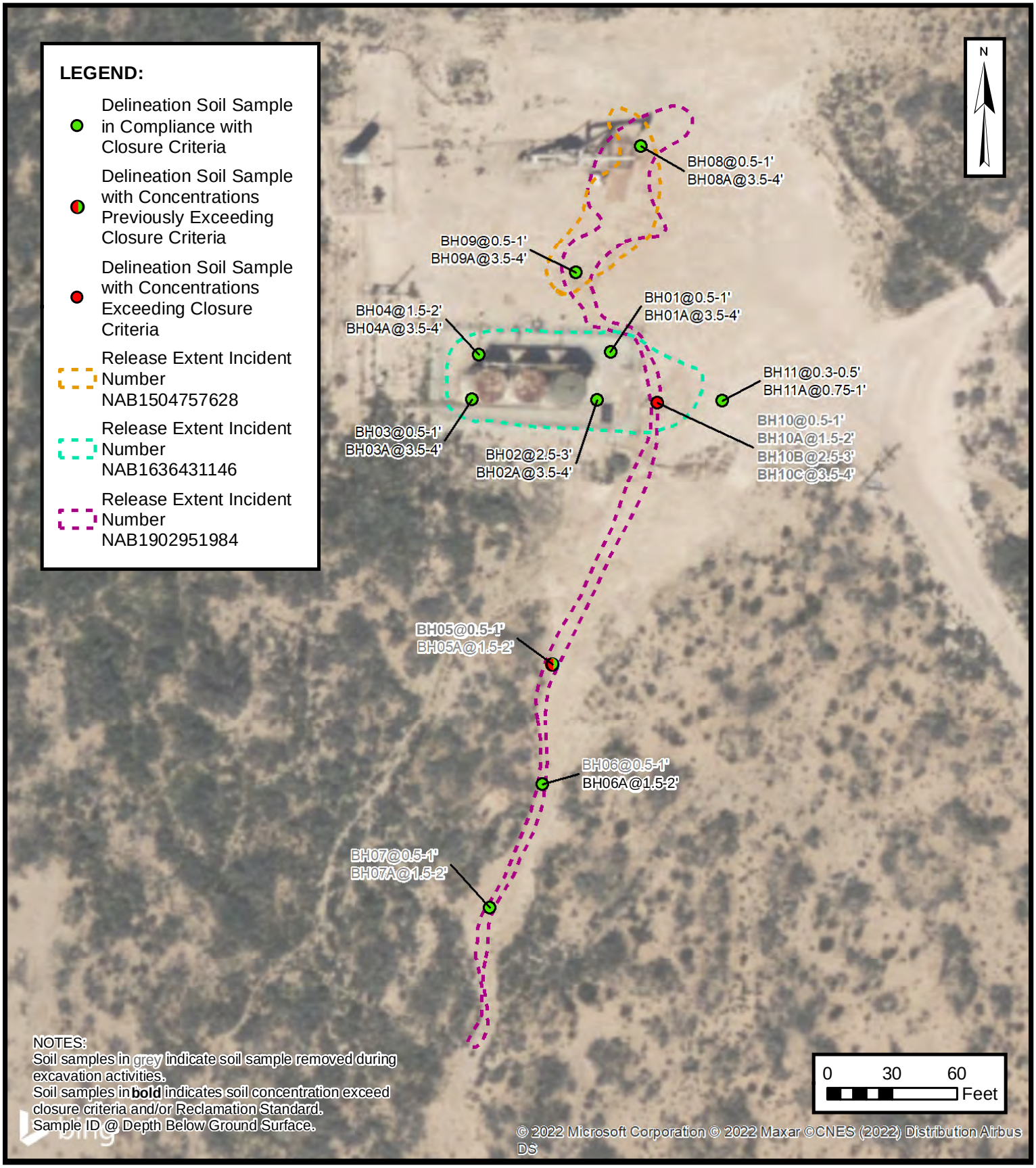


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE MAP

WPX ENERGY PERMIAN, LLC
ROSS DRAW UNIT 14
Unit L Sec 26 T26S R30E
Eddy County, New Mexico

FIGURE
1

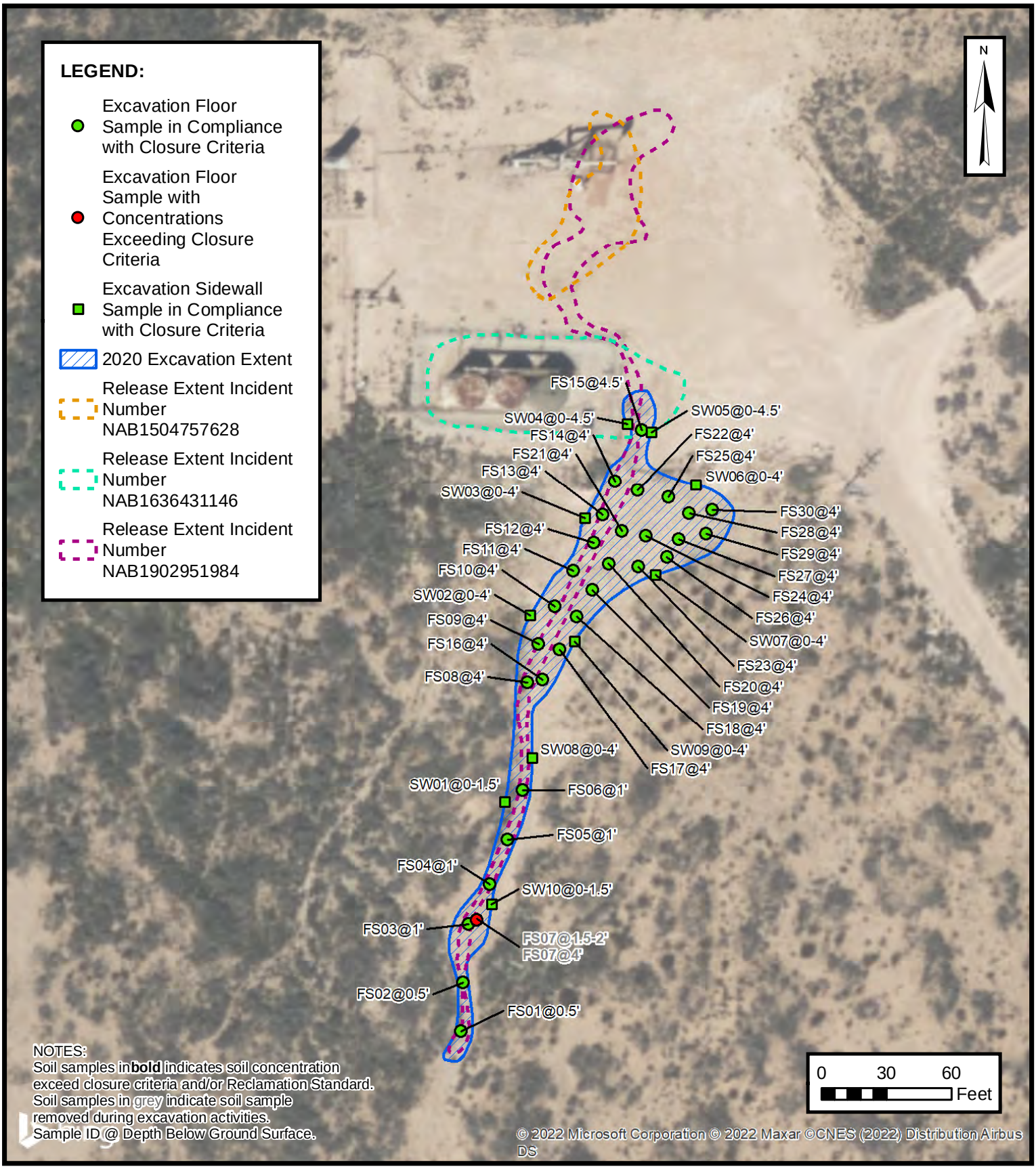


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

WPX ENERGY PERMIAN, LLC
ROSS DRAW UNIT 14
Unit L Sec 26 T26S R30E
Eddy County, New Mexico

FIGURE
2

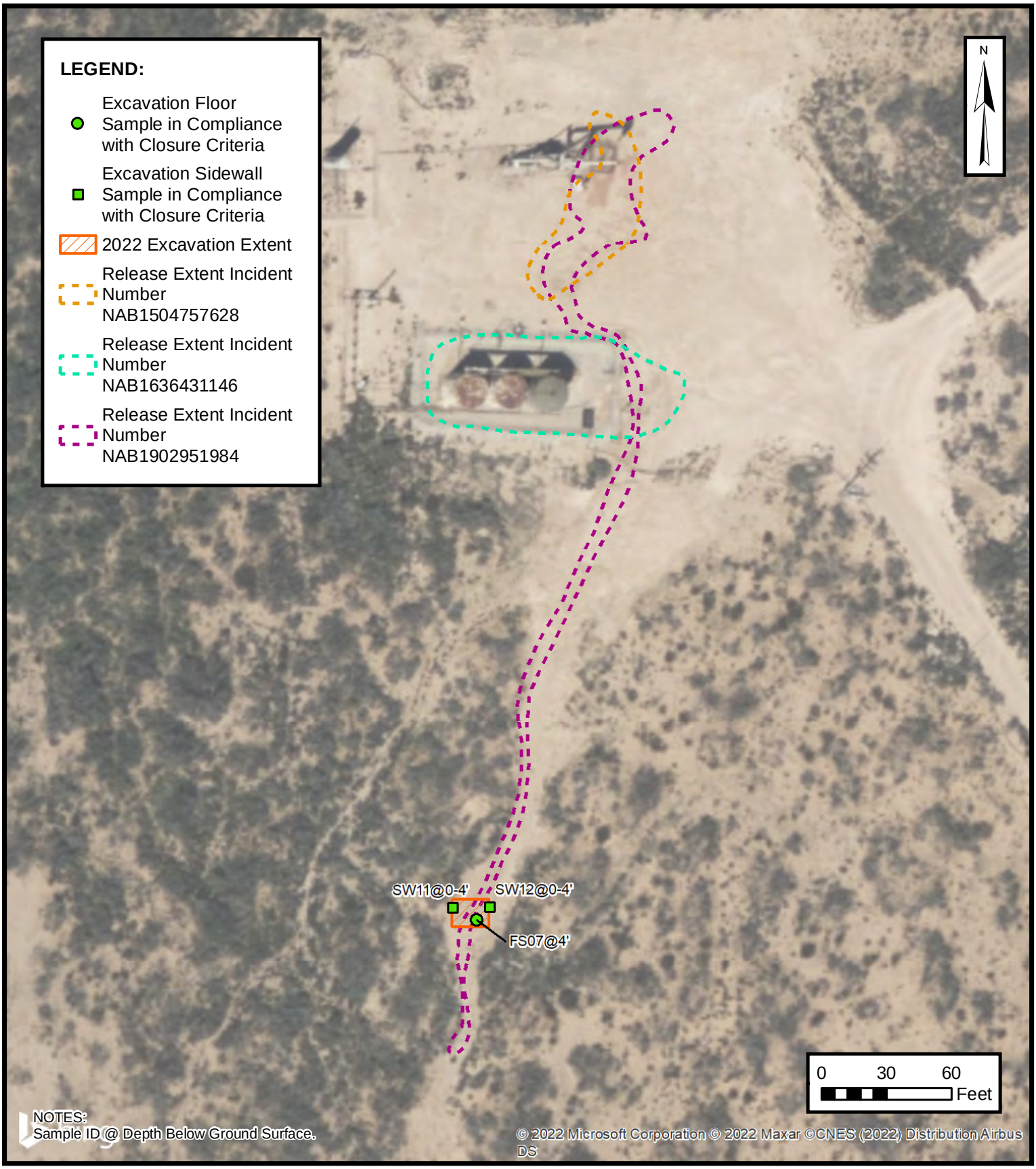


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

2020 EXCAVATION SOIL SAMPLE LOCATIONS

WPX ENERGY PERMIAN, LLC
ROSS DRAW UNIT 14
Unit L Sec 26 T26S R30E
Eddy County, New Mexico

FIGURE
3A



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

2022 EXCAVATION SOIL SAMPLE LOCATIONS

WPX ENERGY PERMIAN, LLC
ROSS DRAW UNIT 14
Unit L Sec 26 T26S R30E
Eddy County, New Mexico

FIGURE
3B

ENSOLUM

APPENDIX B

Well Record

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

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

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

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
WPX Energy Permian, LLC
Ross Draw Unit 14
Incident Numbers: nAB1636431146, nAB1902951984, and nAB1504757628

Photograph 1 Date: 7/13/2022
Description: Backfilled excavation area in the vicinity of confirmation sample FS07

Photograph 2 Date: 7/13/2022
Description: Excavation activities facing north

Photograph 3 Date: 7/13/2022
Description: Final excavation in vicinity of confirmation sample FS07, facing southeast

Photograph 4 Date: 7/13/2022
Description: Final excavation in the vicinity of confirmation sample FS07, facing north

ENSOLUM

APPENDIX D

Table

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC - Ross Draw Unit 14
Eddy County, New Mexico

Ensolum Project No. 03A1987035

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 ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Delineation Soil Sample Analytical Results										
BH01	06/29/2020	0.5 - 1	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	13.5
BH01A	06/29/2020	3.5 - 4	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	12.3
BH02	06/29/2020	2.5 - 3	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	888
BH02A	06/29/2020	3.5 - 4	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	1,330
BH03	06/29/2020	0.5 - 1	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	212
BH03A	06/29/2020	3.5 - 4	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	12.5
BH04	06/29/2020	1.5 - 2	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	11.7
BH04A	06/29/2020	3.5 - 4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	10.9
BH05	06/29/2020	0.5 - 1	<0.00200	<0.00200	<50.2	293	52.4	345	**345***	31.1*
BH05A	06/29/2020	1.5 - 2	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	87.3*
BH06	06/29/2020	0.5 - 1	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	14.2*
BH06A	06/29/2020	1.5 - 2	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	12.8*
BH07	06/29/2020	0.5 - 1	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	<9.98*
BH07A	06/29/2020	1.5 - 2	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	<9.98*
BH08	06/29/2020	0.5 - 1	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	430
BH08A	06/29/2020	3.5 - 4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	531
BH09	06/29/2020	0.5 - 1	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	18.4
BH09A	06/29/2020	3.5 - 4	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	46.3
BH10	06/29/2020	0.5 - 1	<0.00200	<0.00200	<251	3,120	1,150	**3,120**	**4,270**	1,010
BH10A	06/29/2020	1.5 - 2	<0.00200	<0.00200	<251	3,800	1,560	**3,800**	**5,360**	5,010
BH10B	06/29/2020	2.5 - 3	<0.00201	<0.00201	<251	4,680	1,970	**4,680**	**6,650**	4,190
BH10C	06/29/2020	3.5 - 4	<0.00200	<0.00200	<251	4,870	2,120	**4,870**	**6,990**	5,620
BH11	12/09/2020	0.3 - 0.5	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	101
BH11A	12/09/2020	0.75 - 1	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	99.3
Excavation Floor Soil Sample Analytical Results										
FS01	12/09/2020	0.5	<0.00201	<0.002010	<50.0	<50.0	<50.0	<50.0	<50.0	<9.92*
FS02	12/09/2020	0.5	<0.00201	<0.002010	<49.9	<49.9	<49.9	<49.9	<49.9	11.3*
FS03	12/07/2020	1	<0.00198	<0.001980	<50.1	<50.1	<50.1	<50.1	<50.1	23.7*
FS04	12/07/2020	1	<0.00200	<0.00200	<50.1	54.2	<50.1	54.2	54.2	87.7*
FS05	12/07/2020	1	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	246*

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC - Ross Draw Unit 14
Eddy County, New Mexico

Ensolum Project No. 03A1987035

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 ORO (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**
FS06	12/07/2020	1	<0.00200	<0.00200	<50.3	98.3	<50.3	98.3	98.3	42.2*
FS07	12/08/2020	1.5 - 4	<0.0000198	<0.0000198	<50.1	272	65.0	272	**337***	442*
FS07	07/13/2022	4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	1,130
FS08	12/08/2020	4	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	1,070
FS09	12/08/2020	4	<0.00200	<0.00200	<49.9	57.2	<49.9	57.2	57.2	932
FS10	12/08/2020	4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	2,170
FS11	12/08/2020	4	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	4,340
FS12	12/08/2020	4	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	1,710
FS13	12/08/2020	4	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	1,880
FS14	12/08/2020	4	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	1,160
FS15	12/08/2020	4.5	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	1,220
FS16	12/09/2020	4	<0.00198	<0.00198	<49.8	81.1	<49.8	81.1	81.1	1,200
FS17	12/09/2020	4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,090
FS18	12/09/2020	4	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,510
FS19	12/09/2020	4	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	3,860
FS20	12/09/2020	4	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	2,700
FS21	12/09/2020	4	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	3,260
FS22	12/09/2020	4	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	2,420
FS23	12/09/2020	4	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	3,910
FS24	12/09/2020	4	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	4,460
FS25	12/09/2020	4	<0.00198	<0.00198	<50.3	<50.3	<50.3	<50.3	<50.3	1,740
FS26	12/09/2020	4	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	5,280
FS27	12/09/2020	4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	3,190
FS28	12/09/2020	4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	3,640
FS29	12/09/2020	4	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	3,050
FS30	12/09/2020	4	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	4,750
Excavation Sidewall Soil Sample Analytical Results										
SW01	12/09/2020	0 - 1.5	<0.00198	<0.001980	<50.2	<50.2	<50.2	<50.2	<50.2	141*
SW02	12/09/2020	0 - 4	<0.00199	<0.001990	<50.2	<50.2	<50.2	<50.2	<50.2	86.8*
SW03	12/09/2020	0 - 4	<0.00200	<0.002000	<49.8	<49.8	<49.8	<49.8	<49.8	279*
SW04	12/09/2020	0 - 4.5	<0.00198	<0.001980	<49.8	508	<49.8	508	508	897

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC - Ross Draw Unit 14
Eddy County, New Mexico

Ensolum Project No. 03A1987035

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 ORO (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**
SW05	12/09/2020	0 - 4.5	<0.00200	<0.002000	<49.8	297	<49.8	297	297	2,080
SW06	12/09/2020	0 - 4	<0.00202	<0.002020	<49.9	<49.9	<49.9	<49.9	<49.9	329*
SW07	12/09/2020	0 - 4	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	324*
SW08	12/09/2020	0 - 4	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	32.1*
SW09	12/09/2020	0 - 4	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	201*
SW10	12/09/2020	0 - 1.5	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	262*
SW11	07/13/2022	0 - 4	<0.00200	<0.00399	<49.9	63.3	<49.9	63.3	63.3	52.4*
SW12	07/13/2022	0 - 4	<0.00202	<0.00404	<50.0	59.2	<50.0	59.2	59.2	46.8*

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

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

** indicates soil in the top 4 feet of pasture to be reclaimed*

ENSOLUM

APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

eurofins | Xenco

Certificate of Analysis Summary 666055

LT Environmental, Inc., Arvada, CO

Project Name: RDU 14

Project Id: 034820026
Contact: Joseph Hernandez
Project Location: Rural Eddy County

Date Received in Lab: Wed 07.01.2020 11:11
Report Date: 07.06.2020 08:40
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	666055-001		666055-002		666055-003		666055-004		666055-005		666055-006	
	Field Id:	BH01		BH01A		BH02		BH02A		BH03		BH03A	
	Depth:	0.5-1 ft		3.5-4 ft		2.5-3 ft		3.5-4 ft		0.5-1 ft		3.5-4 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	06.29.2020 10:35		06.29.2020 10:40		06.29.2020 09:59		06.29.2020 10:00		06.29.2020 08:28		06.29.2020 08:35	
BTEX by EPA 8021B	***Extracted:***	07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57	
	Analyzed:	07.01.2020 16:26		07.01.2020 16:47		07.01.2020 17:09		07.01.2020 17:30		07.01.2020 17:51		07.01.2020 18:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00396	0.00396
o-Xylene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198
Inorganic Anions by EPA 300	***Extracted:***	07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07	
	Analyzed:	07.01.2020 14:55		07.01.2020 15:13		07.01.2020 15:19		07.01.2020 15:25		07.01.2020 15:31		07.01.2020 15:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		13.5	10.0	12.3	9.94	888	9.92	1330	9.94	212	9.94	12.5	9.98
TPH by SW8015 Mod	***Extracted:***	07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00	
	Analyzed:	07.01.2020 13:13		07.01.2020 13:13		07.01.2020 14:14		07.01.2020 14:34		07.01.2020 14:55		07.01.2020 15:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<49.9	49.9	<50.1	50.1
Diesel Range Organics (DRO)		<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<49.9	49.9	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<49.9	49.9	<50.1	50.1
Total TPH		<50.2	50.2	<49.8	49.8	<49.8	49.8	<50.1	50.1	<49.9	49.9	<50.1	50.1

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Xenco

Certificate of Analysis Summary 666055

LT Environmental, Inc., Arvada, CO

Project Name: RDU 14

Project Id: 034820026
Contact: Joseph Hernandez
Project Location: Rural Eddy County

Date Received in Lab: Wed 07.01.2020 11:11
Report Date: 07.06.2020 08:40
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	666055-007		666055-008		666055-009		666055-010		666055-011		666055-012	
	Field Id:	BH04		BH04A		BH06		BH06A		BH07		BH07A	
	Depth:	1.5-2 ft		3.5-4 ft		0.5-1 ft		1.5-2 ft		0.5-1 ft		1.5-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	06.29.2020 09:16		06.29.2020 09:20		06.29.2020 11:34		06.29.2020 11:37		06.29.2020 12:27		06.29.2020 13:31	
BTEX by EPA 8021B	***Extracted:***	07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57	
	Analyzed:	07.01.2020 18:34		07.01.2020 18:56		07.01.2020 19:17		07.01.2020 19:39		07.01.2020 20:55		07.01.2020 21:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
m,p-Xylenes		<0.00401	0.00401	<0.00401	0.00401	<0.00399	0.00399	<0.00400	0.00400	<0.00398	0.00398	<0.00398	0.00398
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07	
	Analyzed:	07.01.2020 15:55		07.01.2020 16:01		07.01.2020 16:07		07.01.2020 16:13		07.01.2020 16:19		07.01.2020 16:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.7	9.98	10.9	10.0	14.2	9.94	12.8	9.98	<9.98	9.98	<9.98	9.98
TPH by SW8015 Mod	***Extracted:***	07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00	
	Analyzed:	07.01.2020 15:36		07.01.2020 15:56		07.01.2020 16:17		07.01.2020 14:14		07.01.2020 14:34		07.01.2020 14:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<49.9	49.9	<50.2	50.2	<49.8	49.8	<50.0	50.0	<49.8	49.8
Diesel Range Organics (DRO)		<50.1	50.1	<49.9	49.9	<50.2	50.2	<49.8	49.8	<50.0	50.0	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<49.9	49.9	<50.2	50.2	<49.8	49.8	<50.0	50.0	<49.8	49.8
Total TPH		<50.1	50.1	<49.9	49.9	<50.2	50.2	<49.8	49.8	<50.0	50.0	<49.8	49.8

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Xenco

Certificate of Analysis Summary 666055

LT Environmental, Inc., Arvada, CO

Project Name: RDU 14

Project Id: 034820026
Contact: Joseph Hernandez
Project Location: Rural Eddy County

Date Received in Lab: Wed 07.01.2020 11:11
Report Date: 07.06.2020 08:40
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	666055-013		666055-014		666055-015		666055-016					
	Field Id:	BH08		BH08A		BH09		BH09A					
	Depth:	0.5-1 ft		3.5-4 ft		0.5-1 ft		3.5-4 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	06.29.2020 12:30		06.29.2020 12:40		06.29.2020 13:12		06.29.2020 13:20					
BTEX by EPA 8021B	***Extracted:***	07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57		07.01.2020 12:57					
	Analyzed:	07.01.2020 21:38		07.01.2020 21:59		07.01.2020 22:20		07.01.2020 22:42					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201				
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201				
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201				
m,p-Xylenes		<0.00403	0.00403	<0.00401	0.00401	<0.00396	0.00396	<0.00402	0.00402				
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201				
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201				
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00201	0.00201				
Inorganic Anions by EPA 300	***Extracted:***	07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07		07.01.2020 14:07					
	Analyzed:	07.01.2020 16:42		07.01.2020 17:00		07.01.2020 17:06		07.01.2020 17:12					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		430	9.98	531	9.92	18.4	10.0	46.3	9.98				
TPH by SW8015 Mod	***Extracted:***	07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00		07.01.2020 13:00					
	Analyzed:	07.01.2020 15:15		07.01.2020 15:36		07.01.2020 15:56		07.01.2020 16:17					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<49.9	49.9	<50.3	50.3	<50.1	50.1				
Diesel Range Organics (DRO)		<50.1	50.1	<49.9	49.9	<50.3	50.3	<50.1	50.1				
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<49.9	49.9	<50.3	50.3	<50.1	50.1				
Total TPH		<50.1	50.1	<49.9	49.9	<50.3	50.3	<50.1	50.1				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Xenco

Analytical Report 666055

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDU 14

034820026

07.06.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Xenco

07.06.2020

Project Manager: **Joseph Hernandez**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **666055**
RDU 14
Project Address: Rural Eddy County

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 666055. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 666055 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Xenco

Sample Cross Reference 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	06.29.2020 10:35	0.5 - 1 ft	666055-001
BH01A	S	06.29.2020 10:40	3.5 - 4 ft	666055-002
BH02	S	06.29.2020 09:59	2.5 - 3 ft	666055-003
BH02A	S	06.29.2020 10:00	3.5 - 4 ft	666055-004
BH03	S	06.29.2020 08:28	0.5 - 1 ft	666055-005
BH03A	S	06.29.2020 08:35	3.5 - 4 ft	666055-006
BH04	S	06.29.2020 09:16	1.5 - 2 ft	666055-007
BH04A	S	06.29.2020 09:20	3.5 - 4 ft	666055-008
BH06	S	06.29.2020 11:34	0.5 - 1 ft	666055-009
BH06A	S	06.29.2020 11:37	1.5 - 2 ft	666055-010
BH07	S	06.29.2020 12:27	0.5 - 1 ft	666055-011
BH07A	S	06.29.2020 13:31	1.5 - 2 ft	666055-012
BH08	S	06.29.2020 12:30	0.5 - 1 ft	666055-013
BH08A	S	06.29.2020 12:40	3.5 - 4 ft	666055-014
BH09	S	06.29.2020 13:12	0.5 - 1 ft	666055-015
BH09A	S	06.29.2020 13:20	3.5 - 4 ft	666055-016

CASE NARRATIVE

eurofins | Xenco

Client Name: LT Environmental, Inc.
Project Name: RDU 14

Project ID: *034820026*
Work Order Number(s): *666055*

Report Date: *07.06.2020*
Date Received: *07.01.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-001	Date Collected:	06.29.2020 10:35	Sample Depth:	0.5 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.5**	10.0	mg/kg	07.01.2020 14:55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.01.2020 13:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.01.2020 13:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.01.2020 13:13	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.01.2020 13:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	07.01.2020 13:13	
o-Terphenyl	84-15-1	111	%	70-135	07.01.2020 13:13	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-001	Date Collected:	06.29.2020 10:35	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.01.2020 16:26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.01.2020 16:26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.01.2020 16:26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.01.2020 16:26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.01.2020 16:26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.01.2020 16:26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.01.2020 16:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	07.01.2020 16:26	
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.01.2020 16:26	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH01A** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-002 Date Collected: 06.29.2020 10:40 Sample Depth: 3.5 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.3**	9.94	mg/kg	07.01.2020 15:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.01.2020 13:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.01.2020 13:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.01.2020 13:13	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.01.2020 13:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	07.01.2020 13:13	
o-Terphenyl	84-15-1	78	%	70-135	07.01.2020 13:13	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH01A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-002	Date Collected:	06.29.2020 10:40	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.01.2020 16:47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.01.2020 16:47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.01.2020 16:47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.01.2020 16:47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.01.2020 16:47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.01.2020 16:47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.01.2020 16:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 16:47	
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.01.2020 16:47	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH02** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-003 Date Collected: 06.29.2020 09:59 Sample Depth: 2.5 - 3 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**888**	9.92	mg/kg	07.01.2020 15:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130574

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	07.01.2020 14:14	
o-Terphenyl	84-15-1	97	%	70-135	07.01.2020 14:14	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-003	Date Collected:	06.29.2020 09:59	Sample Depth:	2.5 - 3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.01.2020 17:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.01.2020 17:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.01.2020 17:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.01.2020 17:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.01.2020 17:09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.01.2020 17:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.01.2020 17:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.01.2020 17:09	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.01.2020 17:09	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH02A** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-004 Date Collected: 06.29.2020 10:00 Sample Depth: 3.5 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1330**	9.94	mg/kg	07.01.2020 15:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130574

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.01.2020 14:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.01.2020 14:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.01.2020 14:34	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.01.2020 14:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	07.01.2020 14:34	
o-Terphenyl	84-15-1	96	%	70-135	07.01.2020 14:34	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH02A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-004	Date Collected:	06.29.2020 10:00	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 17:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 17:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 17:30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.01.2020 17:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 17:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 17:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 17:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.01.2020 17:30	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 17:30	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-005	Date Collected:	06.29.2020 08:28	Sample Depth:	0.5 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**212**	9.94	mg/kg	07.01.2020 15:31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.01.2020 14:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.01.2020 14:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.01.2020 14:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.01.2020 14:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	07.01.2020 14:55	
o-Terphenyl	84-15-1	97	%	70-135	07.01.2020 14:55	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-005	Date Collected:	06.29.2020 08:28	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 17:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 17:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 17:51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.01.2020 17:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 17:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 17:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 17:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.01.2020 17:51	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.01.2020 17:51	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-006	Date Collected:	06.29.2020 08:35	Sample Depth:	3.5 - 4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.5**	9.98	mg/kg	07.01.2020 15:49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	07.01.2020 15:15	
o-Terphenyl	84-15-1	96	%	70-135	07.01.2020 15:15	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH03A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-006	Date Collected:	06.29.2020 08:35	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.01.2020 18:13	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.01.2020 18:13	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.01.2020 18:13	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.01.2020 18:13	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.01.2020 18:13	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.01.2020 18:13	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.01.2020 18:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.01.2020 18:13	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.01.2020 18:13	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-007	Date Collected:	06.29.2020 09:16	Sample Depth:	1.5 - 2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.7**	9.98	mg/kg	07.01.2020 15:55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.01.2020 15:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.01.2020 15:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.01.2020 15:36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.01.2020 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	07.01.2020 15:36	
o-Terphenyl	84-15-1	96	%	70-135	07.01.2020 15:36	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-007	Date Collected:	06.29.2020 09:16	Sample Depth:	1.5 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 18:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 18:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 18:34	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.01.2020 18:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 18:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 18:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 18:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.01.2020 18:34	
4-Bromofluorobenzene	460-00-4	100	%	70-130	07.01.2020 18:34	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-008	Date Collected:	06.29.2020 09:20	Sample Depth:	3.5 - 4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.9**	10.0	mg/kg	07.01.2020 16:01		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.01.2020 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.01.2020 15:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.01.2020 15:56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.01.2020 15:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	07.01.2020 15:56	
o-Terphenyl	84-15-1	97	%	70-135	07.01.2020 15:56	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH04A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-008	Date Collected:	06.29.2020 09:20	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 18:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 18:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 18:56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.01.2020 18:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 18:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 18:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 18:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	07.01.2020 18:56	
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.01.2020 18:56	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-009	Date Collected:	06.29.2020 11:34	Sample Depth:	0.5 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.2**	9.94	mg/kg	07.01.2020 16:07		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130574				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	07.01.2020 16:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	07.01.2020 16:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	07.01.2020 16:17	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	07.01.2020 16:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	07.01.2020 16:17	
o-Terphenyl	84-15-1	100	%	70-135	07.01.2020 16:17	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-009	Date Collected:	06.29.2020 11:34	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 19:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 19:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 19:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.01.2020 19:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 19:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 19:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 19:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.01.2020 19:17	
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.01.2020 19:17	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH06A** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-010 Date Collected: 06.29.2020 11:37 Sample Depth: 1.5 - 2 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.8**	9.98	mg/kg	07.01.2020 16:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.01.2020 14:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	07.01.2020 14:14	
o-Terphenyl	84-15-1	74	%	70-135	07.01.2020 14:14	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH06A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-010	Date Collected:	06.29.2020 11:37	Sample Depth:	1.5 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 19:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 19:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 19:39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.01.2020 19:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 19:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 19:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.01.2020 19:39	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 19:39	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH07** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-011 Date Collected: 06.29.2020 12:27 Sample Depth: 0.5 - 1 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	07.01.2020 16:19	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.01.2020 14:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.01.2020 14:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.01.2020 14:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.01.2020 14:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	07.01.2020 14:34	
o-Terphenyl	84-15-1	75	%	70-135	07.01.2020 14:34	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-011	Date Collected:	06.29.2020 12:27	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.01.2020 20:55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.01.2020 20:55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.01.2020 20:55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.01.2020 20:55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.01.2020 20:55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.01.2020 20:55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.01.2020 20:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	07.01.2020 20:55	
1,4-Difluorobenzene	540-36-3	96	%	70-130	07.01.2020 20:55	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH07A** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-012 Date Collected: 06.29.2020 13:31 Sample Depth: 1.5 - 2 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	07.01.2020 16:37	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.01.2020 14:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.01.2020 14:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.01.2020 14:55	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.01.2020 14:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	07.01.2020 14:55	
o-Terphenyl	84-15-1	75	%	70-135	07.01.2020 14:55	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH07A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-012	Date Collected:	06.29.2020 13:31	Sample Depth:	1.5 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.01.2020 21:16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.01.2020 21:16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.01.2020 21:16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.01.2020 21:16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.01.2020 21:16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.01.2020 21:16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.01.2020 21:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 21:16	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.01.2020 21:16	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH08** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-013 Date Collected: 06.29.2020 12:30 Sample Depth: 0.5 - 1 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**430**	9.98	mg/kg	07.01.2020 16:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.01.2020 15:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	07.01.2020 15:15	
o-Terphenyl	84-15-1	74	%	70-135	07.01.2020 15:15	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH08**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-013	Date Collected:	06.29.2020 12:30	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.01.2020 21:38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.01.2020 21:38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.01.2020 21:38	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.01.2020 21:38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.01.2020 21:38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.01.2020 21:38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.01.2020 21:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.01.2020 21:38	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 21:38	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH08A** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-014 Date Collected: 06.29.2020 12:40 Sample Depth: 3.5 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**531**	9.92	mg/kg	07.01.2020 17:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.01.2020 15:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.01.2020 15:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.01.2020 15:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.01.2020 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	07.01.2020 15:36	
o-Terphenyl	84-15-1	75	%	70-135	07.01.2020 15:36	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH08A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-014	Date Collected:	06.29.2020 12:40	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 21:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 21:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 21:59	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.01.2020 21:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 21:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 21:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 21:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.01.2020 21:59	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 21:59	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-015	Date Collected:	06.29.2020 13:12	Sample Depth:	0.5 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.4**	10.0	mg/kg	07.01.2020 17:06		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 13:00	Basis:	Wet Weight
Seq Number:	3130577				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	07.01.2020 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	07.01.2020 15:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	07.01.2020 15:56	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	07.01.2020 15:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	07.01.2020 15:56	
o-Terphenyl	84-15-1	74	%	70-135	07.01.2020 15:56	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-015	Date Collected:	06.29.2020 13:12	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.01.2020 22:20	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.01.2020 22:20	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.01.2020 22:20	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.01.2020 22:20	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.01.2020 22:20	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.01.2020 22:20	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.01.2020 22:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 22:20	
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.01.2020 22:20	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH09A** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666055-016 Date Collected: 06.29.2020 13:20 Sample Depth: 3.5 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:07 Basis: Wet Weight
Seq Number: 3130575

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.3**	9.98	mg/kg	07.01.2020 17:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 13:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	07.01.2020 16:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	07.01.2020 16:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	07.01.2020 16:17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	07.01.2020 16:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	07.01.2020 16:17	
o-Terphenyl	84-15-1	75	%	70-135	07.01.2020 16:17	

eurofins | Xenco

Certificate of Analytical Results 666055

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH09A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666055-016	Date Collected:	06.29.2020 13:20	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.01.2020 22:42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.01.2020 22:42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.01.2020 22:42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.01.2020 22:42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.01.2020 22:42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.01.2020 22:42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.01.2020 22:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	07.01.2020 22:42	
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.01.2020 22:42	

eurofins | Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 666055

eurofins | Xenco

LT Environmental, Inc.

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130575 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706572-1-BLK — LCS Sample Id: 7706572-1-BKS — LCSD Sample Id: 7706572-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	258	103	265	106	90-110	3	20	mg/kg	07.01.2020 09:16	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130575 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-001 — MS Sample Id: 666055-001 S — MSD Sample Id: 666055-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.5	201	200	93	200	93	90-110	0	20	mg/kg	07.01.2020 15:01	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130575 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-011 — MS Sample Id: 666055-011 S — MSD Sample Id: 666055-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.94	199	192	96	193	97	90-110	1	20	mg/kg	07.01.2020 16:25	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130574 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706586-1-BLK — LCS Sample Id: 7706586-1-BKS — LCSD Sample Id: 7706586-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1070	107	1090	109	70-135	2	35	mg/kg	07.01.2020 10:45	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1130	113	70-135	1	35	mg/kg	07.01.2020 10:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		118		120		70-135	%	07.01.2020 10:45
o-Terphenyl	110		109		109		70-135	%	07.01.2020 10:45

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130577 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706589-1-BLK — LCS Sample Id: 7706589-1-BKS — LCSD Sample Id: 7706589-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1050	105	996	100	70-135	5	35	mg/kg	07.01.2020 10:45	
Diesel Range Organics (DRO)	<50.0	1000	1140	114	1110	111	70-135	3	35	mg/kg	07.01.2020 10:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		121		118		70-135	%	07.01.2020 10:45
o-Terphenyl	101		108		107		70-135	%	07.01.2020 10:45

MS/MSD Percent Recovery [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 666055

eurofins | Xenco

LT Environmental, Inc.

RDU 14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130574 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706586-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.01.2020 10:25	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130577 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706589-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.01.2020 10:25	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130574 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-001 — MS Sample Id: 666055-001 S — MSD Sample Id: 666055-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	1200	119	1180	118	70-135	2	35	mg/kg	07.01.2020 13:33	
Diesel Range Organics (DRO)	<50.3	1010	1160	115	1120	112	70-135	4	35	mg/kg	07.01.2020 13:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		125		70-135	%	07.01.2020 13:33
o-Terphenyl	113		110		70-135	%	07.01.2020 13:33

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130577 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-002 — MS Sample Id: 666055-002 S — MSD Sample Id: 666055-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1180	118	1030	103	70-135	14	35	mg/kg	07.01.2020 13:33	
Diesel Range Organics (DRO)	<50.2	1000	1090	109	1160	116	70-135	6	35	mg/kg	07.01.2020 13:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		100		70-135	%	07.01.2020 13:33
o-Terphenyl	93		99		70-135	%	07.01.2020 13:33

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

eurofins | Xenco

QC Summary 666055

LT Environmental, Inc.

RDU 14

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3130572 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706587-1-BLK — LCS Sample Id: 7706587-1-BKS — LCSD Sample Id: 7706587-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	07.01.2020 14:27	
Toluene	<0.00200	0.100	0.103	103	0.105	105	70-130	2	35	mg/kg	07.01.2020 14:27	
Ethylbenzene	<0.00200	0.100	0.0971	97	0.0986	99	71-129	2	35	mg/kg	07.01.2020 14:27	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.198	99	70-135	1	35	mg/kg	07.01.2020 14:27	
o-Xylene	<0.00200	0.100	0.0978	98	0.0992	99	71-133	1	35	mg/kg	07.01.2020 14:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		99		70-130	%	07.01.2020 14:27
4-Bromofluorobenzene	97		101		101		70-130	%	07.01.2020 14:27

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3130572 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-001 — MS Sample Id: 666055-001 S — MSD Sample Id: 666055-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.121	122	0.126	126	70-130	4	35	mg/kg	07.01.2020 15:09	
Toluene	<0.00199	0.0994	0.124	125	0.119	119	70-130	4	35	mg/kg	07.01.2020 15:09	
Ethylbenzene	<0.00199	0.0994	0.117	118	0.112	112	71-129	4	35	mg/kg	07.01.2020 15:09	
m,p-Xylenes	<0.00398	0.199	0.237	119	0.229	115	70-135	3	35	mg/kg	07.01.2020 15:09	
o-Xylene	<0.00199	0.0994	0.114	115	0.110	110	71-133	4	35	mg/kg	07.01.2020 15:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		70-130	%	07.01.2020 15:09
4-Bromofluorobenzene	102		103		70-130	%	07.01.2020 15:09

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: tetete055 ~~tetete055~~ AM 7/1

Page 1 of 2

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	LYNDA LAUMBACH
Company Name:	LT ENVIRONMENTAL	Company Name:	WPX ENERGY
Address:	3300 NORTH A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(432) 894-5641	Email:	jhernandez@lenv.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	03482002G	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temperature (°C):	3.4/3.2	Temp Blank:	(Yes) No
Received Intact:	(Yes) No	Wet Ice:	(Yes) No
Cooler Custody Seals:	Yes (No) N/A	Thermometer ID	TNM007
Sample Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
		Total Containers:	14

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	BH01	S	6/29/20	1035	0.5-1'	1			
	~~BH01AAB~~ BH01A			1040	3.5-4'	1			
	BH02			0959	2.5-3'	1			
	BH02A			1000	3.5-4'	1			
	BH03			0828	0.5-1'	1			
	BH03A			0835	3.5-4'	1			
	BH04			0916	1.5-2'	1			
	BH04A			0920	3.5-4'	1			
	BH06			1134	0.5-1'	1			
	BH06A			1137	1.5-2'	1			

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

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

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		7/1/20 11:11	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 El Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 6e1e1055

Page 2 of 2

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	LYNDA LAUMBACH
Company Name:	IT ENVIRONMENTAL	Company Name:	WPX ENERGY
Address:	3300 NORTH A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(432) 894-5641	Email:	jhernandez@ITEN.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	034820026	Routine	☒
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

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

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
	BH07	S	6/29/20	1227	0.5-1'	1				
	BH07A			1331	1.5-2'	1				
	BH08			1230	0.5-1'	1				
	BH08A			1240	3.5-4'	1				
	BH09			1312	0.5-1'	1				
	BH09A	↓	↓	1320	3.5-4'	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 SiO2 Na Sr Tl Sn U V Zn

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		7/1/20 11:11	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.01.2020 11.11.00 AM

Work Order #: 666055

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 07.01.2020

Checklist reviewed by: Jessica Kramer Date: 07.06.2020

Jessica Kramer

eurofins | Xenco

Certificate of Analysis Summary 666068

LT Environmental, Inc., Arvada, CO

Project Name: RDU 14

Project Id: 034820026
Contact: Joseph Hernandez
Project Location: Rural Eddy County

Date Received in Lab: Wed 07.01.2020 11:11
Report Date: 07.06.2020 08:39
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	666068-001		666068-002		666068-003		666068-004					
	Field Id:	BH10		BH10A		BH10B		BH10C					
	Depth:	0.5-1 ft		1.5-2 ft		2.5-3 ft		3.5-4 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	06.29.2020 14:20		06.29.2020 14:25		06.29.2020 14:30		06.29.2020 14:35					
BTEX by EPA 8021B	***Extracted:***	07.01.2020 12:57		07.01.2020 15:02		07.01.2020 15:02		07.01.2020 15:02					
	Analyzed:	07.02.2020 00:08		07.01.2020 19:59		07.01.2020 20:20		07.01.2020 20:40					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200				
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200				
m,p-Xylenes		<0.00401	0.00401	<0.00401	0.00401	<0.00402	0.00402	<0.00400	0.00400				
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200				
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	07.01.2020 14:07		07.01.2020 14:59		07.01.2020 14:59		07.01.2020 14:59					
	Analyzed:	07.01.2020 17:36		07.01.2020 18:12		07.01.2020 18:30		07.01.2020 18:36					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		1010	10.0	5010	49.7	4190	49.5	5620	50.3				
TPH by SW8015 Mod	***Extracted:***	07.01.2020 15:00		07.01.2020 15:00		07.01.2020 15:00		07.01.2020 15:00					
	Analyzed:	07.01.2020 19:02		07.01.2020 18:00		07.01.2020 18:21		07.01.2020 18:41					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<251	251	<251	251	<251	251	<251	251				
Diesel Range Organics (DRO)		3120	251	3800	251	4680	251	4870	251				
Motor Oil Range Hydrocarbons (MRO)		1150	251	1560	251	1970	251	2120	251				
Total TPH		4270	251	5360	251	6650	251	6990	251				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Xenco

Analytical Report 666068

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDU 14

034820026

07.06.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Xenco

07.06.2020

Project Manager: **Joseph Hernandez**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): **666068**
RDU 14
Project Address: Rural Eddy County

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 666068. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 666068 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Xenco

Sample Cross Reference 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH10	S	06.29.2020 14:20	0.5 - 1 ft	666068-001
BH10A	S	06.29.2020 14:25	1.5 - 2 ft	666068-002
BH10B	S	06.29.2020 14:30	2.5 - 3 ft	666068-003
BH10C	S	06.29.2020 14:35	3.5 - 4 ft	666068-004

CASE NARRATIVE

eurofins | Xenco

Client Name: LT Environmental, Inc.

Project Name: RDU 14

Project ID: *034820026*
Work Order Number(s): *666068*

Report Date: *07.06.2020*
Date Received: *07.01.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-001	Date Collected:	06.29.2020 14:20	Sample Depth:	0.5 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:07	Basis:	Wet Weight
Seq Number:	3130575				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1010**	10.0	mg/kg	07.01.2020 17:36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 15:00	Basis:	Wet Weight
Seq Number:	3130577				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	07.01.2020 19:02	U	5
Diesel Range Organics (DRO)	C10C28DRO	**3120**	251	mg/kg	07.01.2020 19:02		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1150**	251	mg/kg	07.01.2020 19:02		5
Total TPH	PHC635	**4270**	251	mg/kg	07.01.2020 19:02		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	07.01.2020 19:02	
o-Terphenyl	84-15-1	79	%	70-135	07.01.2020 19:02	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-001	Date Collected:	06.29.2020 14:20	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 12:57	Basis:	Wet Weight
Seq Number:	3130572				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.02.2020 00:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.02.2020 00:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.02.2020 00:08	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.02.2020 00:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.02.2020 00:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.02.2020 00:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.02.2020 00:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.02.2020 00:08	
4-Bromofluorobenzene	460-00-4	100	%	70-130	07.02.2020 00:08	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-002	Date Collected:	06.29.2020 14:25	Sample Depth:	1.5 - 2 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:59	Basis:	Wet Weight
Seq Number:	3130578				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5010**	49.7	mg/kg	07.01.2020 18:12		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 15:00	Basis:	Wet Weight
Seq Number:	3130577				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	07.01.2020 18:00	U	5
Diesel Range Organics (DRO)	C10C28DRO	**3800**	251	mg/kg	07.01.2020 18:00		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1560**	251	mg/kg	07.01.2020 18:00		5
Total TPH	PHC635	**5360**	251	mg/kg	07.01.2020 18:00		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	07.01.2020 18:00	
o-Terphenyl	84-15-1	80	%	70-135	07.01.2020 18:00	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10A**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-002	Date Collected:	06.29.2020 14:25	Sample Depth:	1.5 - 2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 15:02	Basis:	Wet Weight
Seq Number:	3130571				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 19:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 19:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 19:59	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.01.2020 19:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 19:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 19:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 19:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	07.01.2020 19:59	
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.01.2020 19:59	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id: **BH10B** Matrix: Soil Date Received:07.01.2020 11:11
Lab Sample Id: 666068-003 Date Collected: 06.29.2020 14:30 Sample Depth: 2.5 - 3 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 07.01.2020 14:59 Basis: Wet Weight
Seq Number: 3130578

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4190**	49.5	mg/kg	07.01.2020 18:30		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: DTH % Moisture:
Analyst: DTH Date Prep: 07.01.2020 15:00 Basis: Wet Weight
Seq Number: 3130577

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	07.01.2020 18:21	U	5
Diesel Range Organics (DRO)	C10C28DRO	**4680**	251	mg/kg	07.01.2020 18:21		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1970**	251	mg/kg	07.01.2020 18:21		5
Total TPH	PHC635	**6650**	251	mg/kg	07.01.2020 18:21		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	07.01.2020 18:21	
o-Terphenyl	84-15-1	82	%	70-135	07.01.2020 18:21	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10B**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-003	Date Collected:	06.29.2020 14:30	Sample Depth:	2.5 - 3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 15:02	Basis:	Wet Weight
Seq Number:	3130571				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.01.2020 20:20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.01.2020 20:20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.01.2020 20:20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.01.2020 20:20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.01.2020 20:20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.01.2020 20:20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.01.2020 20:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.01.2020 20:20	
4-Bromofluorobenzene	460-00-4	95	%	70-130	07.01.2020 20:20	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10C**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-004	Date Collected:	06.29.2020 14:35	Sample Depth:	3.5 - 4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 14:59	Basis:	Wet Weight
Seq Number:	3130578				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5620**	50.3	mg/kg	07.01.2020 18:36		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	07.01.2020 15:00	Basis:	Wet Weight
Seq Number:	3130577				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	07.01.2020 18:41	U	5
Diesel Range Organics (DRO)	C10C28DRO	**4870**	251	mg/kg	07.01.2020 18:41		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**2120**	251	mg/kg	07.01.2020 18:41		5
Total TPH	PHC635	**6990**	251	mg/kg	07.01.2020 18:41		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	07.01.2020 18:41	
o-Terphenyl	84-15-1	80	%	70-135	07.01.2020 18:41	

eurofins | Xenco

Certificate of Analytical Results 666068

LT Environmental, Inc., Arvada, CO

RDU 14

Sample Id:	**BH10C**	Matrix:	Soil	Date Received:	07.01.2020 11:11
Lab Sample Id:	666068-004	Date Collected:	06.29.2020 14:35	Sample Depth:	3.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	07.01.2020 15:02	Basis:	Wet Weight
Seq Number:	3130571				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.2020 20:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.2020 20:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.2020 20:40	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.01.2020 20:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.2020 20:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.2020 20:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.2020 20:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	07.01.2020 20:40	
1,4-Difluorobenzene	540-36-3	100	%	70-130	07.01.2020 20:40	

eurofins | Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

eurofins | Xenco

QC Summary 666068

LT Environmental, Inc.

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130575 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706572-1-BLK — LCS Sample Id: 7706572-1-BKS — LCSD Sample Id: 7706572-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	258	103	265	106	90-110	3	20	mg/kg	07.01.2020 09:16	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130578 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706575-1-BLK — LCS Sample Id: 7706575-1-BKS — LCSD Sample Id: 7706575-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	264	106	90-110	3	20	mg/kg	07.01.2020 18:00	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130575 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-001 — MS Sample Id: 666055-001 S — MSD Sample Id: 666055-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.5	201	200	93	200	93	90-110	0	20	mg/kg	07.01.2020 15:01	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130575 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-011 — MS Sample Id: 666055-011 S — MSD Sample Id: 666055-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.94	199	192	96	193	97	90-110	1	20	mg/kg	07.01.2020 16:25	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130578 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666068-002 — MS Sample Id: 666068-002 S — MSD Sample Id: 666068-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5010	203	5210	99	5210	100	90-110	0	20	mg/kg	07.01.2020 18:18	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3130578 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666135-001 — MS Sample Id: 666135-001 S — MSD Sample Id: 666135-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	275	199	418	72	419	72	90-110	0	20	mg/kg	07.01.2020 19:42	X

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 666068

eurofins | Xenco

LT Environmental, Inc.

RDU 14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130577 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706589-1-BLK — LCS Sample Id: 7706589-1-BKS — LCSD Sample Id: 7706589-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1050	105	996	100	70-135	5	35	mg/kg	07.01.2020 10:45	
Diesel Range Organics (DRO)	<50.0	1000	1140	114	1110	111	70-135	3	35	mg/kg	07.01.2020 10:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		121		118		70-135	%	07.01.2020 10:45
o-Terphenyl	101		108		107		70-135	%	07.01.2020 10:45

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130577 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706589-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.01.2020 10:25	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3130577 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-002 — MS Sample Id: 666055-002 S — MSD Sample Id: 666055-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1180	118	1030	103	70-135	14	35	mg/kg	07.01.2020 13:33	
Diesel Range Organics (DRO)	<50.2	1000	1090	109	1160	116	70-135	6	35	mg/kg	07.01.2020 13:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		100		70-135	%	07.01.2020 13:33
o-Terphenyl	93		99		70-135	%	07.01.2020 13:33

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3130572 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706587-1-BLK — LCS Sample Id: 7706587-1-BKS — LCSD Sample Id: 7706587-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	07.01.2020 14:27	
Toluene	<0.00200	0.100	0.103	103	0.105	105	70-130	2	35	mg/kg	07.01.2020 14:27	
Ethylbenzene	<0.00200	0.100	0.0971	97	0.0986	99	71-129	2	35	mg/kg	07.01.2020 14:27	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.198	99	70-135	1	35	mg/kg	07.01.2020 14:27	
o-Xylene	<0.00200	0.100	0.0978	98	0.0992	99	71-133	1	35	mg/kg	07.01.2020 14:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		99		70-130	%	07.01.2020 14:27
4-Bromofluorobenzene	97		101		101		70-130	%	07.01.2020 14:27

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

eurofins | Xenco

QC Summary 666068

LT Environmental, Inc.

RDU 14

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3130571 — Matrix: Solid — Date Prep: 07.01.2020
MB Sample Id: 7706591-1-BLK — LCS Sample Id: 7706591-1-BKS — LCSD Sample Id: 7706591-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0921	92	0.0950	95	70-130	3	35	mg/kg	07.01.2020 16:21	
Toluene	<0.00200	0.100	0.0924	92	0.0937	94	70-130	1	35	mg/kg	07.01.2020 16:21	
Ethylbenzene	<0.00200	0.100	0.0963	96	0.0995	100	71-129	3	35	mg/kg	07.01.2020 16:21	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.203	102	70-135	3	35	mg/kg	07.01.2020 16:21	
o-Xylene	<0.00200	0.100	0.0974	97	0.100	100	71-133	3	35	mg/kg	07.01.2020 16:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		98		70-130	%	07.01.2020 16:21
4-Bromofluorobenzene	102		97		100		70-130	%	07.01.2020 16:21

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3130572 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666055-001 — MS Sample Id: 666055-001 S — MSD Sample Id: 666055-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.121	122	0.126	126	70-130	4	35	mg/kg	07.01.2020 15:09	
Toluene	<0.00199	0.0994	0.124	125	0.119	119	70-130	4	35	mg/kg	07.01.2020 15:09	
Ethylbenzene	<0.00199	0.0994	0.117	118	0.112	112	71-129	4	35	mg/kg	07.01.2020 15:09	
m,p-Xylenes	<0.00398	0.199	0.237	119	0.229	115	70-135	3	35	mg/kg	07.01.2020 15:09	
o-Xylene	<0.00199	0.0994	0.114	115	0.110	110	71-133	4	35	mg/kg	07.01.2020 15:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		70-130	%	07.01.2020 15:09
4-Bromofluorobenzene	102		103		70-130	%	07.01.2020 15:09

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3130571 — Matrix: Soil — Date Prep: 07.01.2020
Parent Sample Id: 666129-001 — MS Sample Id: 666129-001 S — MSD Sample Id: 666129-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.110	110	0.109	108	70-130	1	35	mg/kg	07.01.2020 17:01	
Toluene	<0.00200	0.0998	0.106	106	0.105	104	70-130	1	35	mg/kg	07.01.2020 17:01	
Ethylbenzene	<0.00200	0.0998	0.111	111	0.108	107	71-129	3	35	mg/kg	07.01.2020 17:01	
m,p-Xylenes	<0.00399	0.200	0.227	114	0.222	110	70-135	2	35	mg/kg	07.01.2020 17:01	
o-Xylene	<0.00200	0.0998	0.111	111	0.110	109	71-133	1	35	mg/kg	07.01.2020 17:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		70-130	%	07.01.2020 17:01
4-Bromofluorobenzene	96		101		70-130	%	07.01.2020 17:01

MS/MSD Percent Recovery — [D] = 100*(C-A) / B
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery — [D] = 100 * (C) / [B]
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 620608

www.xenco.com Page 1 of 1

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	LYNDA LAUMBACH
Company Name:	LT ENVIRONMENTAL	Company Name:	WPX ENERGY
Address:	3300 NORTH A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(432)894-5641	Email:	jhernandez@ltenv.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	034820026	Routine	X
Project Location	Rural Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	3.4/3.2	Thermometer ID	T-NM-007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	4

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	BH10	S	6/29/20	1420	0.5 - 1'	1	X	X	X
	BH10A	S		1425	1.5 - 2'	1	X	X	X
	BH10B	S		1430	2.5 - 3'	1	X	X	X
	BH10C	S		1435	3.5 - 4'	1	X	X	X

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

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

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

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

1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers		7/1/20 11:41	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 07.01.2020 11.11.00 AM

Work Order #: 666068

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 07.01.2020

Checklist reviewed by: Jessica Kramer Date: 07.06.2020

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680635

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034850026
Contact: Joseph Hernandez
Project Location: EddyC County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:09
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	680635-001		680635-002			
	Field Id:	BH11		BH11A			
	Depth:	0.3-0.5 ft		0.75-1 ft			
	Matrix:	SOIL		SOIL			
	Sampled:	12.09.2020 13:00		12.09.2020 13:02			
BTEX by EPA 8021B	***Extracted:***	12.11.2020 16:22		12.11.2020 16:22			
	Analyzed:	12.12.2020 04:09		12.12.2020 04:31			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	<0.00199	0.00199		
Toluene		<0.00200	0.00200	<0.00199	0.00199		
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199		
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398		
o-Xylene		<0.00200	0.00200	<0.00199	0.00199		
Total Xylenes		<0.002000	0.002000	<0.001990	0.001990		
Total BTEX		<0.002000	0.002000	<0.001990	0.001990		
Inorganic Anions by EPA 300	***Extracted:***	12.14.2020 16:44		12.14.2020 16:44			
	Analyzed:	12.15.2020 16:58		12.15.2020 17:16			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		101	10.0	99.3	10.0		
TPH by SW8015 Mod	***Extracted:***	12.10.2020 17:33		12.10.2020 17:33			
	Analyzed:	12.12.2020 05:41		12.12.2020 06:01			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.1	50.1		
Diesel Range Organics (DRO)		<50.2	50.2	<50.1	50.1		
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.1	50.1		
Total TPH		<50.20	50.20	<50.10	50.10		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer

eurofins | Environment Testing Xenco

Analytical Report 680635

for

WSP USA

Project Manager: Joseph Hernandez

RDU 14

TE034850026

12.16.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.16.2020

Project Manager: **Joseph Hernandez**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **680635**
RDU 14
Project Address: EddyC County

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 680635. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 680635 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 680635

WSP USA, Dallas, TX

RDU 14

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH11	S	12.09.2020 13:00	0.3 - 0.5 ft	680635-001
BH11A	S	12.09.2020 13:02	0.75 - 1 ft	680635-002

CASE NARRATIVE

eurofins | Environment Testing Xenco

Client Name: WSP USA

Project Name: RDU 14

Project ID: *TE034850026*
Work Order Number(s): *680635*

Report Date: *12.16.2020*
Date Received: *12.10.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680635

WSP USA, Dallas, TX

RDU 14

Sample Id: **BH11** Matrix: Soil Date Received: 12.10.2020 11:57

Lab Sample Id: 680635-001 Date Collected: 12.09.2020 13:00 Sample Depth: 0.3 - 0.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.14.2020 16:44 % Moisture:

Seq Number: 3145019 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**101**	10.0	mg/kg	12.15.2020 16:58		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.10.2020 17:33 % Moisture:

Seq Number: 3144745 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.12.2020 05:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.12.2020 05:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.12.2020 05:41	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	12.12.2020 05:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.12.2020 05:41	
o-Terphenyl	84-15-1	113	%	70-135	12.12.2020 05:41	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680635

WSP USA, Dallas, TX

RDU 14

Sample Id:	**BH11**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680635-001	Date Collected:	12.09.2020 13:00	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 16:22	% Moisture:	
Seq Number:	3144729			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.2020 04:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.2020 04:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.2020 04:09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.12.2020 04:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.2020 04:09	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.12.2020 04:09	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.12.2020 04:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.12.2020 04:09	
4-Bromofluorobenzene	460-00-4	120	%	70-130	12.12.2020 04:09	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680635

WSP USA, Dallas, TX

RDU 14

Sample Id: **BH11A** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680635-002 Date Collected: 12.09.2020 13:02 Sample Depth: 0.75 - 1 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.14.2020 16:44 % Moisture:
Seq Number: 3145019 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.3**	10.0	mg/kg	12.15.2020 17:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.10.2020 17:33 % Moisture:
Seq Number: 3144745 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.12.2020 06:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.12.2020 06:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.12.2020 06:01	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	12.12.2020 06:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	12.12.2020 06:01	
o-Terphenyl	84-15-1	103	%	70-135	12.12.2020 06:01	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680635

WSP USA, Dallas, TX

RDU 14

Sample Id:	**BH11A**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680635-002	Date Collected:	12.09.2020 13:02	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 16:22	% Moisture:	
Seq Number:	3144729			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.12.2020 04:31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.12.2020 04:31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.12.2020 04:31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.12.2020 04:31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.12.2020 04:31	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	12.12.2020 04:31	U	1
Total BTEX		<0.001990	0.001990	mg/kg	12.12.2020 04:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.12.2020 04:31	
4-Bromofluorobenzene	460-00-4	123	%	70-130	12.12.2020 04:31	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 680635

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145019 — Matrix: Solid — Date Prep: 12.14.2020
MB Sample Id: 7717075-1-BLK — LCS Sample Id: 7717075-1-BKS — LCSD Sample Id: 7717075-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	264	106	263	105	90-110	0	20	mg/kg	12.15.2020 14:46	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145019 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680628-013 — MS Sample Id: 680628-013 S — MSD Sample Id: 680628-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3040	202	3230	94	3240	99	90-110	0	20	mg/kg	12.15.2020 15:16	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145019 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680634-006 — MS Sample Id: 680634-006 S — MSD Sample Id: 680634-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12300	200	12500	100	12500	101	90-110	0	20	mg/kg	12.15.2020 16:40	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144745 — Matrix: Solid — Date Prep: 12.10.2020
MB Sample Id: 7716879-1-BLK — LCS Sample Id: 7716879-1-BKS — LCSD Sample Id: 7716879-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	990	99	1060	106	70-135	7	35	mg/kg	12.11.2020 22:58	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	922	92	70-135	16	35	mg/kg	12.11.2020 22:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		113		98		70-135	%	12.11.2020 22:58
o-Terphenyl	111		114		101		70-135	%	12.11.2020 22:58

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144745 — Matrix: Solid — Date Prep: 12.10.2020
MB Sample Id: 7716879-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.11.2020 22:38	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Final 1.000

eurofins | Environment Testing Xenco

QC Summary 680635

WSP USA

RDU 14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144745 — Matrix: Soil — Date Prep: 12.10.2020
Parent Sample Id: 680628-003 — MS Sample Id: 680628-003 S — MSD Sample Id: 680628-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1090	109	1060	106	70-135	3	35	mg/kg	12.11.2020 23:58	
Diesel Range Organics (DRO)	<49.9	997	1140	114	996	100	70-135	13	35	mg/kg	12.11.2020 23:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		115		70-135	%	12.11.2020 23:58
o-Terphenyl	101		100		70-135	%	12.11.2020 23:58

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144729 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716958-1-BLK — LCS Sample Id: 7716958-1-BKS — LCSD Sample Id: 7716958-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0879	88	0.0935	94	70-130	6	35	mg/kg	12.12.2020 02:05	
Toluene	<0.00200	0.100	0.0826	83	0.0873	87	70-130	6	35	mg/kg	12.12.2020 02:05	
Ethylbenzene	<0.00200	0.100	0.0858	86	0.0931	93	71-129	8	35	mg/kg	12.12.2020 02:05	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.188	94	70-135	8	35	mg/kg	12.12.2020 02:05	
o-Xylene	<0.00200	0.100	0.0860	86	0.0929	93	71-133	8	35	mg/kg	12.12.2020 02:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		96		101		70-130	%	12.12.2020 02:05
4-Bromofluorobenzene	123		108		111		70-130	%	12.12.2020 02:05

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144729 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680635-001 — MS Sample Id: 680635-001 S — MSD Sample Id: 680635-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0873	87	0.0876	88	70-130	0	35	mg/kg	12.12.2020 02:49	
Toluene	<0.00200	0.100	0.0791	79	0.0780	78	70-130	1	35	mg/kg	12.12.2020 02:49	
Ethylbenzene	<0.00200	0.100	0.0770	77	0.0770	77	71-129	0	35	mg/kg	12.12.2020 02:49	
m,p-Xylenes	<0.00401	0.200	0.160	80	0.154	77	70-135	4	35	mg/kg	12.12.2020 02:49	
o-Xylene	<0.00200	0.100	0.0807	81	0.0756	76	71-133	7	35	mg/kg	12.12.2020 02:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		101		70-130	%	12.12.2020 02:49
4-Bromofluorobenzene	115		114		70-130	%	12.12.2020 02:49

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

Chain of Custody

Work Order No: 680635

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 N A St	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281)-702-2329	Email:	joe.hernandez@wsp.com anna.byers@wsp.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	TE03182600026	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.0 / 0.8	Thermometer ID	T-NM-007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	2

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015 Mod)	BTEx (EPA 8021B)	Chloride (EPA 300.0)
	BH11	S	12/9/20	1300	0.3-0.5'	1		X	X	X
	BH11A	S	12/9/20	1302	0.75-1'	1		X	X	X

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

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

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Clint Cuff	12.10.20 1157	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680641

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:44
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	680641-001		680641-002		680641-003		680641-004		680641-005		680641-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	0.5- ft		0.5- ft		1- ft		1- ft		1- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.09.2020 10:48		12.09.2020 10:54		12.09.2020 10:08		12.09.2020 10:11		12.09.2020 10:13		12.09.2020 10:15	
BTEX by EPA 8021B	***Extracted:***	12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28	
	Analyzed:	12.12.2020 08:15		12.12.2020 08:38		12.12.2020 09:00		12.14.2020 12:59		12.14.2020 13:21		12.14.2020 13:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00402	0.00402	<0.00402	0.00402	<0.00396	0.00396	<0.00400	0.00400	<0.00397	0.00397	<0.00399	0.00399
o-Xylene		<0.00201	0.00201	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Total Xylenes		<0.002010	0.002010	<0.002010	0.002010	<0.001980	0.001980	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.002010	0.002010	<0.002010	0.002010	<0.001980	0.001980	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30	
	Analyzed:	12.15.2020 18:22		12.15.2020 18:40		12.15.2020 18:46		12.15.2020 18:52		12.15.2020 18:58		12.15.2020 19:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.92	9.92	11.3	10.1	23.7	10.1	87.7	9.92	246	9.92	42.2	9.90
TPH by SW8015 Mod	***Extracted:***	12.10.2020 17:33		12.10.2020 17:33		12.10.2020 17:33		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01	
	Analyzed:	12.12.2020 06:22		12.12.2020 06:42		12.12.2020 07:03		12.14.2020 11:18		12.14.2020 12:19		12.14.2020 12:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.3	50.3
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.1	50.1	54.2	50.1	<50.0	50.0	98.3	50.3
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.1	50.1	<50.1	50.1	<50.0	50.0	<50.3	50.3
Total TPH		<50.00	50.00	<49.90	49.90	<50.10	50.10	54.2	50.1	<50.0	50.0	98.3	50.3

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680641

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:44
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	680641-007		680641-008		680641-009		680641-010		680641-011		680641-012	
	Field Id:	FS07		FS08		FS09		FS10		FS11		FS12	
	Depth:	1.5-4 ft		4- ft		4- ft		4- ft		4- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.09.2020 13:00		12.09.2020 13:34		12.09.2020 13:36		12.09.2020 13:39		12.09.2020 13:42		12.09.2020 13:44	
BTEX by EPA 8021B	***Extracted:***	12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28	
	Analyzed:	12.14.2020 14:06		12.14.2020 14:28		12.14.2020 14:51		12.14.2020 15:13		12.14.2020 15:36		12.14.2020 15:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0000198	0.0000198	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Toluene		<0.0000198	0.0000198	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Ethylbenzene		<0.0000198	0.0000198	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
m,p-Xylenes		<0.0000396	0.0000396	<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00403	0.00403	<0.00398	0.00398
o-Xylene		<0.0000198	0.0000198	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Total Xylenes		<0.0000198	0.0000198	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Total BTEX		<0.0000198	0.0000198	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30	
	Analyzed:	12.15.2020 19:29		12.15.2020 19:35		12.15.2020 19:41		12.15.2020 19:47		12.15.2020 19:53		12.15.2020 20:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		442	9.98	1070	9.98	932	10.1	2170	50.5	4340	50.2	1710	49.9
TPH by SW8015 Mod	***Extracted:***	12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01	
	Analyzed:	12.14.2020 13:00		12.14.2020 13:20		12.14.2020 13:40		12.14.2020 14:01		12.14.2020 14:22		12.14.2020 14:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.3	50.3	<49.9	49.9	<49.9	49.9	<50.3	50.3	<49.8	49.8
Diesel Range Organics (DRO)		272	50.1	<50.3	50.3	57.2	49.9	<49.9	49.9	<50.3	50.3	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		65.0	50.1	<50.3	50.3	<49.9	49.9	<49.9	49.9	<50.3	50.3	<49.8	49.8
Total TPH		337	50.1	<50.3	50.3	57.2	49.9	<49.9	49.9	<50.3	50.3	<49.8	49.8

BRL - Below Reporting Limit

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680641

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:44
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	680641-013		680641-014		680641-015		680641-016		680641-017		680641-018	
	Field Id:	FS13		FS14		FS16		FS17		FS18		FS19	
	Depth:	4- ft		4- ft		4- ft		4- ft		4- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.09.2020 13:46		12.09.2020 13:48		12.09.2020 14:42		12.09.2020 14:44		12.09.2020 14:47		12.09.2020 14:50	
BTEX by EPA 8021B	***Extracted:***	12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28	
	Analyzed:	12.14.2020 16:20		12.14.2020 18:23		12.14.2020 18:45		12.14.2020 19:08		12.14.2020 19:30		12.14.2020 19:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00396	0.00396	<0.00399	0.00399	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Inorganic Anions by EPA 300	***Extracted:***	12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30		12.14.2020 17:30	
	Analyzed:	12.15.2020 20:17		12.15.2020 20:23		12.15.2020 20:40		12.15.2020 20:46		12.15.2020 20:52		12.15.2020 20:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1880	50.4	1160	50.3	1200	10.0	1090	9.94	1510	50.1	3860 D	49.7
TPH by SW8015 Mod	***Extracted:***	12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01	
	Analyzed:	12.14.2020 15:03		12.14.2020 15:43		12.14.2020 16:04		12.14.2020 16:24		12.14.2020 16:45		12.14.2020 17:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.9	49.9	<50.2	50.2
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0	81.1	49.8	<49.9	49.9	<49.9	49.9	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.9	49.9	<50.2	50.2
Total TPH		<49.8	49.8	<50.0	50.0	81.1	49.8	<49.9	49.9	<49.9	49.9	<50.2	50.2

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680641

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:44
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	680641-019		680641-020		680641-021		680641-022		680641-023		680641-024	
	Field Id:	FS20		FS21		FS22		FS23		FS24		FS25	
	Depth:	4- ft		4- ft		4- ft		4- ft		4- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.09.2020 14:52		12.09.2020 14:54		12.09.2020 14:56		12.09.2020 15:56		12.09.2020 16:00		12.09.2020 16:02	
BTEX by EPA 8021B	***Extracted:***	12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.14.2020 08:28		12.11.2020 17:00	
	Analyzed:	12.14.2020 20:15		12.14.2020 20:37		12.14.2020 21:00		12.14.2020 21:22		12.14.2020 21:44		12.12.2020 09:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00403	0.00403	<0.00404	0.00404	<0.00401	0.00401	<0.00396	0.00396
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.001980	0.001980
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00202	0.00202	<0.00200	0.00200	<0.001980	0.001980
Inorganic Anions by EPA 300	***Extracted:***	12.14.2020 17:30		12.14.2020 17:30		12.14.2020 15:41		12.11.2020 12:00		12.11.2020 12:00		12.11.2020 12:00	
	Analyzed:	12.15.2020 21:04		12.15.2020 21:10		12.15.2020 01:22		12.11.2020 16:24		12.11.2020 16:39		12.11.2020 16:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2700	49.9	3260	49.9	2420	49.6	3910	49.5	4460	49.9	1740	49.6
TPH by SW8015 Mod	***Extracted:***	12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:01		12.11.2020 17:56	
	Analyzed:	12.14.2020 17:25		12.14.2020 17:46		12.14.2020 18:06		12.14.2020 18:27		12.14.2020 18:48		12.12.2020 04:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.3	50.3
Diesel Range Organics (DRO)		<50.2	50.2	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.3	50.3
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.3	50.3
Total TPH		<50.2	50.2	<50.0	50.0	<50.1	50.1	<50.0	50.0	<50.1	50.1	<50.30	50.30

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680641

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:44
Project Manager: Jessica Kramer

Analysis Requested												
	Lab Id:	680641-025		680641-026		680641-027		680641-028		680641-029		
	Field Id:	FS26		FS27		FS28		FS29		FS30		
	Depth:	4- ft		4- ft		4- ft		4- ft		4- ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	12.09.2020 16:04		12.09.2020 16:06		12.09.2020 16:08		12.09.2020 16:10		12.09.2020 16:12		
BTEX by EPA 8021B	***Extracted:***	12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00		12.11.2020 14:20		12.11.2020 14:20		
	Analyzed:	12.12.2020 09:45		12.12.2020 10:07		12.12.2020 10:30		12.11.2020 21:33		12.11.2020 21:55		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	
m,p-Xylenes		<0.00398	0.00398	<0.00400	0.00400	<0.00401	0.00401	<0.00401	0.00401	<0.00402	0.00402	
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	
Total Xylenes		<0.001990	0.001990	<0.002000	0.002000	<0.002000	0.002000	<0.002000	0.002000	<0.002010	0.002010	
Total BTEX		<0.001990	0.001990	<0.002000	0.002000	<0.002000	0.002000	<0.002000	0.002000	<0.002010	0.002010	
Inorganic Anions by EPA 300	***Extracted:***	12.11.2020 12:00		12.11.2020 12:00		12.11.2020 12:00		12.11.2020 12:00		12.11.2020 12:00		
	Analyzed:	12.11.2020 16:59		12.11.2020 17:05		12.11.2020 17:10		12.11.2020 16:13		12.11.2020 16:19		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		5280	49.9	3190	49.8	3640	49.9	3050	49.8	4750	49.8	
TPH by SW8015 Mod	***Extracted:***	12.11.2020 17:56		12.11.2020 17:56		12.11.2020 17:56		12.11.2020 17:56		12.11.2020 17:56		
	Analyzed:	12.12.2020 04:40		12.12.2020 05:00		12.12.2020 05:20		12.12.2020 05:41		12.12.2020 06:01		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0	
Total TPH		<50.00	50.00	<49.90	49.90	<49.90	49.90	<50.00	50.00	<50.00	50.00	

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Analytical Report 680641

for

WSP USA

Project Manager: Joseph Hernandez

RDU 14

TE034820026

12.16.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.16.2020

Project Manager: **Joseph Hernandez**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **680641**
RDU 14
Project Address: Eddy County

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 680641. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 680641 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 680641

WSP USA, Dallas, TX

RDU 14

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	12.09.2020 10:48	0.5 ft	680641-001
FS02	S	12.09.2020 10:54	0.5 ft	680641-002
FS03	S	12.09.2020 10:08	1 ft	680641-003
FS04	S	12.09.2020 10:11	1 ft	680641-004
FS05	S	12.09.2020 10:13	1 ft	680641-005
FS06	S	12.09.2020 10:15	1 ft	680641-006
FS07	S	12.09.2020 13:00	1.5 - 4 ft	680641-007
FS08	S	12.09.2020 13:34	4 ft	680641-008
FS09	S	12.09.2020 13:36	4 ft	680641-009
FS10	S	12.09.2020 13:39	4 ft	680641-010
FS11	S	12.09.2020 13:42	4 ft	680641-011
FS12	S	12.09.2020 13:44	4 ft	680641-012
FS13	S	12.09.2020 13:46	4 ft	680641-013
FS14	S	12.09.2020 13:48	4 ft	680641-014
FS16	S	12.09.2020 14:42	4 ft	680641-015
FS17	S	12.09.2020 14:44	4 ft	680641-016
FS18	S	12.09.2020 14:47	4 ft	680641-017
FS19	S	12.09.2020 14:50	4 ft	680641-018
FS20	S	12.09.2020 14:52	4 ft	680641-019
FS21	S	12.09.2020 14:54	4 ft	680641-020
FS22	S	12.09.2020 14:56	4 ft	680641-021
FS23	S	12.09.2020 15:56	4 ft	680641-022
FS24	S	12.09.2020 16:00	4 ft	680641-023
FS25	S	12.09.2020 16:02	4 ft	680641-024
FS26	S	12.09.2020 16:04	4 ft	680641-025
FS27	S	12.09.2020 16:06	4 ft	680641-026
FS28	S	12.09.2020 16:08	4 ft	680641-027
FS29	S	12.09.2020 16:10	4 ft	680641-028
FS30	S	12.09.2020 16:12	4 ft	680641-029

CASE NARRATIVE

eurofins | Environment Testing Xenco

Client Name: WSP USA

Project Name: RDU 14

Project ID: *TE034820026*
Work Order Number(s): *680641*

Report Date: *12.16.2020*
Date Received: *12.10.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-001	Date Collected:	12.09.2020 10:48	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 17:30	% Moisture:	
Seq Number:	3145023			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	12.15.2020 18:22	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.10.2020 17:33	% Moisture:	
Seq Number:	3144745			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.2020 06:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.2020 06:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.2020 06:22	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.12.2020 06:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	12.12.2020 06:22	
o-Terphenyl	84-15-1	117	%	70-135	12.12.2020 06:22	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-001	Date Collected:	12.09.2020 10:48	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.12.2020 08:15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.12.2020 08:15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.12.2020 08:15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.12.2020 08:15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.12.2020 08:15	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	12.12.2020 08:15	U	1
Total BTEX		<0.002010	0.002010	mg/kg	12.12.2020 08:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	12.12.2020 08:15	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.12.2020 08:15	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-002	Date Collected:	12.09.2020 10:54	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 17:30	% Moisture:	
Seq Number:	3145023			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.3**	10.1	mg/kg	12.15.2020 18:40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.10.2020 17:33	% Moisture:	
Seq Number:	3144745			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.2020 06:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.2020 06:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.2020 06:42	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	12.12.2020 06:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	12.12.2020 06:42	
o-Terphenyl	84-15-1	99	%	70-135	12.12.2020 06:42	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-002	Date Collected:	12.09.2020 10:54	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.12.2020 08:38	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.12.2020 08:38	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.12.2020 08:38	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.12.2020 08:38	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.12.2020 08:38	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	12.12.2020 08:38	U	1
Total BTEX		<0.002010	0.002010	mg/kg	12.12.2020 08:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	12.12.2020 08:38	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.12.2020 08:38	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id: **FS03** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680641-003 Date Collected: 12.09.2020 10:08 Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.14.2020 17:30 % Moisture:
Seq Number: 3145023 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.7**	10.1	mg/kg	12.15.2020 18:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.10.2020 17:33 % Moisture:
Seq Number: 3144745 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.12.2020 07:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.12.2020 07:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.12.2020 07:03	U	1
Total TPH	PHC635	<50.10	50.10	mg/kg	12.12.2020 07:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	12.12.2020 07:03	
o-Terphenyl	84-15-1	113	%	70-135	12.12.2020 07:03	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-003	Date Collected:	12.09.2020 10:08	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.12.2020 09:00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.12.2020 09:00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.12.2020 09:00	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.12.2020 09:00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.12.2020 09:00	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	12.12.2020 09:00	U	1
Total BTEX		<0.001980	0.001980	mg/kg	12.12.2020 09:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	12.12.2020 09:00	
4-Bromofluorobenzene	460-00-4	92	%	70-130	12.12.2020 09:00	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-004	Date Collected:	12.09.2020 10:11	Sample Depth:	1 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**87.7**	9.92	mg/kg	12.15.2020 18:52		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.14.2020 11:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	**54.2**	50.1	mg/kg	12.14.2020 11:18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.14.2020 11:18	U	1
Total TPH	PHC635	**54.2**	50.1	mg/kg	12.14.2020 11:18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.14.2020 11:18	
o-Terphenyl	84-15-1	99	%	70-135	12.14.2020 11:18	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-004	Date Collected:	12.09.2020 10:11	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 12:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 12:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 12:59	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	12.14.2020 12:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 12:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 12:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 12:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	12.14.2020 12:59	
1,4-Difluorobenzene	540-36-3	97	%	70-130	12.14.2020 12:59	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-005	Date Collected:	12.09.2020 10:13	Sample Depth:	1 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**246**	9.92	mg/kg	12.15.2020 18:58		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.14.2020 12:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.14.2020 12:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.14.2020 12:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.14.2020 12:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	12.14.2020 12:19	
o-Terphenyl	84-15-1	112	%	70-135	12.14.2020 12:19	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-005	Date Collected:	12.09.2020 10:13	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.14.2020 13:21	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.14.2020 13:21	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.14.2020 13:21	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.14.2020 13:21	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.14.2020 13:21	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.14.2020 13:21	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.14.2020 13:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 13:21	
4-Bromofluorobenzene	460-00-4	91	%	70-130	12.14.2020 13:21	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-006	Date Collected:	12.09.2020 10:15	Sample Depth:	1 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**42.2**	9.90	mg/kg	12.15.2020 19:23		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.14.2020 12:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	**98.3**	50.3	mg/kg	12.14.2020 12:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.14.2020 12:39	U	1
Total TPH	PHC635	**98.3**	50.3	mg/kg	12.14.2020 12:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	12.14.2020 12:39	
o-Terphenyl	84-15-1	116	%	70-135	12.14.2020 12:39	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-006	Date Collected:	12.09.2020 10:15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 13:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 13:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 13:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 13:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 13:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 13:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 13:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 13:44	
4-Bromofluorobenzene	460-00-4	88	%	70-130	12.14.2020 13:44	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id: **FS07** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680641-007 Date Collected: 12.09.2020 13:00 Sample Depth: 1.5 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.14.2020 17:30 % Moisture:
Seq Number: 3145023 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**442**	9.98	mg/kg	12.15.2020 19:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: MAB
Analyst: CAC Date Prep: 12.11.2020 17:01 % Moisture:
Seq Number: 3144877 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.14.2020 13:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	**272**	50.1	mg/kg	12.14.2020 13:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**65.0**	50.1	mg/kg	12.14.2020 13:00		1
Total TPH	PHC635	**337**	50.1	mg/kg	12.14.2020 13:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	12.14.2020 13:00	
o-Terphenyl	84-15-1	122	%	70-135	12.14.2020 13:00	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-007	Date Collected:	12.09.2020 13:00	Sample Depth:	1.5 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0000198	0.0000198	mg/kg	12.14.2020 14:06	U	1
Toluene	108-88-3	<0.0000198	0.0000198	mg/kg	12.14.2020 14:06	U	1
Ethylbenzene	100-41-4	<0.0000198	0.0000198	mg/kg	12.14.2020 14:06	U	1
m,p-Xylenes	179601-23-1	<0.0000396	0.0000396	mg/kg	12.14.2020 14:06	U	1
o-Xylene	95-47-6	<0.0000198	0.0000198	mg/kg	12.14.2020 14:06	U	1
Total Xylenes	1330-20-7	<0.0000198	0.0000198	mg/kg	12.14.2020 14:06	U	1
Total BTEX		<0.0000198	0.0000198	mg/kg	12.14.2020 14:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.14.2020 14:06	
4-Bromofluorobenzene	460-00-4	89	%	70-130	12.14.2020 14:06	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-008	Date Collected:	12.09.2020 13:34	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1070**	9.98	mg/kg	12.15.2020 19:35		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.14.2020 13:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	12.14.2020 13:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.14.2020 13:20	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	12.14.2020 13:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	130	%	70-135	12.14.2020 13:20	
o-Terphenyl	84-15-1	114	%	70-135	12.14.2020 13:20	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS08**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-008	Date Collected:	12.09.2020 13:34	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 14:28	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 14:28	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 14:28	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 14:28	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 14:28	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.14.2020 14:28	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.14.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	12.14.2020 14:28	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 14:28	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-009	Date Collected:	12.09.2020 13:36	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture:

Seq Number: 3145023 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**932**	10.1	mg/kg	12.15.2020 19:41		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.14.2020 13:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	**57.2**	49.9	mg/kg	12.14.2020 13:40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.14.2020 13:40	U	1
Total TPH	PHC635	**57.2**	49.9	mg/kg	12.14.2020 13:40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.14.2020 13:40	
o-Terphenyl	84-15-1	110	%	70-135	12.14.2020 13:40	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS09**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-009	Date Collected:	12.09.2020 13:36	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 14:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 14:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 14:51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 14:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 14:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 14:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 14:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.14.2020 14:51	
4-Bromofluorobenzene	460-00-4	93	%	70-130	12.14.2020 14:51	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-010	Date Collected:	12.09.2020 13:39	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2170**	50.5	mg/kg	12.15.2020 19:47		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.14.2020 14:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.14.2020 14:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.14.2020 14:01	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.14.2020 14:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	12.14.2020 14:01	
o-Terphenyl	84-15-1	102	%	70-135	12.14.2020 14:01	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS10**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-010	Date Collected:	12.09.2020 13:39	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 15:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 15:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 15:13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.14.2020 15:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 15:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 15:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 15:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.14.2020 15:13	
4-Bromofluorobenzene	460-00-4	88	%	70-130	12.14.2020 15:13	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-011	Date Collected:	12.09.2020 13:42	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4340**	50.2	mg/kg	12.15.2020 19:53		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.14.2020 14:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	12.14.2020 14:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.14.2020 14:22	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	12.14.2020 14:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.14.2020 14:22	
o-Terphenyl	84-15-1	118	%	70-135	12.14.2020 14:22	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS11**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-011	Date Collected:	12.09.2020 13:42	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.14.2020 15:36	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.14.2020 15:36	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.14.2020 15:36	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.14.2020 15:36	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.14.2020 15:36	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.14.2020 15:36	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.14.2020 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	12.14.2020 15:36	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 15:36	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-012	Date Collected:	12.09.2020 13:44	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3145023

Date Prep: 12.14.2020 17:30

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1710**	49.9	mg/kg	12.15.2020 20:11		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB
Analyst: CAC
Seq Number: 3144877

Date Prep: 12.11.2020 17:01

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 14:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.14.2020 14:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 14:42	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.14.2020 14:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	12.14.2020 14:42	
o-Terphenyl	84-15-1	104	%	70-135	12.14.2020 14:42	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS12**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-012	Date Collected:	12.09.2020 13:44	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 15:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 15:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 15:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 15:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 15:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.14.2020 15:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.14.2020 15:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.14.2020 15:58	
4-Bromofluorobenzene	460-00-4	92	%	70-130	12.14.2020 15:58	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-013	Date Collected:	12.09.2020 13:46	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1880**	50.4	mg/kg	12.15.2020 20:17		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 15:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.14.2020 15:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 15:03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.14.2020 15:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	12.14.2020 15:03	
o-Terphenyl	84-15-1	106	%	70-135	12.14.2020 15:03	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS13**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-013	Date Collected:	12.09.2020 13:46	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 16:20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 16:20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 16:20	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 16:20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 16:20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 16:20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.14.2020 16:20	
4-Bromofluorobenzene	460-00-4	93	%	70-130	12.14.2020 16:20	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-014	Date Collected:	12.09.2020 13:48	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1160**	50.3	mg/kg	12.15.2020 20:23		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.14.2020 15:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.14.2020 15:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.14.2020 15:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.14.2020 15:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	12.14.2020 15:43	
o-Terphenyl	84-15-1	94	%	70-135	12.14.2020 15:43	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS14**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-014	Date Collected:	12.09.2020 13:48	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 18:23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 18:23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 18:23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 18:23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 18:23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.14.2020 18:23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.14.2020 18:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	12.14.2020 18:23	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.14.2020 18:23	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-015	Date Collected:	12.09.2020 14:42	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture:

Seq Number: 3145023 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1200**	10.0	mg/kg	12.15.2020 20:40		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 16:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	**81.1**	49.8	mg/kg	12.14.2020 16:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 16:04	U	1
Total TPH	PHC635	**81.1**	49.8	mg/kg	12.14.2020 16:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	12.14.2020 16:04	
o-Terphenyl	84-15-1	112	%	70-135	12.14.2020 16:04	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS16**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-015	Date Collected:	12.09.2020 14:42	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.14.2020 18:45	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.14.2020 18:45	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.14.2020 18:45	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.14.2020 18:45	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.14.2020 18:45	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.14.2020 18:45	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.14.2020 18:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	12.14.2020 18:45	
1,4-Difluorobenzene	540-36-3	91	%	70-130	12.14.2020 18:45	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-016	Date Collected:	12.09.2020 14:44	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture:

Seq Number: 3145023 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1090**	9.94	mg/kg	12.15.2020 20:46		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.14.2020 16:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.14.2020 16:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.14.2020 16:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.14.2020 16:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.14.2020 16:24	
o-Terphenyl	84-15-1	106	%	70-135	12.14.2020 16:24	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS17**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-016	Date Collected:	12.09.2020 14:44	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 19:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 19:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 19:08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 19:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 19:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 19:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 19:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	12.14.2020 19:08	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 19:08	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-017	Date Collected:	12.09.2020 14:47	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture:

Seq Number: 3145023 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1510**	50.1	mg/kg	12.15.2020 20:52		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.14.2020 16:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.14.2020 16:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.14.2020 16:45	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.14.2020 16:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	12.14.2020 16:45	
o-Terphenyl	84-15-1	108	%	70-135	12.14.2020 16:45	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS18**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-017	Date Collected:	12.09.2020 14:47	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 19:30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 19:30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 19:30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 19:30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 19:30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.14.2020 19:30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.14.2020 19:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 19:30	
4-Bromofluorobenzene	460-00-4	90	%	70-130	12.14.2020 19:30	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS19**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-018	Date Collected:	12.09.2020 14:50	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture:

Seq Number: 3145023 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3860**	49.7	mg/kg	12.16.2020 10:52	D	5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.14.2020 17:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.14.2020 17:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.14.2020 17:05	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	12.14.2020 17:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.14.2020 17:05	
o-Terphenyl	84-15-1	104	%	70-135	12.14.2020 17:05	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS19**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-018	Date Collected:	12.09.2020 14:50	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.14.2020 19:53	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.14.2020 19:53	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.14.2020 19:53	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.14.2020 19:53	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.14.2020 19:53	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.14.2020 19:53	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.14.2020 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	12.14.2020 19:53	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 19:53	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS20**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-019	Date Collected:	12.09.2020 14:52	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture:

Seq Number: 3145023 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2700**	49.9	mg/kg	12.15.2020 21:04		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.14.2020 17:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.14.2020 17:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.14.2020 17:25	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	12.14.2020 17:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	12.14.2020 17:25	
o-Terphenyl	84-15-1	118	%	70-135	12.14.2020 17:25	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS20**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-019	Date Collected:	12.09.2020 14:52	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 20:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 20:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 20:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 20:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 20:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 20:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 20:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	70-130	12.14.2020 20:15	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.14.2020 20:15	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS21**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-020	Date Collected:	12.09.2020 14:54	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.14.2020 17:30 — % Moisture: Basis: Wet Weight

Seq Number: 3145023

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3260**	49.9	mg/kg	12.15.2020 21:10		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture: Basis: Wet Weight

Seq Number: 3144877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.14.2020 17:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.14.2020 17:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.14.2020 17:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.14.2020 17:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	12.14.2020 17:46	
o-Terphenyl	84-15-1	98	%	70-135	12.14.2020 17:46	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS21**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-020	Date Collected:	12.09.2020 14:54	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 20:37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 20:37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 20:37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 20:37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 20:37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.14.2020 20:37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.14.2020 20:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	12.14.2020 20:37	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 20:37	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS22**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-021	Date Collected:	12.09.2020 14:56	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3144853

Date Prep: 12.14.2020 15:41

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2420**	49.6	mg/kg	12.15.2020 01:22		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB
Analyst: CAC
Seq Number: 3144877

Date Prep: 12.11.2020 17:01

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.14.2020 18:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.14.2020 18:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.14.2020 18:06	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.14.2020 18:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	12.14.2020 18:06	
o-Terphenyl	84-15-1	105	%	70-135	12.14.2020 18:06	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS22**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-021	Date Collected:	12.09.2020 14:56	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.14.2020 21:00	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.14.2020 21:00	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.14.2020 21:00	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.14.2020 21:00	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.14.2020 21:00	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.14.2020 21:00	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.14.2020 21:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	12.14.2020 21:00	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.14.2020 21:00	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS23**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-022	Date Collected:	12.09.2020 15:56	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3910**	49.5	mg/kg	12.11.2020 16:24		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.14.2020 18:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.14.2020 18:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.14.2020 18:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.14.2020 18:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	131	%	70-135	12.14.2020 18:27	
o-Terphenyl	84-15-1	112	%	70-135	12.14.2020 18:27	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS23**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-022	Date Collected:	12.09.2020 15:56	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.14.2020 21:22	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.14.2020 21:22	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.14.2020 21:22	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	12.14.2020 21:22	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.14.2020 21:22	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.14.2020 21:22	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.14.2020 21:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	12.14.2020 21:22	
1,4-Difluorobenzene	540-36-3	102	%	70-130	12.14.2020 21:22	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS24**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-023	Date Collected:	12.09.2020 16:00	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4460**	49.9	mg/kg	12.11.2020 16:39		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:01 — % Moisture:

Seq Number: 3144877 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.14.2020 18:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.14.2020 18:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.14.2020 18:48	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.14.2020 18:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.14.2020 18:48	
o-Terphenyl	84-15-1	98	%	70-135	12.14.2020 18:48	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS24**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-023	Date Collected:	12.09.2020 16:00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:28	% Moisture:	
Seq Number:	3144887			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 21:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 21:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 21:44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.14.2020 21:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 21:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.14.2020 21:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.14.2020 21:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	12.14.2020 21:44	
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.14.2020 21:44	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS25**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-024	Date Collected:	12.09.2020 16:02	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1740**	49.6	mg/kg	12.11.2020 16:44		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:56 — % Moisture:

Seq Number: 3144731 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.12.2020 04:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	12.12.2020 04:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.12.2020 04:20	U	1
Total TPH	PHC635	<50.30	50.30	mg/kg	12.12.2020 04:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.12.2020 04:20	
o-Terphenyl	84-15-1	99	%	70-135	12.12.2020 04:20	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS25**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-024	Date Collected:	12.09.2020 16:02	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.12.2020 09:23	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.12.2020 09:23	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.12.2020 09:23	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.12.2020 09:23	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.12.2020 09:23	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	12.12.2020 09:23	U	1
Total BTEX		<0.001980	0.001980	mg/kg	12.12.2020 09:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.12.2020 09:23	
4-Bromofluorobenzene	460-00-4	92	%	70-130	12.12.2020 09:23	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS26**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-025	Date Collected:	12.09.2020 16:04	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5280**	49.9	mg/kg	12.11.2020 16:59		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:56 — % Moisture:

Seq Number: 3144731 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.2020 04:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.2020 04:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.2020 04:40	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.12.2020 04:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	12.12.2020 04:40	
o-Terphenyl	84-15-1	116	%	70-135	12.12.2020 04:40	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS26**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-025	Date Collected:	12.09.2020 16:04	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.12.2020 09:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.12.2020 09:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.12.2020 09:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.12.2020 09:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.12.2020 09:45	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	12.12.2020 09:45	U	1
Total BTEX		<0.001990	0.001990	mg/kg	12.12.2020 09:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	12.12.2020 09:45	
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.12.2020 09:45	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS27**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-026	Date Collected:	12.09.2020 16:06	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3190**	49.8	mg/kg	12.11.2020 17:05		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:56 — % Moisture:

Seq Number: 3144731 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.2020 05:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.2020 05:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.2020 05:00	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	12.12.2020 05:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.12.2020 05:00	
o-Terphenyl	84-15-1	101	%	70-135	12.12.2020 05:00	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS27**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-026	Date Collected:	12.09.2020 16:06	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.2020 10:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.2020 10:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.2020 10:07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	12.12.2020 10:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.2020 10:07	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.12.2020 10:07	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.12.2020 10:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	12.12.2020 10:07	
1,4-Difluorobenzene	540-36-3	94	%	70-130	12.12.2020 10:07	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS28**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-027	Date Collected:	12.09.2020 16:08	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3640**	49.9	mg/kg	12.11.2020 17:10		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:56 — % Moisture:

Seq Number: 3144731 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.2020 05:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.2020 05:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.2020 05:20	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	12.12.2020 05:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	12.12.2020 05:20	
o-Terphenyl	84-15-1	106	%	70-135	12.12.2020 05:20	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS28**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-027	Date Collected:	12.09.2020 16:08	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144738			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.2020 10:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.2020 10:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.2020 10:30	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.12.2020 10:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.2020 10:30	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.12.2020 10:30	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.12.2020 10:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	12.12.2020 10:30	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.12.2020 10:30	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS29**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-028	Date Collected:	12.09.2020 16:10	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3050**	49.8	mg/kg	12.11.2020 16:13		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:56 — % Moisture:

Seq Number: 3144731 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.2020 05:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.2020 05:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.2020 05:41	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.12.2020 05:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.12.2020 05:41	
o-Terphenyl	84-15-1	114	%	70-135	12.12.2020 05:41	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS29**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-028	Date Collected:	12.09.2020 16:10	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 14:20	% Moisture:	
Seq Number:	3144728			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.11.2020 21:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.11.2020 21:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.11.2020 21:33	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.11.2020 21:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.11.2020 21:33	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.11.2020 21:33	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.11.2020 21:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.11.2020 21:33	
4-Bromofluorobenzene	460-00-4	122	%	70-130	12.11.2020 21:33	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS30**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-029	Date Collected:	12.09.2020 16:12	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 12:00 — % Moisture:

Seq Number: 3144663 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4750**	49.8	mg/kg	12.11.2020 16:19		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: MAB

Analyst: CAC — Date Prep: 12.11.2020 17:56 — % Moisture:

Seq Number: 3144731 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.2020 06:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.2020 06:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.2020 06:01	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.12.2020 06:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	12.12.2020 06:01	
o-Terphenyl	84-15-1	112	%	70-135	12.12.2020 06:01	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680641

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS30**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680641-029	Date Collected:	12.09.2020 16:12	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 14:20	% Moisture:	
Seq Number:	3144728			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.11.2020 21:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.11.2020 21:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.11.2020 21:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.11.2020 21:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.11.2020 21:55	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	12.11.2020 21:55	U	1
Total BTEX		<0.002010	0.002010	mg/kg	12.11.2020 21:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	12.11.2020 21:55	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.11.2020 21:55	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 680641

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144663 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716916-1-BLK — LCS Sample Id: 7716916-1-BKS — LCSD Sample Id: 7716916-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	245	98	247	99	90-110	1	20	mg/kg	12.11.2020 15:02	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144853 — Matrix: Solid — Date Prep: 12.14.2020
MB Sample Id: 7717074-1-BLK — LCS Sample Id: 7717074-1-BKS — LCSD Sample Id: 7717074-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	262	105	264	106	90-110	1	20	mg/kg	12.14.2020 23:08	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145023 — Matrix: Solid — Date Prep: 12.14.2020
MB Sample Id: 7717076-1-BLK — LCS Sample Id: 7717076-1-BKS — LCSD Sample Id: 7717076-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	263	105	264	106	90-110	0	20	mg/kg	12.15.2020 18:10	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144663 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680594-101 — MS Sample Id: 680594-101 S — MSD Sample Id: 680594-101 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.1	201	185	92	200	99	90-110	8	20	mg/kg	12.11.2020 15:17	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144663 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680641-022 — MS Sample Id: 680641-022 S — MSD Sample Id: 680641-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3910	202	4100	94	4110	99	90-110	0	20	mg/kg	12.11.2020 16:29	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144853 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680980-001 — MS Sample Id: 680980-001 S — MSD Sample Id: 680980-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	669	199	866	99	838	91	90-110	3	20	mg/kg	12.14.2020 23:24	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 680641

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144853 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680980-011 — MS Sample Id: 680980-011 S — MSD Sample Id: 680980-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	798	200	1010	106	1000	102	90-110	1	20	mg/kg	12.15.2020 00:43	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145023 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680641-001 — MS Sample Id: 680641-001 S — MSD Sample Id: 680641-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.94	199	196	98	205	103	90-110	4	20	mg/kg	12.15.2020 18:28	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145023 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680641-011 — MS Sample Id: 680641-011 S — MSD Sample Id: 680641-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4340	198	4520	91	4550	106	90-110	1	20	mg/kg	12.15.2020 19:59	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144745 — Matrix: Solid — Date Prep: 12.10.2020
MB Sample Id: 7716879-1-BLK — LCS Sample Id: 7716879-1-BKS — LCSD Sample Id: 7716879-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	990	99	1060	106	70-135	7	35	mg/kg	12.11.2020 22:58	
Diesel Range Organics (DRO)	<50.0	1000	1080	108	922	92	70-135	16	35	mg/kg	12.11.2020 22:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		113		98		70-135	%	12.11.2020 22:58
o-Terphenyl	111		114		101		70-135	%	12.11.2020 22:58

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144877 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716951-1-BLK — LCS Sample Id: 7716951-1-BKS — LCSD Sample Id: 7716951-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	973	97	1040	104	70-135	7	35	mg/kg	12.14.2020 10:38	
Diesel Range Organics (DRO)	<50.0	1000	970	97	1060	106	70-135	9	35	mg/kg	12.14.2020 10:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	130		86		108		70-135	%	12.14.2020 10:38
o-Terphenyl	126		73		112		70-135	%	12.14.2020 10:38

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 680641

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144731 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716950-1-BLK — LCS Sample Id: 7716950-1-BKS — LCSD Sample Id: 7716950-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	922	92	913	91	70-135	1	35	mg/kg	12.11.2020 22:58	
Diesel Range Organics (DRO)	<50.0	1000	996	100	1120	112	70-135	12	35	mg/kg	12.11.2020 22:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		100		126		70-135	%	12.11.2020 22:58
o-Terphenyl	94		107		118		70-135	%	12.11.2020 22:58

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144745 — Matrix: Solid — Date Prep: 12.10.2020
MB Sample Id: 7716879-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.11.2020 22:38	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144877 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716951-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.14.2020 10:18	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144731 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716950-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.11.2020 22:38	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144745 — Matrix: Soil — Date Prep: 12.10.2020
Parent Sample Id: 680628-003 — MS Sample Id: 680628-003 S — MSD Sample Id: 680628-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1090	109	1060	106	70-135	3	35	mg/kg	12.11.2020 23:58	
Diesel Range Organics (DRO)	<49.9	997	1140	114	996	100	70-135	13	35	mg/kg	12.11.2020 23:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		115		70-135	%	12.11.2020 23:58
o-Terphenyl	101		100		70-135	%	12.11.2020 23:58

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 680641

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144877 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680641-004 — MS Sample Id: 680641-004 S — MSD Sample Id: 680641-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	995	1070	108	1120	112	70-135	5	35	mg/kg	12.14.2020 11:38	
Diesel Range Organics (DRO)	54.2	995	1080	103	1070	102	70-135	1	35	mg/kg	12.14.2020 11:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		114		70-135	%	12.14.2020 11:38
o-Terphenyl	114		108		70-135	%	12.14.2020 11:38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144731 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680582-001 — MS Sample Id: 680582-001 S — MSD Sample Id: 680582-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	1040	104	1110	111	70-135	7	35	mg/kg	12.11.2020 23:58	
Diesel Range Organics (DRO)	<50.0	999	1140	114	998	100	70-135	13	35	mg/kg	12.11.2020 23:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		111		70-135	%	12.11.2020 23:58
o-Terphenyl	108		116		70-135	%	12.11.2020 23:58

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144728 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716920-1-BLK — LCS Sample Id: 7716920-1-BKS — LCSD Sample Id: 7716920-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.002000	0.1000	0.09340	93	0.1011	101	70-130	8	35	mg/kg	12.11.2020 13:39	
Toluene	<0.002000	0.1000	0.08936	89	0.09281	93	70-130	4	35	mg/kg	12.11.2020 13:39	
Ethylbenzene	<0.002000	0.1000	0.09189	92	0.09935	99	71-129	8	35	mg/kg	12.11.2020 13:39	
m,p-Xylenes	<0.004000	0.2000	0.1881	94	0.2049	102	70-135	9	35	mg/kg	12.11.2020 13:39	
o-Xylene	<0.002000	0.1000	0.09449	94	0.09956	100	71-133	5	35	mg/kg	12.11.2020 13:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		100		101		70-130	%	12.11.2020 13:39
4-Bromofluorobenzene	119		109		111		70-130	%	12.11.2020 13:39

MS/MSD Percent Recovery — [D] = 100*(C-A) / B
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery — [D] = 100 * (C) / [B]
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 680641

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144738 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716960-1-BLK — LCS Sample Id: 7716960-1-BKS — LCSD Sample Id: 7716960-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.102	102	0.0937	94	70-130	8	35	mg/kg	12.12.2020 00:27	
Toluene	<0.00200	0.100	0.0980	98	0.0917	92	70-130	7	35	mg/kg	12.12.2020 00:27	
Ethylbenzene	<0.00200	0.100	0.0906	91	0.0855	86	71-129	6	35	mg/kg	12.12.2020 00:27	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.174	87	70-135	6	35	mg/kg	12.12.2020 00:27	
o-Xylene	<0.00200	0.100	0.0930	93	0.0869	87	71-133	7	35	mg/kg	12.12.2020 00:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		91		70-130	%	12.12.2020 00:27
4-Bromofluorobenzene	85		88		79		70-130	%	12.12.2020 00:27

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144887 — Matrix: Solid — Date Prep: 12.14.2020
MB Sample Id: 7717021-1-BLK — LCS Sample Id: 7717021-1-BKS — LCSD Sample Id: 7717021-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0932	93	0.101	101	70-130	8	35	mg/kg	12.14.2020 10:57	
Toluene	<0.00200	0.100	0.0906	91	0.0991	99	70-130	9	35	mg/kg	12.14.2020 10:57	
Ethylbenzene	<0.00200	0.100	0.0847	85	0.0933	93	71-129	10	35	mg/kg	12.14.2020 10:57	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.192	96	70-135	10	35	mg/kg	12.14.2020 10:57	
o-Xylene	<0.00200	0.100	0.0857	86	0.0943	94	71-133	10	35	mg/kg	12.14.2020 10:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		93		94		70-130	%	12.14.2020 10:57
4-Bromofluorobenzene	89		85		89		70-130	%	12.14.2020 10:57

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144728 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680628-007 — MS Sample Id: 680628-007 S — MSD Sample Id: 680628-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.002004	0.1000	0.09975	100	0.1027	103	70-130	3	35	mg/kg	12.11.2020 14:24	
Toluene	<0.002004	0.1000	0.09161	92	0.09711	97	70-130	6	35	mg/kg	12.11.2020 14:24	
Ethylbenzene	<0.002004	0.1000	0.09510	95	0.1035	104	71-129	8	35	mg/kg	12.11.2020 14:24	
m,p-Xylenes	<0.004008	0.2000	0.1935	97	0.2079	104	70-135	7	35	mg/kg	12.11.2020 14:24	
o-Xylene	<0.002004	0.1000	0.09440	94	0.1026	103	71-133	8	35	mg/kg	12.11.2020 14:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		96		70-130	%	12.11.2020 14:24
4-Bromofluorobenzene	108		105		70-130	%	12.11.2020 14:24

MS/MSD Percent Recovery [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 680641

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144738 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680743-011 — MS Sample Id: 680743-011 S — MSD Sample Id: 680743-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0978	98	0.103	103	70-130	5	35	mg/kg	12.12.2020 01:12	
Toluene	<0.00200	0.0998	0.100	100	0.0992	99	70-130	1	35	mg/kg	12.12.2020 01:12	
Ethylbenzene	<0.00200	0.0998	0.0963	96	0.0912	91	71-129	5	35	mg/kg	12.12.2020 01:12	
m,p-Xylenes	<0.00399	0.200	0.197	99	0.185	93	70-135	6	35	mg/kg	12.12.2020 01:12	
o-Xylene	<0.00200	0.0998	0.0981	98	0.0931	93	71-133	5	35	mg/kg	12.12.2020 01:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		93		70-130	%	12.12.2020 01:12
4-Bromofluorobenzene	94		85		70-130	%	12.12.2020 01:12

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144887 — Matrix: Soil — Date Prep: 12.14.2020
Parent Sample Id: 680641-004 — MS Sample Id: 680641-004 S — MSD Sample Id: 680641-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.100	100	0.0961	96	70-130	4	35	mg/kg	12.14.2020 16:43	
Toluene	<0.00200	0.100	0.0951	95	0.0921	92	70-130	3	35	mg/kg	12.14.2020 16:43	
Ethylbenzene	<0.00200	0.100	0.0877	88	0.0853	85	71-129	3	35	mg/kg	12.14.2020 16:43	
m,p-Xylenes	<0.00401	0.200	0.178	89	0.174	87	70-135	2	35	mg/kg	12.14.2020 16:43	
o-Xylene	<0.00200	0.100	0.0893	89	0.0861	86	71-133	4	35	mg/kg	12.14.2020 16:43	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		95		70-130	%	12.14.2020 16:43
4-Bromofluorobenzene	86		86		70-130	%	12.14.2020 16:43

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 680641

Page 1 of 3

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 N A St	Address:	5315 Buena Vista Dr
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	joe.hernandez@wsp.com; anna.byers@wsp.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	TE03482026	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.0/0.8	Thermometer ID	T-NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	29

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TRH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
	FS01	S	12/9/20	1048	0.5'	1			
	FS02		12/9/20	1054	0.5'	1			
	FS03		12/7/20	1008	1'	1			
	FS04		12/7/20	1011	1'	1			
	FS05		12/7/20	1013	1'	1			
	FS06		12/7/20	1015	1'	1			
	FS07		12/8/20	1300	1.5-4'	1			
	FS08		12/8/20	1334	4'	1			
	FS09		12/8/20	1336	4'	1			
	FS10	V	12/8/20	1339	4'	1			

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

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

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

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

1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Clue Chapa	12.10.20 1157	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Work Order No: 680648

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 N A St	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	joe.hernandez@wsp.com & anna.byers@wsp.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	TE03482026	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temperature (°C):		Temp Blank: Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID	See Page 1
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
	FS11	S	12/8/20	1342	4'	1				
	FS12		12/8/20	1344	4'	1				
	FS13		12/8/20	1346	4'	1				
	FS14		12/8/20	1348	4'	1				
	FS16		12/9/20	1442	4'	1				
	FS17		12/9/20	1444	4'	1				
	FS18		12/9/20	1447	4'	1				
	FS19		12/9/20	1450	4'	1				
	FS20		12/9/20	1452	4'	1				
	FS21	↓	12/9/20	1454	4'	1				

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

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

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Cloe Cuffle	12.10.20 1157	2		
			4		
			6		

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 680641

www.xenco.com Page 3 of 3

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 N A St	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281 - 702 - 2329	Email:	joe.hernandez@wsp.com + anna.byers@wsp.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	TE03482026	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID	See Page 1	
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Preservative Codes: MeOH: Me; None: NO; HNO3: HN; H2S04: H2; HCL: HL; NaOH: Na; Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
	FS22	S	12/9/20	1456	4'	1				
	FS23			1556		1				
	FS24			1600		1				
	FS25			1602		1				
	FS26			1604		1				
	FS27			1606		1				
	FS28			1608		1				
	FS29			1610		1				
	FS30	↓	↓	1612	↓	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 SiO2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna By	Cole Cuff	12.10.20 1157	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.10.2020 11.57.00 AM

Work Order #: 680641

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : TN007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.8
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Martha Castro Date: 12.10.2020

Checklist reviewed by: Jessica Kramer Date: 12.10.2020

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680280

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Tue 12.08.2020 15:58
Report Date: 12.28.2020 07:38
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	680280-001						
	Field Id:	FS15						
	Depth:	4.5- ft						
	Matrix:	SOIL						
	Sampled:	12.08.2020 11:48						
BTEX by EPA 8021B	***Extracted:***	12.08.2020 17:29						
	Analyzed:	12.09.2020 05:25						
	Units/RL:	mg/kg RL						
Benzene		<0.00201 0.00201						
Toluene		<0.00201 0.00201						
Ethylbenzene		<0.00201 0.00201						
m,p-Xylenes		<0.00402 0.00402						
o-Xylene		<0.00201 0.00201						
Total Xylenes		<0.002010 0.002010						
Total BTEX		<0.002010 0.002010						
Inorganic Anions by EPA 300	***Extracted:***	12.08.2020 17:10						
	Analyzed:	12.09.2020 11:13						
	Units/RL:	mg/kg RL						
Chloride		1220 49.5						
TPH by SW8015 Mod	***Extracted:***	12.08.2020 17:00						
	Analyzed:	12.08.2020 21:05						
	Units/RL:	mg/kg RL						
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9						
Diesel Range Organics (DRO)		<49.9 49.9						
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9						
Total TPH		<49.90 49.90						

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer

eurofins | Environment Testing Xenco

Analytical Report 680280

for

WSP USA

Project Manager: Joseph Hernandez

RDU 14

TE034820026

12.28.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.28.2020

Project Manager: **Joseph Hernandez**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **680280**
RDU 14
Project Address: Eddy County, New Mexico

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 680280. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 680280 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 680280

WSP USA, Dallas, TX

RDU 14

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS15	S	12.08.2020 11:48	4.5 ft	680280-001

CASE NARRATIVE

eurofins | Environment Testing Xenco

Client Name: WSP USA

Project Name: RDU 14

Project ID: *TE034820026*
Work Order Number(s): *680280*

Report Date: *12.28.2020*
Date Received: *12.08.2020*

Sample receipt non conformances and comments:

V1.001 Revision - Corrected sample ID to FS15

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680280

WSP USA, Dallas, TX

RDU 14

Sample Id: **FS15** Matrix: Soil Date Received: 12.08.2020 15:58
Lab Sample Id: 680280-001 Date Collected: 12.08.2020 11:48 Sample Depth: 4.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.08.2020 17:10 % Moisture:
Seq Number: 3144391 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1220**	49.5	mg/kg	12.09.2020 11:13		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.08.2020 17:00 % Moisture:
Seq Number: 3144261 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.08.2020 21:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.08.2020 21:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.08.2020 21:05	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	12.08.2020 21:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	12.08.2020 21:05	
o-Terphenyl	84-15-1	108	%	70-135	12.08.2020 21:05	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680280

WSP USA, Dallas, TX

RDU 14

Sample Id:	**FS15**	Matrix:	Soil	Date Received:	12.08.2020 15:58
Lab Sample Id:	680280-001	Date Collected:	12.08.2020 11:48	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.08.2020 17:29	% Moisture:	
Seq Number:	3144268			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.09.2020 05:25	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.09.2020 05:25	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.09.2020 05:25	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.09.2020 05:25	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.09.2020 05:25	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	12.09.2020 05:25	U	1
Total BTEX		<0.002010	0.002010	mg/kg	12.09.2020 05:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	12.09.2020 05:25	
1,4-Difluorobenzene	540-36-3	102	%	70-130	12.09.2020 05:25	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 680280

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144391 — Matrix: Solid — Date Prep: 12.08.2020
MB Sample Id: 7716659-1-BLK — LCS Sample Id: 7716659-1-BKS — LCSD Sample Id: 7716659-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	243	97	242	97	90-110	0	20	mg/kg	12.09.2020 09:44	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144391 — Matrix: Soil — Date Prep: 12.08.2020
Parent Sample Id: 680246-021 — MS Sample Id: 680246-021 S — MSD Sample Id: 680246-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.1	202	200	99	200	99	90-110	0	20	mg/kg	12.09.2020 10:00	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144391 — Matrix: Soil — Date Prep: 12.08.2020
Parent Sample Id: 680280-001 — MS Sample Id: 680280-001 S — MSD Sample Id: 680280-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1220	202	1410	94	1440	109	90-110	2	20	mg/kg	12.09.2020 11:18	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144261 — Matrix: Solid — Date Prep: 12.08.2020
MB Sample Id: 7716670-1-BLK — LCS Sample Id: 7716670-1-BKS — LCSD Sample Id: 7716670-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1060	106	1120	112	70-135	6	35	mg/kg	12.08.2020 19:25	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1150	115	70-135	5	35	mg/kg	12.08.2020 19:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		81		104		70-135	%	12.08.2020 19:25
o-Terphenyl	106		70		116		70-135	%	12.08.2020 19:25

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144261 — Matrix: Solid — Date Prep: 12.08.2020
MB Sample Id: 7716670-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.08.2020 19:05	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

eurofins | Environment Testing Xenco

QC Summary 680280

WSP USA

RDU 14

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144261 — Matrix: Soil — Date Prep: 12.08.2020
Parent Sample Id: 680246-001 — MS Sample Id: 680246-001 S — MSD Sample Id: 680246-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1120	112	1060	106	70-135	6	35	mg/kg	12.08.2020 20:25	
Diesel Range Organics (DRO)	<50.2	1000	1000	100	1070	107	70-135	7	35	mg/kg	12.08.2020 20:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		102		70-135	%	12.08.2020 20:25
o-Terphenyl	116		114		70-135	%	12.08.2020 20:25

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144268 — Matrix: Solid — Date Prep: 12.08.2020
MB Sample Id: 7716663-1-BLK — LCS Sample Id: 7716663-1-BKS — LCSD Sample Id: 7716663-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0946	95	0.0992	99	70-130	5	35	mg/kg	12.08.2020 21:09	
Toluene	<0.00200	0.100	0.0881	88	0.0923	92	70-130	5	35	mg/kg	12.08.2020 21:09	
Ethylbenzene	<0.00200	0.100	0.0903	90	0.0976	98	71-129	8	35	mg/kg	12.08.2020 21:09	
m,p-Xylenes	<0.00400	0.200	0.186	93	0.199	100	70-135	7	35	mg/kg	12.08.2020 21:09	
o-Xylene	<0.00200	0.100	0.0923	92	0.101	101	71-133	9	35	mg/kg	12.08.2020 21:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		98		100		70-130	%	12.08.2020 21:09
4-Bromofluorobenzene	124		104		108		70-130	%	12.08.2020 21:09

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3144268 — Matrix: Soil — Date Prep: 12.08.2020
Parent Sample Id: 680246-018 — MS Sample Id: 680246-018 S — MSD Sample Id: 680246-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0965	97	0.0968	96	70-130	0	35	mg/kg	12.08.2020 21:54	
Toluene	<0.00199	0.0996	0.0902	91	0.0888	88	70-130	2	35	mg/kg	12.08.2020 21:54	
Ethylbenzene	<0.00199	0.0996	0.0948	95	0.0927	92	71-129	2	35	mg/kg	12.08.2020 21:54	
m,p-Xylenes	<0.00398	0.199	0.193	97	0.192	96	70-135	1	35	mg/kg	12.08.2020 21:54	
o-Xylene	<0.00199	0.0996	0.0959	96	0.0948	94	71-133	1	35	mg/kg	12.08.2020 21:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		100		70-130	%	12.08.2020 21:54
4-Bromofluorobenzene	110		109		70-130	%	12.08.2020 21:54

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

XENCO LABORATORIES

Chain of Custody

Work Order No: 680280

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	WPS USA Inc.	Company Name:	WPX Energy
Address:	3300 N A St	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(281) 702-2329	Email:	joe.hernandez@wsp.com anna.byers@wsp.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	TE03482026	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	3.6/3.4	Thermometer ID	
Received Intact:	~~Yes~~ No		1-WM-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes ~~No~~ N/A	Total Containers:	1

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015 mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
	FS13	S	12/3/20	1148	4.5'	1		X	X	X	rush TPH only

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Ale Cuff	12.8.20 1558	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WPX Energy Permian Basin, LLC

Date/ Time Received: 12.08.2020 03.58.00 PM

Work Order #: 680280

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 12.08.2020

Checklist reviewed by: Jessica Kramer Date: 12.09.2020

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680640

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:10
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	680640-001		680640-002		680640-003		680640-004		680640-005		680640-006	
	Field Id:	SW01		SW02		SW03		SW04		SW05		SW06	
	Depth:	0-1.5 ft		0-4 ft		0-4 ft		0-4.5 ft		0-4.5 ft		0-4 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.09.2020 10:40		12.09.2020 10:27		12.09.2020 09:40		12.09.2020 11:52		12.09.2020 11:55		12.09.2020 15:08	
BTEX by EPA 8021B	***Extracted:***	12.14.2020 08:24		12.14.2020 08:24		12.14.2020 08:24		12.14.2020 08:24		12.14.2020 08:24		12.14.2020 08:24	
	Analyzed:	12.14.2020 12:54		12.14.2020 13:17		12.14.2020 13:39		12.14.2020 14:01		12.14.2020 14:24		12.14.2020 14:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202
Toluene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202
Ethylbenzene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202
m,p-Xylenes		<0.00397	0.00397	<0.00398	0.00398	<0.00399	0.00399	<0.00397	0.00397	<0.00401	0.00401	<0.00403	0.00403
o-Xylene		<0.00198	0.00198	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202
Total Xylenes		<0.001980	0.001980	<0.001990	0.001990	<0.002000	0.002000	<0.001980	0.001980	<0.002000	0.002000	<0.002020	0.002020
Total BTEX		<0.001980	0.001980	<0.001990	0.001990	<0.002000	0.002000	<0.001980	0.001980	<0.002000	0.002000	<0.002020	0.002020
Inorganic Anions by EPA 300	***Extracted:***	12.11.2020 16:13		12.11.2020 16:13		12.11.2020 16:13		12.11.2020 16:13		12.11.2020 16:13		12.11.2020 16:13	
	Analyzed:	12.11.2020 23:26		12.11.2020 23:41		12.11.2020 23:46		12.11.2020 23:51		12.11.2020 23:56		12.12.2020 00:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		141	9.88	86.8	9.96	279	10.1	897	50.4	2080	50.1	329	9.92
TPH by SW8015 Mod	***Extracted:***	12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00	
	Analyzed:	12.14.2020 11:18		12.14.2020 12:19		12.14.2020 12:39		12.14.2020 13:00		12.14.2020 13:20		12.14.2020 13:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<50.2	50.2	<49.8	49.8	<49.8	49.8	<49.8	49.8	<49.9	49.9
Diesel Range Organics (DRO)		<50.2	50.2	<50.2	50.2	<49.8	49.8	508	49.8	297	49.8	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.2	50.2	<49.8	49.8	<49.8	49.8	<49.8	49.8	<49.9	49.9
Total TPH		<50.20	50.20	<50.20	50.20	<49.80	49.80	508.0	49.80	297.0	49.80	<49.90	49.90

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 680640

WSP USA, Dallas, TX

Project Name: RDU 14

Project Id: TE034820026
Contact: Joseph Hernandez
Project Location: Eddy County

Date Received in Lab: Thu 12.10.2020 11:57
Report Date: 12.16.2020 12:10
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	680640-007		680640-008		680640-009		680640-010					
	Field Id:	SW07		SW08		SW09		SW10					
	Depth:	0-4 ft		0-4 ft		0-4 ft		0-1.5 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	12.09.2020 15:15		12.09.2020 15:10		12.09.2020 12:05		12.09.2020 10:57					
BTEX by EPA 8021B	***Extracted:***	12.14.2020 08:24		12.14.2020 08:24		12.14.2020 08:24		12.14.2020 08:24					
	Analyzed:	12.14.2020 15:09		12.14.2020 15:31		12.14.2020 15:53		12.14.2020 16:16					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199				
Toluene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199				
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199				
m,p-Xylenes		<0.00401	0.00401	<0.00403	0.00403	<0.00399	0.00399	<0.00398	0.00398				
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199				
Total Xylenes		<0.002000	0.002000	<0.002020	0.002020	<0.002000	0.002000	<0.001990	0.001990				
Total BTEX		<0.002000	0.002000	<0.002020	0.002020	<0.002000	0.002000	<0.001990	0.001990				
Inorganic Anions by EPA 300	***Extracted:***	12.11.2020 16:13		12.11.2020 16:13		12.11.2020 16:13		12.11.2020 16:13					
	Analyzed:	12.12.2020 00:17		12.12.2020 00:22		12.12.2020 00:27		12.12.2020 00:32					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		324	9.94	32.1	9.98	201	10.0	262	10.0				
TPH by SW8015 Mod	***Extracted:***	12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00		12.11.2020 17:00					
	Analyzed:	12.14.2020 14:01		12.14.2020 14:22		12.14.2020 14:42		12.14.2020 15:03					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<49.8	49.8	<50.0	50.0	<50.0	50.0				
Diesel Range Organics (DRO)		<50.3	50.3	<49.8	49.8	<50.0	50.0	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<49.8	49.8	<50.0	50.0	<50.0	50.0				
Total TPH		<50.30	50.30	<49.80	49.80	<50.00	50.00	<50.00	50.00				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer

eurofins | Environment Testing Xenco

Analytical Report 680640

for

WSP USA

Project Manager: Joseph Hernandez

RDU 14

TE034820026

12.16.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.16.2020

Project Manager: **Joseph Hernandez**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **680640**
RDU 14
Project Address: Eddy County

Joseph Hernandez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 680640. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 680640 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 680640

WSP USA, Dallas, TX

RDU 14

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SW01	S	12.09.2020 10:40	0 - 1.5 ft	680640-001
SW02	S	12.09.2020 10:27	0 - 4 ft	680640-002
SW03	S	12.09.2020 09:40	0 - 4 ft	680640-003
SW04	S	12.09.2020 11:52	0 - 4.5 ft	680640-004
SW05	S	12.09.2020 11:55	0 - 4.5 ft	680640-005
SW06	S	12.09.2020 15:08	0 - 4 ft	680640-006
SW07	S	12.09.2020 15:15	0 - 4 ft	680640-007
SW08	S	12.09.2020 15:10	0 - 4 ft	680640-008
SW09	S	12.09.2020 12:05	0 - 4 ft	680640-009
SW10	S	12.09.2020 10:57	0 - 1.5 ft	680640-010

CASE NARRATIVE

eurofins | Environment Testing Xenco

Client Name: WSP USA

Project Name: RDU 14

Project ID: *TE034820026*
Work Order Number(s): *680640*

Report Date: *12.16.2020*
Date Received: *12.10.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-001	Date Collected:	12.09.2020 10:40	Sample Depth:	0 - 1.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB

Analyst: MAB — Date Prep: 12.11.2020 16:13 — % Moisture: Basis: Wet Weight

Seq Number: 3144749

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**141**	9.88	mg/kg	12.11.2020 23:26		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: CAC

Analyst: CAC — Date Prep: 12.11.2020 17:00 — % Moisture: Basis: Wet Weight

Seq Number: 3144878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.14.2020 11:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.14.2020 11:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.14.2020 11:18	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	12.14.2020 11:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	12.14.2020 11:18	
o-Terphenyl	84-15-1	109	%	70-135	12.14.2020 11:18	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW01**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-001	Date Collected:	12.09.2020 10:40	Sample Depth:	0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.14.2020 12:54	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.14.2020 12:54	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.14.2020 12:54	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.14.2020 12:54	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.14.2020 12:54	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	12.14.2020 12:54	U	1
Total BTEX		<0.001980	0.001980	mg/kg	12.14.2020 12:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	12.14.2020 12:54	
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.14.2020 12:54	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW02** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-002 Date Collected: 12.09.2020 10:27 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**86.8**	9.96	mg/kg	12.11.2020 23:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.14.2020 12:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.14.2020 12:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.14.2020 12:19	U	1
Total TPH	PHC635	<50.20	50.20	mg/kg	12.14.2020 12:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.14.2020 12:19	
o-Terphenyl	84-15-1	114	%	70-135	12.14.2020 12:19	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW02**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-002	Date Collected:	12.09.2020 10:27	Sample Depth:	0 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 13:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 13:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 13:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 13:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 13:17	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	12.14.2020 13:17	U	1
Total BTEX		<0.001990	0.001990	mg/kg	12.14.2020 13:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.14.2020 13:17	
4-Bromofluorobenzene	460-00-4	119	%	70-130	12.14.2020 13:17	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-003	Date Collected:	12.09.2020 09:40	Sample Depth:	0 - 4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 16:13	% Moisture:	
Seq Number:	3144749			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**279**	10.1	mg/kg	12.11.2020 23:46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144878			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 12:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.14.2020 12:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 12:39	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	12.14.2020 12:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.14.2020 12:39	
o-Terphenyl	84-15-1	99	%	70-135	12.14.2020 12:39	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW03**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-003	Date Collected:	12.09.2020 09:40	Sample Depth:	0 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 13:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 13:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 13:39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 13:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 13:39	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.14.2020 13:39	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.14.2020 13:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	12.14.2020 13:39	
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.14.2020 13:39	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW04** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-004 Date Collected: 12.09.2020 11:52 Sample Depth: 0 - 4.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**897**	50.4	mg/kg	12.11.2020 23:51		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 13:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	**508**	49.8	mg/kg	12.14.2020 13:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 13:00	U	1
Total TPH	PHC635	**508.0**	49.80	mg/kg	12.14.2020 13:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.14.2020 13:00	
o-Terphenyl	84-15-1	101	%	70-135	12.14.2020 13:00	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW04**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-004	Date Collected:	12.09.2020 11:52	Sample Depth:	0 - 4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.14.2020 14:01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.14.2020 14:01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.14.2020 14:01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.14.2020 14:01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.14.2020 14:01	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	12.14.2020 14:01	U	1
Total BTEX		<0.001980	0.001980	mg/kg	12.14.2020 14:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.14.2020 14:01	
4-Bromofluorobenzene	460-00-4	113	%	70-130	12.14.2020 14:01	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW05** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-005 Date Collected: 12.09.2020 11:55 Sample Depth: 0 - 4.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2080**	50.1	mg/kg	12.11.2020 23:56		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 13:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	**297**	49.8	mg/kg	12.14.2020 13:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 13:20	U	1
Total TPH	PHC635	**297.0**	49.80	mg/kg	12.14.2020 13:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.14.2020 13:20	
o-Terphenyl	84-15-1	113	%	70-135	12.14.2020 13:20	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW05**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-005	Date Collected:	12.09.2020 11:55	Sample Depth:	0 - 4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 14:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 14:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 14:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.14.2020 14:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 14:24	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.14.2020 14:24	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.14.2020 14:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	12.14.2020 14:24	
4-Bromofluorobenzene	460-00-4	126	%	70-130	12.14.2020 14:24	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-006	Date Collected:	12.09.2020 15:08	Sample Depth:	0 - 4 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.11.2020 16:13	% Moisture:	
Seq Number:	3144749			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**329**	9.92	mg/kg	12.12.2020 00:12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.11.2020 17:00	% Moisture:	
Seq Number:	3144878			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.14.2020 13:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.14.2020 13:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.14.2020 13:40	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	12.14.2020 13:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	12.14.2020 13:40	
o-Terphenyl	84-15-1	103	%	70-135	12.14.2020 13:40	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW06**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-006	Date Collected:	12.09.2020 15:08	Sample Depth:	0 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.14.2020 14:46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.14.2020 14:46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.14.2020 14:46	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.14.2020 14:46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.14.2020 14:46	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	12.14.2020 14:46	U	1
Total BTEX		<0.002020	0.002020	mg/kg	12.14.2020 14:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	12.14.2020 14:46	
4-Bromofluorobenzene	460-00-4	117	%	70-130	12.14.2020 14:46	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW07** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-007 Date Collected: 12.09.2020 15:15 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**324**	9.94	mg/kg	12.12.2020 00:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.14.2020 14:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	12.14.2020 14:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.14.2020 14:01	U	1
Total TPH	PHC635	<50.30	50.30	mg/kg	12.14.2020 14:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.14.2020 14:01	
o-Terphenyl	84-15-1	97	%	70-135	12.14.2020 14:01	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW07**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-007	Date Collected:	12.09.2020 15:15	Sample Depth:	0 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 15:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 15:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 15:09	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.14.2020 15:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 15:09	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.14.2020 15:09	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.14.2020 15:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.14.2020 15:09	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.14.2020 15:09	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW08** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-008 Date Collected: 12.09.2020 15:10 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.1**	9.98	mg/kg	12.12.2020 00:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.14.2020 14:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.14.2020 14:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.14.2020 14:22	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	12.14.2020 14:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.14.2020 14:22	
o-Terphenyl	84-15-1	119	%	70-135	12.14.2020 14:22	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW08**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-008	Date Collected:	12.09.2020 15:10	Sample Depth:	0 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.14.2020 15:31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.14.2020 15:31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.14.2020 15:31	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.14.2020 15:31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.14.2020 15:31	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	12.14.2020 15:31	U	1
Total BTEX		<0.002020	0.002020	mg/kg	12.14.2020 15:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.14.2020 15:31	
4-Bromofluorobenzene	460-00-4	122	%	70-130	12.14.2020 15:31	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW09** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-009 Date Collected: 12.09.2020 12:05 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**201**	10.0	mg/kg	12.12.2020 00:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.14.2020 14:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.14.2020 14:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.14.2020 14:42	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.14.2020 14:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	12.14.2020 14:42	
o-Terphenyl	84-15-1	107	%	70-135	12.14.2020 14:42	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW09**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-009	Date Collected:	12.09.2020 12:05	Sample Depth:	0 - 4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.14.2020 15:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.14.2020 15:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.14.2020 15:53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.14.2020 15:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.14.2020 15:53	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.14.2020 15:53	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.14.2020 15:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	12.14.2020 15:53	
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.14.2020 15:53	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id: **SW10** Matrix: Soil Date Received:12.10.2020 11:57
Lab Sample Id: 680640-010 Date Collected: 12.09.2020 10:57 Sample Depth: 0 - 1.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.11.2020 16:13 % Moisture:
Seq Number: 3144749 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**262**	10.0	mg/kg	12.12.2020 00:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.11.2020 17:00 % Moisture:
Seq Number: 3144878 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.14.2020 15:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.14.2020 15:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.14.2020 15:03	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.14.2020 15:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	12.14.2020 15:03	
o-Terphenyl	84-15-1	103	%	70-135	12.14.2020 15:03	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 680640

WSP USA, Dallas, TX

RDU 14

Sample Id:	**SW10**	Matrix:	Soil	Date Received:	12.10.2020 11:57
Lab Sample Id:	680640-010	Date Collected:	12.09.2020 10:57	Sample Depth:	0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.14.2020 08:24	% Moisture:	
Seq Number:	3144882			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.14.2020 16:16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.14.2020 16:16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.14.2020 16:16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.14.2020 16:16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.14.2020 16:16	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	12.14.2020 16:16	U	1
Total BTEX		<0.001990	0.001990	mg/kg	12.14.2020 16:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.14.2020 16:16	
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.14.2020 16:16	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 680640

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144749 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716954-1-BLK — LCS Sample Id: 7716954-1-BKS — LCSD Sample Id: 7716954-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	243	97	245	98	90-110	1	20	mg/kg	12.11.2020 23:16	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144749 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680640-001 — MS Sample Id: 680640-001 S — MSD Sample Id: 680640-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	141	202	322	90	326	93	90-110	1	20	mg/kg	12.11.2020 23:31	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3144749 — Matrix: Soil — Date Prep: 12.11.2020
Parent Sample Id: 680743-041 — MS Sample Id: 680743-041 S — MSD Sample Id: 680743-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	200	199	380	90	380	90	90-110	0	20	mg/kg	12.12.2020 00:42	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144878 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716952-1-BLK — LCS Sample Id: 7716952-1-BKS — LCSD Sample Id: 7716952-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1080	108	1160	116	70-135	7	35	mg/kg	12.14.2020 10:38	
Diesel Range Organics (DRO)	<50.0	1000	1140	114	1110	111	70-135	3	35	mg/kg	12.14.2020 10:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		105		103		70-135	%	12.14.2020 10:38
o-Terphenyl	105		113		105		70-135	%	12.14.2020 10:38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3144878 — Matrix: Solid — Date Prep: 12.11.2020
MB Sample Id: 7716952-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.14.2020 10:18	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 680640

eurofins | Environment Testing Xenco

WSP USA

RDU 14

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3144878 Matrix: Soil Date Prep: 12.11.2020
Parent Sample Id: 680640-001 MS Sample Id: 680640-001 S MSD Sample Id: 680640-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	989	99	1070	107	70-135	8	35	mg/kg	12.14.2020 11:38	
Diesel Range Organics (DRO)	<49.9	997	1110	111	994	100	70-135	11	35	mg/kg	12.14.2020 11:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		104		70-135	%	12.14.2020 11:38
o-Terphenyl	115		105		70-135	%	12.14.2020 11:38

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3144882 Matrix: Solid Date Prep: 12.14.2020
MB Sample Id: 7717019-1-BLK LCS Sample Id: 7717019-1-BKS LCSD Sample Id: 7717019-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0933	93	0.0955	96	70-130	2	35	mg/kg	12.14.2020 10:42	
Toluene	<0.00200	0.100	0.0895	90	0.0913	91	70-130	2	35	mg/kg	12.14.2020 10:42	
Ethylbenzene	<0.00200	0.100	0.0960	96	0.0978	98	71-129	2	35	mg/kg	12.14.2020 10:42	
m,p-Xylenes	<0.00400	0.200	0.194	97	0.203	102	70-135	5	35	mg/kg	12.14.2020 10:42	
o-Xylene	<0.00200	0.100	0.0942	94	0.0998	100	71-133	6	35	mg/kg	12.14.2020 10:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		99		99		70-130	%	12.14.2020 10:42
4-Bromofluorobenzene	115		110		109		70-130	%	12.14.2020 10:42

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 680640

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Lynda Laumbach
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 N A St	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	281-702-2329	Email:	joe.hernandez.com+anna.byers@wsp.com

Work Order Comments

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

Project Name:	RDU 14	Turn Around	
Project Number:	TE034820026	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.0/0.3	Thermometer ID	T-NM-007
Received Intact:	~~Yes~~ No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	16

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
	SW01	S	12/9/20	1040	0-1.5'	1			
	SW02		12/9/20	1027	0-4'	1			
	SW03		12/9/20	0940	0-4'	1			
	SW04		12/8/20	1152	0-4.5'	1			
	SW05		12/8/20	1155	0-4.5'	1			
	SW06		12/9/20	1508	0-4'	1			
	SW07		12/9/20	1515	0-4'	1			
	SW08		12/9/20	1510	0-4'	1			
	SW09		12/9/20	1205	0-4'	1			
	SW10	↓	12/9/20	1057	0-1.5'	1			

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

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

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

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

1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Ave Cruz	12.10.20 1157	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.10.2020 11.57.00 AM

Work Order #: 680640

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : TNM 007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.8
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 12.11.2020

Checklist reviewed by: Jessica Kramer Date: 12.15.2020

Jessica Kramer

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2557-1
Laboratory Sample Delivery Group: 03A1987035
Client Project/Site: RDU 14

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/21/2022 8:07:50 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: RDU 14

Laboratory Job ID: 890-2557-1
SDG: 03A1987035

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

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
F2	MS/MSD RPD exceeds control limits
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: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Job ID: 890-2557-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2557-1

Receipt
The samples were received on 7/13/2022 2:55 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 3.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-29817 and analytical batch 880-30096 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.

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-29867 and analytical batch 880-29786 was outside control limits. Sample non-homogeneity is suspected.

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: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Client Sample ID: FS07

Lab Sample ID: 890-2557-1
Matrix: Solid
Date Collected: 07/13/22 10:20
Date Received: 07/13/22 14:55
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		07/15/22 09:11	07/20/22 19:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/15/22 09:11	07/20/22 19:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/15/22 09:11	07/20/22 19:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/15/22 09:11	07/20/22 19:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/15/22 09:11	07/20/22 19:53	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/15/22 09:11	07/20/22 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*07/15/22 09:11*	*07/20/22 19:53*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/15/22 09:11*	*07/20/22 19:53*	*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			07/21/22 08:55	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			07/18/22 09:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	50.0		mg/Kg		07/15/22 14:19	07/15/22 21:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 14:19	07/15/22 21:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 14:19	07/15/22 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/15/22 14:19*	*07/15/22 21:32*	*1*
o-Terphenyl	*103*		*70 - 130*	*07/15/22 14:19*	*07/15/22 21:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1130**		5.02		mg/Kg			07/16/22 19:42	1

Client Sample ID: SW11

Lab Sample ID: 890-2557-2
Matrix: Solid
Date Collected: 07/13/22 10:25
Date Received: 07/13/22 14:55
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		07/15/22 09:11	07/20/22 20:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 20:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 20:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/15/22 09:11	07/20/22 20:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 20:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/15/22 09:11	07/20/22 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*07/15/22 09:11*	*07/20/22 20:14*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Client Sample ID: SW11

Date Collected: 07/13/22 10:25
Date Received: 07/13/22 14:55
Sample Depth: 0 - 4

Lab Sample ID: 890-2557-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/15/22 09:11*	*07/20/22 20:14*	*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			07/21/22 08:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**63.3**		49.9		mg/Kg			07/18/22 09:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/22 14:19	07/15/22 22:36	1
Diesel Range Organics (Over C10-C28)	**63.3**		49.9		mg/Kg		07/15/22 14:19	07/15/22 22:36	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 14:19	07/15/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*07/15/22 14:19*	*07/15/22 22:36*	*1*
o-Terphenyl	*110*		*70 - 130*	*07/15/22 14:19*	*07/15/22 22:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52.4**		5.02		mg/Kg			07/16/22 19:52	1

Client Sample ID: SW12

Date Collected: 07/13/22 10:30
Date Received: 07/13/22 14:55
Sample Depth: 0 - 4

Lab Sample ID: 890-2557-3

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		07/15/22 09:11	07/20/22 20:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/15/22 09:11	07/20/22 20:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/15/22 09:11	07/20/22 20:34	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/15/22 09:11	07/20/22 20:34	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/15/22 09:11	07/20/22 20:34	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/15/22 09:11	07/20/22 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*07/15/22 09:11*	*07/20/22 20:34*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*07/15/22 09:11*	*07/20/22 20:34*	*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			07/21/22 08:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**59.2**		50.0		mg/Kg			07/18/22 09:00	1

Client Sample Results

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Client Sample ID: SW12

Date Collected: 07/13/22 10:30
Date Received: 07/13/22 14:55
Sample Depth: 0 - 4

Lab Sample ID: 890-2557-3

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	<50.0	U	50.0		mg/Kg		07/15/22 14:19	07/15/22 22:57	1
Diesel Range Organics (Over C10-C28)	**59.2**		50.0		mg/Kg		07/15/22 14:19	07/15/22 22:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 14:19	07/15/22 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/15/22 14:19*	*07/15/22 22:57*	*1*
o-Terphenyl	*108*		*70 - 130*	*07/15/22 14:19*	*07/15/22 22:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.8**		5.02		mg/Kg			07/16/22 20:01	1

Surrogate Summary

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

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)
890-2539-A-1-E MS	Matrix Spike	90	95
890-2539-A-1-F MSD	Matrix Spike Duplicate	106	89
890-2557-1	FS07	102	97
890-2557-2	SW11	117	102
890-2557-3	SW12	74	89
LCS 880-29817/1-A	Lab Control Sample	109	97
LCSD 880-29817/2-A	Lab Control Sample Dup	101	95
MB 880-29817/5-A	Method Blank	98	96

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)
890-2557-1	FS07	91	103
890-2557-1 MS	FS07	82	90
890-2557-1 MSD	FS07	83	91
890-2557-2	SW11	95	110
890-2557-3	SW12	93	108
LCS 880-29867/2-A	Lab Control Sample	111	127
LCSD 880-29867/3-A	Lab Control Sample Dup	93	104
MB 880-29867/1-A	Method Blank	101	121

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29817/5-A
Matrix: Solid
Analysis Batch: 30096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 12:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 12:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 12:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/15/22 09:11	07/20/22 12:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/22 09:11	07/20/22 12:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/15/22 09:11	07/20/22 12:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*07/15/22 09:11*	*07/20/22 12:46*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/15/22 09:11*	*07/20/22 12:46*	*1*

Lab Sample ID: LCS 880-29817/1-A
Matrix: Solid
Analysis Batch: 30096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1048		mg/Kg		105	70 - 130
Toluene	0.100	0.1037		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1069		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2278		mg/Kg		114	70 - 130
o-Xylene	0.100	0.1203		mg/Kg		120	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-29817/2-A
Matrix: Solid
Analysis Batch: 30096

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29817

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09444		mg/Kg		94	70 - 130	10	35
Toluene	0.100	0.09316		mg/Kg		93	70 - 130	11	35
Ethylbenzene	0.100	0.09138		mg/Kg		91	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.1945		mg/Kg		97	70 - 130	16	35
o-Xylene	0.100	0.1025		mg/Kg		103	70 - 130	16	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-2539-A-1-E MS
Matrix: Solid
Analysis Batch: 30096

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29817

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.0998	0.02974	F1	mg/Kg		29	70 - 130
Toluene	0.0164	F1	0.0998	0.03203	F1	mg/Kg		16	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

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

Lab Sample ID: 890-2539-A-1-E MS
Matrix: Solid
Analysis Batch: 30096

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29817

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.0194	F1	0.0998	0.03403	F1	mg/Kg		15	70 - 130
m-Xylene & p-Xylene	0.0239	F1	0.200	0.06705	F1	mg/Kg		22	70 - 130
o-Xylene	0.00435	F1	0.0998	0.03828	F1	mg/Kg		34	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-2539-A-1-F MSD
Matrix: Solid
Analysis Batch: 30096

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 29817

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.100	0.02922	F1	mg/Kg		29	70 - 130	2	35
Toluene	0.0164	F1	0.100	0.03409	F1	mg/Kg		18	70 - 130	6	35
Ethylbenzene	0.0194	F1	0.100	0.03490	F1	mg/Kg		15	70 - 130	3	35
m-Xylene & p-Xylene	0.0239	F1	0.201	0.07730	F1	mg/Kg		27	70 - 130	14	35
o-Xylene	0.00435	F1	0.100	0.04542	F1	mg/Kg		41	70 - 130	17	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

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

Lab Sample ID: MB 880-29867/1-A
Matrix: Solid
Analysis Batch: 29786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29867

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		07/15/22 14:19	07/15/22 20:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 14:19	07/15/22 20:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 14:19	07/15/22 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*07/15/22 14:19*	*07/15/22 20:28*	*1*
o-Terphenyl	*121*		*70 - 130*	*07/15/22 14:19*	*07/15/22 20:28*	*1*

Lab Sample ID: LCS 880-29867/2-A
Matrix: Solid
Analysis Batch: 29786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29867

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	976.0		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	996.5		mg/Kg		100	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

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

Lab Sample ID: LCS 880-29867/2-A
Matrix: Solid
Analysis Batch: 29786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29867

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: LCSD 880-29867/3-A
Matrix: Solid
Analysis Batch: 29786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29867

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	997.8		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	867.3		mg/Kg		87	70 - 130	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 890-2557-1 MS
Matrix: Solid
Analysis Batch: 29786

Client Sample ID: FS07
Prep Type: Total/NA
Prep Batch: 29867

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	1156		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	765.6		mg/Kg		72	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 890-2557-1 MSD
Matrix: Solid
Analysis Batch: 29786

Client Sample ID: FS07
Prep Type: Total/NA
Prep Batch: 29867

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	999	866.1	F2	mg/Kg		87	70 - 130	29	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	773.9		mg/Kg		73	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	91		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29660/1-A
Matrix: Solid
Analysis Batch: 29862

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			07/16/22 14:53	1

Lab Sample ID: LCS 880-29660/2-A
Matrix: Solid
Analysis Batch: 29862

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	264.9		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-29660/3-A
Matrix: Solid
Analysis Batch: 29862

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	264.8		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 880-16876-A-3-B MS
Matrix: Solid
Analysis Batch: 29862

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	9.93		250	276.3		mg/Kg		107	90 - 110		

Lab Sample ID: 880-16876-A-3-C MSD
Matrix: Solid
Analysis Batch: 29862

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	9.93		250	276.0		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

GC VOA

Prep Batch: 29817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Total/NA	Solid	5035	
890-2557-2	SW11	Total/NA	Solid	5035	
890-2557-3	SW12	Total/NA	Solid	5035	
MB 880-29817/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29817/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29817/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2539-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2539-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 30096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Total/NA	Solid	8021B	29817
890-2557-2	SW11	Total/NA	Solid	8021B	29817
890-2557-3	SW12	Total/NA	Solid	8021B	29817
MB 880-29817/5-A	Method Blank	Total/NA	Solid	8021B	29817
LCS 880-29817/1-A	Lab Control Sample	Total/NA	Solid	8021B	29817
LCSD 880-29817/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29817
890-2539-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	29817
890-2539-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29817

Analysis Batch: 30198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Total/NA	Solid	Total BTEX	
890-2557-2	SW11	Total/NA	Solid	Total BTEX	
890-2557-3	SW12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 29786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Total/NA	Solid	8015B NM	29867
890-2557-2	SW11	Total/NA	Solid	8015B NM	29867
890-2557-3	SW12	Total/NA	Solid	8015B NM	29867
MB 880-29867/1-A	Method Blank	Total/NA	Solid	8015B NM	29867
LCS 880-29867/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29867
LCSD 880-29867/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29867
890-2557-1 MS	FS07	Total/NA	Solid	8015B NM	29867
890-2557-1 MSD	FS07	Total/NA	Solid	8015B NM	29867

Prep Batch: 29867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Total/NA	Solid	8015NM Prep	
890-2557-2	SW11	Total/NA	Solid	8015NM Prep	
890-2557-3	SW12	Total/NA	Solid	8015NM Prep	
MB 880-29867/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29867/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29867/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2557-1 MS	FS07	Total/NA	Solid	8015NM Prep	
890-2557-1 MSD	FS07	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

GC Semi VOA

Analysis Batch: 29905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Total/NA	Solid	8015 NM	
890-2557-2	SW11	Total/NA	Solid	8015 NM	
890-2557-3	SW12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 29660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Soluble	Solid	DI Leach	
890-2557-2	SW11	Soluble	Solid	DI Leach	
890-2557-3	SW12	Soluble	Solid	DI Leach	
MB 880-29660/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29660/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29660/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-16876-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-16876-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 29862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2557-1	FS07	Soluble	Solid	300.0	29660
890-2557-2	SW11	Soluble	Solid	300.0	29660
890-2557-3	SW12	Soluble	Solid	300.0	29660
MB 880-29660/1-A	Method Blank	Soluble	Solid	300.0	29660
LCS 880-29660/2-A	Lab Control Sample	Soluble	Solid	300.0	29660
LCSD 880-29660/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29660
880-16876-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	29660
880-16876-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	29660

Lab Chronicle

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Client Sample ID: FS07

Date Collected: 07/13/22 10:20
Date Received: 07/13/22 14:55

Lab Sample ID: 890-2557-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29817	07/15/22 09:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30096	07/20/22 19:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30198	07/21/22 08:55	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29905	07/18/22 09:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29867	07/15/22 14:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29786	07/15/22 21:32	SM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	29660	07/15/22 12:07	SMC	XEN MID
Soluble	Analysis	300.0		1			29862	07/16/22 19:42	CH	XEN MID

Client Sample ID: SW11

Date Collected: 07/13/22 10:25
Date Received: 07/13/22 14:55

Lab Sample ID: 890-2557-2
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	29817	07/15/22 09:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30096	07/20/22 20:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30198	07/21/22 08:55	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29905	07/18/22 09:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29867	07/15/22 14:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29786	07/15/22 22:36	SM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	29660	07/15/22 12:07	SMC	XEN MID
Soluble	Analysis	300.0		1			29862	07/16/22 19:52	CH	XEN MID

Client Sample ID: SW12

Date Collected: 07/13/22 10:30
Date Received: 07/13/22 14:55

Lab Sample ID: 890-2557-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29817	07/15/22 09:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30096	07/20/22 20:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30198	07/21/22 08:55	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29905	07/18/22 09:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29867	07/15/22 14:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29786	07/15/22 22:57	SM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	29660	07/15/22 12:07	SMC	XEN MID
Soluble	Analysis	300.0		1			29862	07/16/22 20:01	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

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	T104704400-22-24	06-30-23

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: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

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: Ensolum
Project/Site: RDU 14

Job ID: 890-2557-1
SDG: 03A1987035

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2557-1	FS07	Solid	07/13/22 10:20	07/13/22 14:55	4
890-2557-2	SW11	Solid	07/13/22 10:25	07/13/22 14:55	0 - 4
890-2557-3	SW12	Solid	07/13/22 10:30	07/13/22 14:55	0 - 4

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 1

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum	Company Name:	WPX
Address:	3122 National Parks HWY	Address:	5315 Buena Vista Dr.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	BBelill@Ensolum.com, jim.raley@dvn.com

Work Order Comments

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

Project Name:	RDU 14	**Turn Around**	
Project Number:	03A1987035	☑ Routine ☐ Rush	
Project Location:	Eddy County, NM	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
CC #:	1061147701		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TRM-002	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.8	
Total Containers:		Corrected Temperature:	3.6	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
FS07	S	7.13.22	10:20	4'	Comp	1		X	X	X
SW11	S	7.13.22	10:25	0-4'	Comp	1		X	X	X
SW12	S	7.13.22	10:30	0-4'	Comp	1		X	X	X

Parameters

890-2557 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 Numbers
NAB1504757628
NAB1636431146
NAB1902951984

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			7.13.22 1455			
4						
6						

Revised Date 08/25/2020 Rev 2020 2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2557-1
SDG Number: 03A1987035

Login Number: 2557
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: Ensolum

Job Number: 890-2557-1
SDG Number: 03A1987035

Login Number: 2557
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 07/15/22 12:13 PM

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

ENSOLUM

APPENDIX F

Email Correspondence

From: Joseph Hernandez
To: ocd.enviro@state.nm.us; "CFO_Spill, BLM_NM"
Cc: Raley, Jim; Ben Belill
Subject: WPX Site Sampling Activity Update (7/11-7/16/22)
Date: Friday, July 8, 2022 11:48:59 AM
Attachments: image001.png
image002.png
image003.png
image004.png

Good morning,

WPX anticipates conducting final confirmation soil sampling activities at the following sites between July 11 through July 16, 2022:

Site: RDU 55
API: 30-015-41976
Incident ID: NAB1728549561

Site: RDU 14
API: 30-015-25208
Incident ID's: NAB1504757628, NAB1636431146, & NAB1902951984

Site: North Brushy 35-4H
API: 30-015-42290
Incident ID: NRM2019550034

Site: RDX Federal 21 #044
API: 30-015-41193
Incident Number: nAPP2115533694

Site: EP USA #005
API: 30-015-25020
Incident Number: NMAP1826970471

Site: Tucker Draw 9-4-4
API: 30-015-44487
Incident Number: nAB1812338789

Joseph Hernandez
Senior Geologist
281-702-2329
Ensolum, LLC

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 158139

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 158139
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure approved. The pad will need to meet the requirements of 19.15.29.13 NMAC at time of plugging and abandonment.	1/19/2023