NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 17 2016
RECEIVED

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1632647780

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company WPX Energy Inc/RKI 246289	Contact Karolina Blaney
Address 5315 Buena Vista Dr.	Telephone No. 970 589 0743
Facility Name: RDU 11	Facility Type: Well Pad

Surface Owner: Federal	Mineral Owner: Federal	API No. 30- 015-24307

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	22	26S	30E	660	FSL	1980	FEL	Eddy

Latitude: 32.030564 N **Longitude**: -103.8912511 W

NATURE OF RELEASE

Type of Release. Oil	Volume of Release: 70 Bbls	Volume Recovered: 66 Bbls
Source of Release Tank Battery	Date and Hour of Occurrence 11/5/2016	Date and Hour of Discovery 11/5/2016 – 9:30 hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD Heather Patterson & Michael Bratcher, BLM Shelly Tucker	
By Whom? Karolina Blaney	Date and Hour: 11/06/16– 11:09 hrs MT	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

The cause of this spill is equipment failure. A pump air locked causing tank to overfill. 66 bbls of oil was recovered from a dirt SPCC containment berm; none of the fluids have left the containment.

Describe Area Affected and Cleanup Action Taken.*

Vacuum truck was dispatched to the location; 66 bbls oil were recovered from the dirt containment. The impacted area was mapped with Trimble. On 11/15/16, two grab samples were collected from the containment area and were sent to the lab to be analyzed for BTEX, TPH, and chlorides in accordance with NM OCD Guidelines for Remediation of Leaks, Spills, and Releases. Further remediation will be based on these results.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Karolina Blaney	OIL CONSERVATION DIVISION Signed By Approved by Environmental Specialist:	
Printed Name: Karolina Blaney		
Title: Environmental Specialist	Approval Date: 11/21/16	Expiration Date: N/A
E-mail Address: Karolina.blaney@wpxenergy.com	Conditions of Approval:	Attached ☑
Date: 11/17/2016 Phone: 970-589-0743		

* Attach Additional Sheets If Necessary

2RP-4001

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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	nAB1632647780
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.02224 Longitude -103.86682
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Ross Draw Unit 11	Site Type Well Pad
Date Release Discovered 11/5/2016	API# *(if applicable)* 30-015-24307

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

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

Nature and Volume of Release

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

☑ Crude Oil	Volume Released (bbls) 70	Volume Recovered (bbls) 66
☐ 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 cause of this spill is equipment failure. A pump air locked causing tank to overfill. 66 bbls of oil was recovered from a dirt SPCC containment berm; none of the fluids have left the containment.

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

State of New Mexico
Oil Conservation Division

Incident ID	nAB1632647780
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? >25 bbls

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, Karolina Blaney, NMOCD Heather Patterson & Michael Bratcher, BLM Shelly Tucker via email

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: 9/1/2022
email: jim.raley@dvn.com
Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAB1632647780
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>105 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAB1632647780
District RP	
Facility ID	
Application ID	

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

Printed Name: Jim Raley Titl : Environmental Professional

Signature: Jim Raley Date: 9/1/2022

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

OCD Only

Received by: _____ Date: _____

Incident ID	nAB1632647780
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 9/1/2022

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

OCD Only

Received by: _____ Date: _____

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

Signature: Brittany Hall Date: 10/4/2022

The deferral request for nAB1632647780 has been denied. This release has not been fully delineation per 19.15.29.12 NMAC. Vertical delineation submitted was incomplete. The upper 4 feet of the release must be delineated in order to provide an accurate estimate of contamination left in place. Please submit a complete delineation report by 1/6/2023.

ENSOLUM

DEFERRAL REQUEST REPORT

Site Location:

Ross Draw Unit 11
Eddy County, New Mexico
Incident Number
nAB1632647780

September 1, 2022
Ensolum Project No. 03A1987006

Prepared for:

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

Prepared by:

Joseph S. Hernandez
Senior Geologist

Ashley Ager, MS, PG
Program Director, Geologist

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Site Description & Background

Ensolum, LLC (Ensolum), on behalf of WPX Permian, LLC (WPX), has prepared this Deferral Request Report (DRR) for a historical release at the Ross Draw Unit 11 (hereinafter referred to as the "Site") in Unit O, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico **(Figure 1 in Appendix A)**. Based on the information provided on the Corrective Action Form (Form C-141), an air pump failed causing the oil tank to overfill and release approximately 70 barrels (bbls) of oil into the earthen berm containment. Approximately 66 bbls were recovered via vacuum truck. None of the fluids flowed off the location. The release was reported to the New Mexico Oil Conservation Division (NMOCD) and assigned Incident Number nAB1632647780. An updated Form C-141 (current revision August 24, 2018) is provided in this DRR.

WPX respectfully requests NMOCD review a recent Deferral Request (DR) for Incident Number NRM2034258716, authored by WSP USA Inc. (WSP) and approved by NMOCD on January 13, 2022, which overlapped the subject release. Specifically, NMOCD can review the field summary and laboratory analytical data, as it provides delineation information applicable in this DRR. Based on information provided on the C-141, existing data from the previous soil sampling activities, and approved deferral of residual impacts to soil from the overlapping release, WPX respectfully submits this DRR, which summarizes existing data and estimates an additional volume of impacted soil to leave in place.

1.2 Site Characterization

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

Ensolum characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based a soil boring (MW-1) that was drilled by Talon LPE for WPX on December 9, 2020, located approximately 0.45 miles southeast of the Site. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 106 feet and 7 inches bgs. No fluids were observed within the soil boring after at least 72 hours. Following the observation period, the boring was plugged and abandoned. The well log is provided as **Appendix B**.

The closest surface water or significant watercourse to the Site is a dry wash, located approximately 1,359 feet northeast of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland and greater than 1,000 feet to a freshwater well or spring. The Site is not within a 100-year floodplain. This Site is located in a medium potential karst area.

Based on the results of the Site Characterization and recently drilled soil boring, MW-1, 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

2.0 DESCRIPTION OF EXISTING DATA

The DR for Incident Number NRM2034258716, authored by WSP, was approved by NMOCD on January 13, 2022 and overlapped historical Incident Number nAB1632647780. WPX respectfully requests NMOCD review the laboratory analytical data from the DR, as it is applicable to the horizontal and vertical delineation of this historical release.

Based on the summary of the approved DR **(Appendix C)**, the following findings and conclusions regarding historical Incident Number nAB1632647780 are presented:

- The historical release assigned Incident Number nAB1632647780 occurred on November 5, 2016 within the secondary containment berm. The more recent release (Incident Number NRM2034258716) occurred on November 24, 2020 in the same secondary containment and overlapped the historical release footprint. The secondary containment, and therefore release footprint for the historical release, is identified as the Area of Concern in **Figure 2 in Appendix A**.

- WPX addressed the recent release first, excavating soil from the secondary containment and delineating residual impacts near active production equipment.

- Laboratory analytical results of lateral delineation soil samples collected to address impacts associated with the recent release (Incident Number NRM2034258716), specifically samples from BH01, BH02, BH03, and BH04, document lateral delineation for both releases and confirm both releases remained within the secondary containment.

- Vertical delineation of both releases was documented as 1 foot to 1.5 feet bgs in the DR by boreholes BH05 through BH10 advanced within the secondary containment.

- Excavation of impacted soils occurred within the secondary containment where possible. The approved DR estimated 102 cubic yards of residual impacted soil would be left in place due to proximity to active production equipment and deferred until final abandonment or major reconstruction.

- Based on the existing soil laboratory analytical results and an assumption that the historical release footprint extended across the entirety of the secondary containment, an additional 182 cubic yards of residual impacted soil is estimated to remain in place around active production equipment.

- Facility equipment has not changed since approval of the DR and no other releases have occurred within the secondary containment. Photographic documentation is provided in **Appendix D**.

3.0 DEFERRAL REQUEST

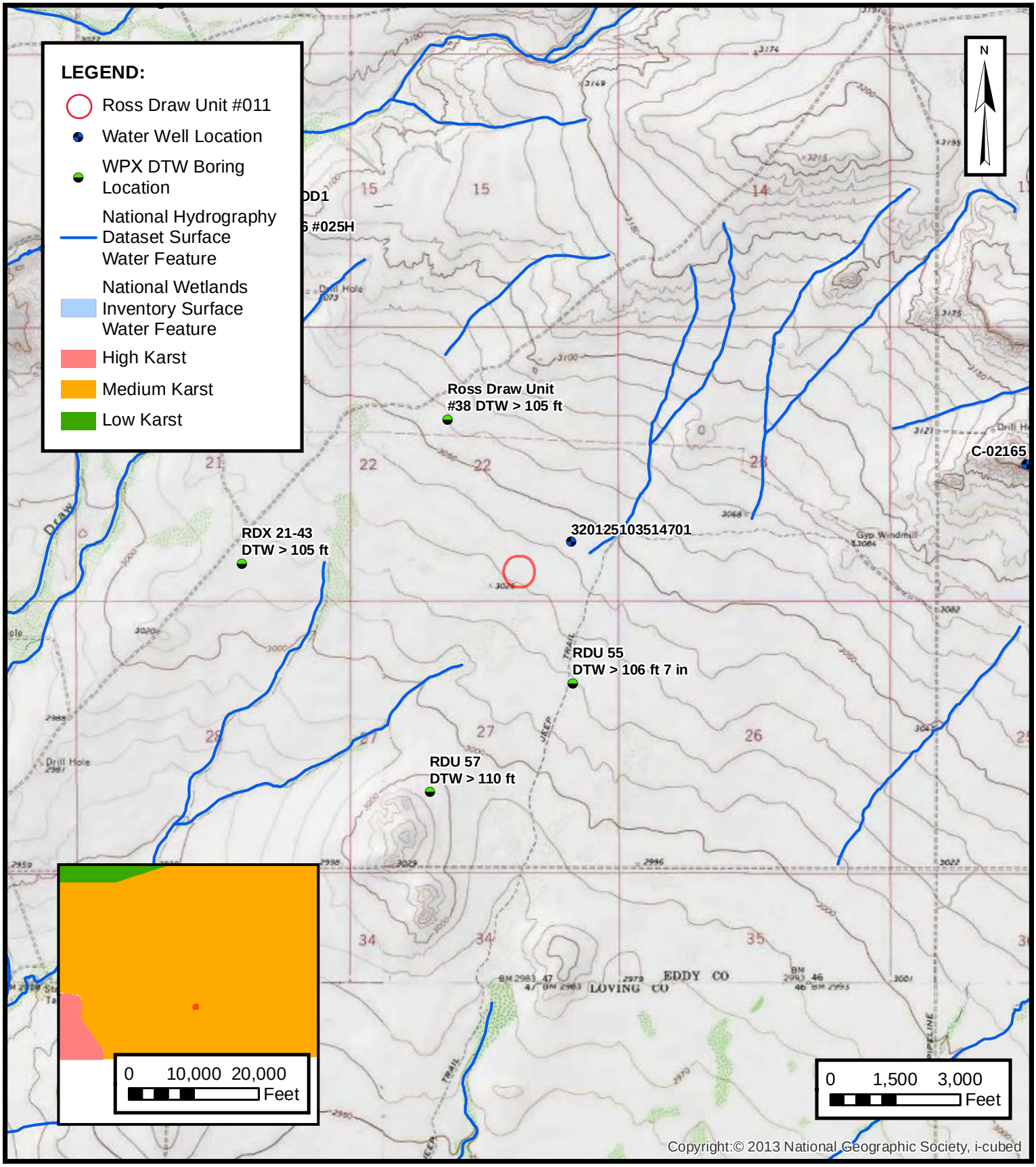
WPX believes the data described above meet the horizontal and vertical delineation requirements set forth in NMAC 19.15.29.11. Excavation in addition to what was removed for Incident Number NRM2034258716 is still restricted by aboveground storage tanks and pipelines, or active

production equipment that would require major facility deconstruction to work around. As such, WPX respectfully requests deferral of a total of 284 cubic yards of impacted soil for historical Incident Number nAB1632647780. Based on the findings and conclusions of an NMOCD approved deferral for Incident Number NRM2034258716 and applicability of existing data to historical Incident Number nAB1632647780, No Further Action appears warranted at this time and the Site should be respectfully considered for Deferral by the NMOCD using the previously collected data.

ENSOLUM

APPENDIX A

Figures



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE MAP

WPX ENERGY PERMIAN, LLC.
ROSS DRAW UNIT 11
Eddy County, New Mexico
Unit O Sec 22 T26S R30E

PROJECT NUMBER: 03A1987006

FIGURE
1

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

DEFERRAL AREA

WPX ENERGY PERMIAN, LLC
ROSS DRAW UNIT 11
Eddy County, New Mexico
Unit O Sec 22 T26S R30E

PROJECT NUMBER: 03A1987006

FIGURE

2

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
Approved Deferral Request (Incident Number NRM2034258716)

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NRM2034258716
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 08/31/2021

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

OCD Only

Received by: Robert Hamlet Date: 1/13/2022

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

Signature: Robert Hamlet Date: 1/13/2022

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Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2034258716
District RP	
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Application ID	

Release Notification

Responsible Party

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

Location of Release Source

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

Site Name ROSS DRAW UNIT #011	Site Type: Oil Well
Date Release Discovered: November 24th, 2020	API# *(if applicable) 30-015-24307*

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

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 7	Volume Recovered (bbls) 6
☐ 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: Tank overflow allowed 7bbls of crude oil to be released to earthen secondary containment. 6 bbls was recovered.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2034258716
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
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: ____James Raley_____ Title: Environmental Specialist _____

Signature: _____ _____ Date: ___11/30/2020_____

email: ___james.raley@wpxenergy.com_____ Telephone: ___575-689-7597_____

OCD Only

Received by: Ramona Marcus Date: 12/7/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2034258716
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>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	NRM2034258716
District RP	
Facility ID	
Application ID	

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 08/31/2021

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2034258716
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 08/31/2021

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

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

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

August 31, 2021

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

RE: Addendum Deferral Request
Ross Draw Unit #011
Incident Number NRM2034258716
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of WPX Energy Permian, LLC. (WPX), presents the following Addendum to the original Deferral Request submitted on February 19, 2021. This Addendum provides clarification to the vertical definition of the release that was completed at the Ross Draw Unit #011 (Site) in Unit O, Section 22, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The New Mexico Oil Conservation Division (NMOCD) denied the original Deferral Request based on concern vertical definition of the release extent to the NMOCD Table 1 Closure Criteria (Closure Criteria) was not achieved. Based on the additional clarification below, WPX is submitting this Addendum Deferral Request in an effort to forbear from disturbing impacted soil within a tank battery earthen containment that may contribute to compromising the safety of field personnel during active operations or the structural integrity of existing above ground equipment and utilities.

RELEASE BACKGROUND

On November 24, 2020, a tank overflowed and released approximately 7 barrels (bbls) of crude oil into the tank battery earthen containment. Vacuum trucks were immediately dispatched and recovered approximately 6 bbls of crude oil. WPX reported the release to NMOCD and submitted a Corrective Action Form C-141 (Form C -141) on November 30, 2020 that was subsequently assigned Incident Number NRM2034258716.

The Deferral Request detailed site characterization according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Based on the results of the Site Characterization, the following Closure Criteria were applied:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;

- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg;
- TPH: 2,500 mg/kg; and
- Chloride: 20,000 mg/kg.

ADDENDUM RESPONSE

The following section of this report describes the interpretation of previous delineation soil sampling activities and laboratory analytical data. All previous remediation activities, soil sample analytical results, and the detailed site characterization can be referenced in the original report.

On September 25, 2020, NMOCD denied the Closure Request for Incident Number NRM2012229165 for the following reason:

- *Samples/ Sample areas for FS02, FS04, FS05, FS06, FS07 need to be vertically delineated to consider these areas for deferral.*

The vertical extent of remaining TPH impacts associated with the subject site is defined by boreholes BH05 through BH10 to approximately 1 to 1.5 feet bgs within the excavation/release area. Based on laboratory analytical data, vertical impacts do not extend beyond 1.5 feet bgs. The boreholes were collected within the 200 square foot grid of the floor sampling sample areas. Vertical extent for the sampling area for FS02 is defined by BH05, FS04 by BH10, FS05 by BH08, and FS07 by BH09. BH05 was collected at minimum 10 feet from the sampling area for FS06 but is defined vertically and laterally.

Borehole samples BH01 through BH04 were collected in every cardinal direction outside the tank battery containment to define the horizontal extent of impacts. The summary table and analytical reports for the lateral delineation samples may be found in the original Deferral Request.

VERTICAL DELINEATION TABLE

Failing Soil Sample Location	Depth (ft bgs)	TPH-GRO & TPH-DRO / TPH Concentrations (mg/kg)	Corresponding Vertical Delineation Sample ID	Depth (ft bgs)	Concentration (mg/kg)
FS02	0.3 – 0.5	2,910 / 2,910	BH05	0.75 – 1	<50.0 / <50.0

FS04	0.5 – 0.75	3,620 / 3,620	BH10	0.75 – 1	83.4 / 83.4
FS05	0.3 – 0.5	8,510 / 8,510	BH08	1 – 1.5	<50.1 / <50.1
FS06	0.5	20,800 / 20,800	BH05	0.75 – 1	<50.0 / <50.0
FS07	0.5 – 1	6,880 / 6,880	BH09	1 – 1.5	88.3 / 88.3

Notes:

ft – feet
bgs – below ground surface
mg/kg – milligrams per kilogram
TPH – Total Petroleum Hydrocarbons
GRO – Gasoline Range Organics
DRO – Diesel Range Organics
< - Less than detectible limit

Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 1.

DEFERRAL REQUEST

Based on the data collected from the final delineation soil samples, WPX requests to defer the remaining residual impacts within the tank battery earthen containment:

- Impacts have been removed to the maximum extent practicable (MEP) to limit future vertical migration and human exposure upon future Site visits. The remaining residual impacts within the subject area release lay in close proximity to and beneath above ground storage tanks and above ground utilities. The approximate area of residual impacts within the release area is presented on Figure 2. Depth to groundwater is estimated to be greater than 100 feet bgs based on the nearest well data and regional depth to water determination, and no other sensitive receptors are within the applicable

ranges. The chloride concentrations meet Table 1 Closure Criteria applicable for a depth to water of greater than 100 feet bgs for all soil samples.

- Removal of impacted soil is not a practical means of remediation due to the location of the release and surrounding production equipment and pipelines. Safety restrictions prevent the ability to remove all impacted soil associated with TPH-GRO/TPH-DRO and TPH exceedances. Based on the data indicating residual impacts are fully delineated, supportive evidence that any remaining TPH concentrations are not harmful to public health and environment and highly unlikely to impact groundwater based on the shallow nature of identified impacts. WPX requests to defer approximately 102 cubic yards of impacted soil associated with Incident Number NRM2034258716 in an effort to forbear from disturbing impacted soil within the earthen tank battery containment, which may also compromise the safety of field personnel during active operations.

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

Sincerely,

WSP USA

Joseph S. Hernandez
Associate Consultant, Geologist

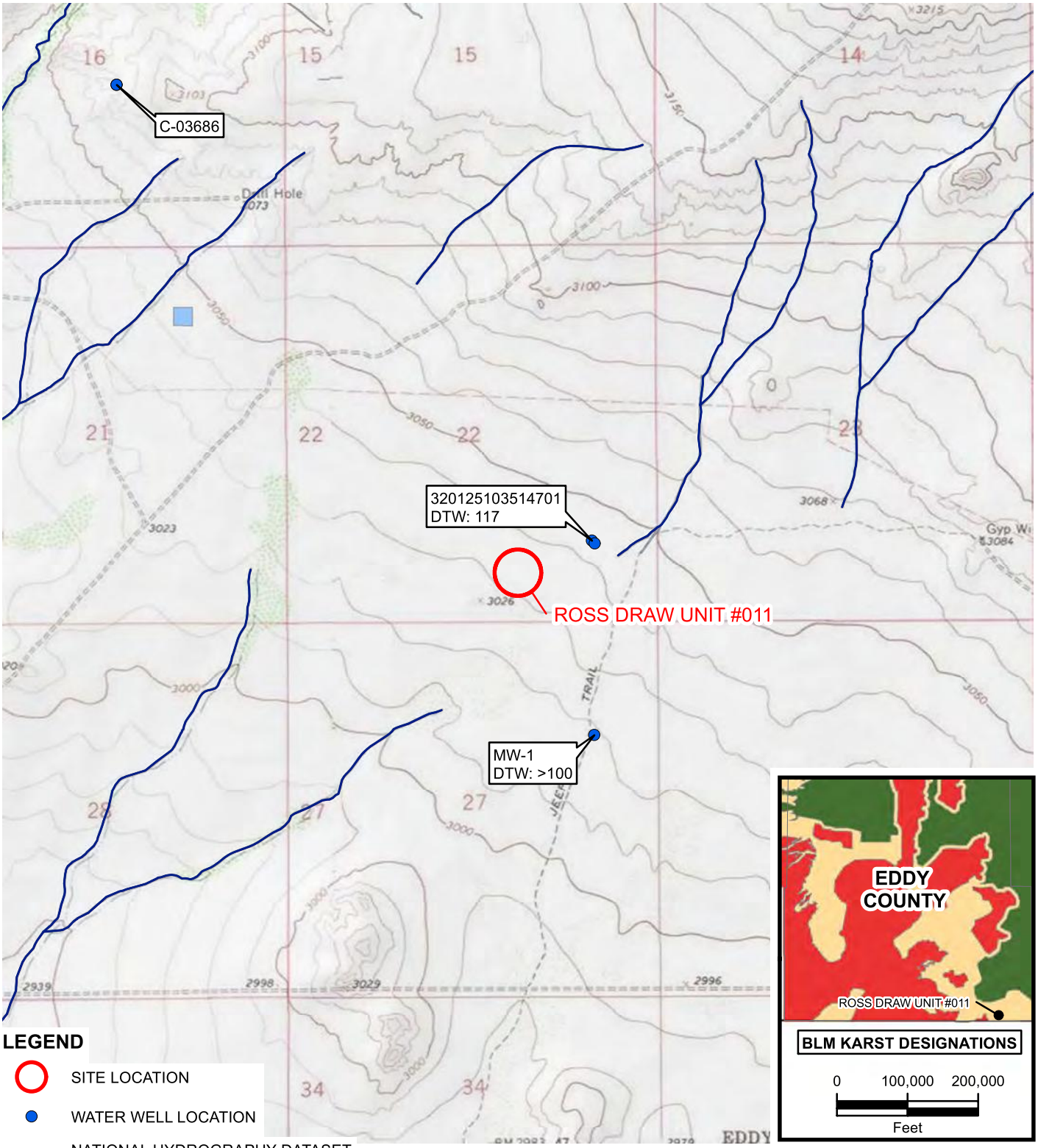
Daniel R. Moir, P.G.
Lead Consultant, Geologist

cc: James Raley, Devon
United States Bureau of Land Management
NMOCD

Attachments:

Figure 1	Site Receptor Map
Figure 2	Estimated Deferral Area
Table 1	Soil Analytical Results
Attachment 1	Laboratory Analytical Reports

FIGURES



NOTE: INCIDENT NUMBER NRM2034258716
BLM: BUREAU OF LAND MANAGEMENT
DTW: DEPTH TO WATER IN FEET

FIGURE 1
SITE RECEPTOR MAP
ROSS DRAW UNIT #011
UNIT O SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX\GIS\MXD\034820044_ROSS DRAW UNIT #011\034820044_FIG01_SITE_LOCATION_2021.mxd

LEGEND

- RELEASE LOCATION
- FLOOR SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- GAS/PIPELINE
- WATER LINE
- EXCAVATION EXTENT
- ESTIMATED DEFERRAL AREA (102 CUBIC YARDS)
- TANK BATTERY EARTHEN CONTAINMENT

NOTE: INCIDENT NUMBER NRM2034258716
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

0 30 60
Feet

N

FIGURE 2
ESTIMATED DEFERRAL AREA
ROSS DRAW UNIT #011
UNIT O SEC 22 T26S R30E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC.

P:\WPX-Devon\GIS\MXD\034820044_ROSS DRAW UNIT #011\034820044_FIG02_ESTIMATED_DEFERRAL_AREA_2021_1.mxd

TABLES

Table 1

Soil Analytical Results
Ross Draw Unit #011
Incident Number NRM2034258716
Eddy County, New Mexico
WPX Energy Permian, LLC.

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Soil Samples										
FS01	12/18/2020	0.5	<0.0200	0.888	<50.0	<50.0	<50.0	<50.0	<50.0	1,970
FS02	12/18/2020	0.3 - 0.5	<0.0233	8.83	<250	2,910	<250	**2,910**	**2,910**	3,520
BH05	12/18/2020	0.75 - 1	<0.00204	<0.00204	<50.0	<50.0	<50.0	<50.0	<50.0	2,110
BH05	12/18/2020	1 - 1.5	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	42.7
FS03	12/18/2020	0.5 - 0.75	<0.00199	<0.00199	<49.8	51.2	<49.8	51.2	51.2	6,640
FS04	12/18/2020	0.5 - 0.75	<0.00200	<0.00200	278	3,340	<249	**3,620**	**3,620**	6,810
BH10	12/18/2020	0.75 - 1	<0.00200	<0.00200	<50.0	83.4	<50.0	83.4	83.4	6,610
BH10	12/18/2020	1 - 1.5	<0.00200	<0.00200	<49.8	52.8	<49.8	52.8	52.8	810
FS05	12/18/2020	0.3 - 0.5	<0.0196	<0.0196	1,040	7,470	<499	**8,510**	**8,510**	2,680
BH08	12/18/2020	0.75 - 1	<0.00200	<0.00200	<251	2,830	<251	**2,830**	**2,830**	852
BH08	12/18/2020	1 - 1.5	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	4,730
FS06	12/18/2020	0.5	<0.0196	0.761	1,130	19,700	<1,000	**20,800**	**20,800**	2,080
BH05	12/18/2020	0.75 - 1	<0.00204	<0.00204	<50.0	<50.0	<50.0	<50.0	<50.0	2,110
BH05	12/18/2020	1 - 1.5	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	42.7

Table 1

Soil Analytical Results
Ross Draw Unit #011
Incident Number NRM2034258716
Eddy County, New Mexico
WPX Energy Permian, LLC.

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS07	12/18/2020	0.5 - 1	<0.0175	<0.0175	522	6,360	<500	**6,880**	**6,880**	1,410
BH09	12/18/2020	0.75 - 1	<0.00200	<0.00200	706	4,290	<251	**5,000**	**5,000**	1,300
BH09	12/18/2020	1 - 1.5	<0.00202	<0.00202	<50.3	88.3	<50.3	88.3	88.3	2,320

Notes:

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Greyed data represents samples that were excavated

ATTACHMENT 1: LABORATORY ANALYTICAL REPORTS

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Certificate of Analysis Summary 681867

WSP USA, Dallas, TX

Project Name: RDU 11

Project Id: TE034820044
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 12.18.2020 15:51
Report Date: 01.21.2021 08:50
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	681867-001		681867-002		681867-003		681867-004		681867-005		681867-006	
	Field Id:	FS01		FS02		FS03		FS04		FS05		FS06	
	Depth:	0.5- ft		0.3-0.5 ft		0.5-0.75 ft		0.3-0.75 ft		0.5-0.5 ft		0.5- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.18.2020 09:00		12.18.2020 09:02		12.18.2020 09:05		12.18.2020 09:07		12.18.2020 09:10		12.18.2020 09:12	
BTEX by EPA 8021B	***Extracted:***	12.18.2020 17:04		12.18.2020 17:26		12.18.2020 17:04		12.18.2020 17:04		12.18.2020 17:04		12.18.2020 17:04	
	Analyzed:	12.18.2020 23:38		12.19.2020 23:17		12.19.2020 00:23		12.19.2020 00:45		12.19.2020 01:08		12.19.2020 01:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0200	0.0200	<0.0233	0.0233	<0.00199	0.00199	<0.00200	0.00200	<0.0196	0.0196	<0.0196	0.0196
Toluene		<0.0200	0.0200	0.774	0.0233	<0.00199	0.00199	<0.00200	0.00200	<0.0196	0.0196	<0.0196	0.0196
Ethylbenzene		0.224	0.0200	1.55	0.0233	<0.00199	0.00199	<0.00200	0.00200	<0.0196	0.0196	<0.0196	0.0196
m,p-Xylenes		0.359	0.0400	4.43	0.0465	<0.00398	0.00398	<0.00399	0.00399	<0.0392	0.0392	<0.0392	0.0392
o-Xylene		0.305	0.0200	2.08	0.0233	<0.00199	0.00199	<0.00200	0.00200	<0.0196	0.0196	0.761	0.0196
Total Xylenes		0.664	0.0200	6.51	0.0233	<0.00199	0.00199	<0.00200	0.00200	<0.0196	0.0196	0.761	0.0196
Total BTEX		0.888	0.0200	8.83	0.0233	<0.00199	0.00199	<0.00200	0.00200	<0.0196	0.0196	0.761	0.0196
Inorganic Anions by EPA 300	***Extracted:***	12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11	
	Analyzed:	12.21.2020 16:03		12.21.2020 16:21		12.21.2020 16:27		12.21.2020 16:33		12.21.2020 16:39		12.21.2020 16:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1970	50.3	3520	50.1	6640	50.1	6810	49.9	2680	49.9	2080	49.6
TPH by SW8015 Mod	***Extracted:***	12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00	
	Analyzed:	12.22.2020 22:09		12.22.2020 22:30		12.22.2020 22:51		12.22.2020 23:11		12.22.2020 23:32		12.22.2020 23:53	
	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	<250	250	<49.8	49.8	278	249	1040	499	1130	1000
Diesel Range Organics (DRO)		<50.0	50.0	2910	250	51.2	49.8	3340	249	7470	499	19700	1000
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<250	250	<49.8	49.8	<249	249	<499	499	<1000	1000
Total TPH		<50.0	50.0	2910	250	51.2	49.8	3620	249	8510	499	20800	1000

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 681867

WSP USA, Dallas, TX

Project Name: RDU 11

Project Id: TE034820044
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 12.18.2020 15:51
Report Date: 01.21.2021 08:50
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	681867-007					
	Field Id:	FS07					
	Depth:	0.5-1 ft					
	Matrix:	SOIL					
	Sampled:	12.18.2020 09:15					
BTEX by EPA 8021B	***Extracted:***	12.18.2020 17:04					
	Analyzed:	12.19.2020 02:51					
	Units/RL:	mg/kg	RL				
Benzene		<0.0175	0.0175				
Toluene		<0.0175	0.0175				
Ethylbenzene		<0.0175	0.0175				
m,p-Xylenes		<0.0351	0.0351				
o-Xylene		<0.0175	0.0175				
Total Xylenes		<0.0175	0.0175				
Total BTEX		<0.0175	0.0175				
Inorganic Anions by EPA 300	***Extracted:***	12.19.2020 18:11					
	Analyzed:	12.21.2020 17:03					
	Units/RL:	mg/kg	RL				
Chloride		1410	50.1				
TPH by SW8015 Mod	***Extracted:***	12.19.2020 11:00					
	Analyzed:	12.23.2020 00:14					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		522	500				
Diesel Range Organics (DRO)		6360	500				
Motor Oil Range Hydrocarbons (MRO)		<500	500				
Total TPH		6880	500				

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 681867

for

WSP USA

Project Manager: Joseph Hernandez

RDU 11

TE034820044

01.21.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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01.21.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **681867**
RDU 11
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) 681867. 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. 681867 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

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Sample Cross Reference 681867

WSP USA, Dallas, TX

RDU 11

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	12.18.2020 09:00	0.5 ft	681867-001
FS02	S	12.18.2020 09:02	0.3 - 0.5 ft	681867-002
FS03	S	12.18.2020 09:05	0.5 - 0.75 ft	681867-003
FS04	S	12.18.2020 09:07	0.3 - 0.75 ft	681867-004
FS05	S	12.18.2020 09:10	0.5 - 0.5 ft	681867-005
FS06	S	12.18.2020 09:12	0.5 ft	681867-006
FS07	S	12.18.2020 09:15	0.5 - 1 ft	681867-007

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CASE NARRATIVE

Client Name: WSP USA

Project Name: RDU 11

Project ID: *TE034820044*
Work Order Number(s): *681867*

Report Date: *01.21.2021*
Date Received: *12.18.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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WSP USA, Dallas, TX

RDU 11

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-001	Date Collected:	12.18.2020 09:00	Sample Depth:	0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.19.2020 18:11	% Moisture:	
Seq Number:	3145671			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1970**	50.3	mg/kg	12.21.2020 16:03		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.19.2020 11:00	% Moisture:	
Seq Number:	3145521			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.22.2020 22:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.22.2020 22:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.22.2020 22:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.22.2020 22:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.22.2020 22:09	
o-Terphenyl	84-15-1	113	%	70-135	12.22.2020 22:09	

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RDU 11

Sample Id:	**FS01**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-001	Date Collected:	12.18.2020 09:00	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	12.18.2020 23:38	U	1
Toluene	108-88-3	<0.0200	0.0200	mg/kg	12.18.2020 23:38	U	1
Ethylbenzene	100-41-4	**0.224**	0.0200	mg/kg	12.18.2020 23:38		1
m,p-Xylenes	179601-23-1	**0.359**	0.0400	mg/kg	12.18.2020 23:38		1
o-Xylene	95-47-6	**0.305**	0.0200	mg/kg	12.18.2020 23:38		1
Total Xylenes	1330-20-7	**0.664**	0.0200	mg/kg	12.18.2020 23:38		1
Total BTEX		**0.888**	0.0200	mg/kg	12.18.2020 23:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	12.18.2020 23:38	
4-Bromofluorobenzene	460-00-4	108	%	70-130	12.18.2020 23:38	

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WSP USA, Dallas, TX

RDU 11

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-002	Date Collected:	12.18.2020 09:02	Sample Depth:	0.3 - 0.5 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture: Basis: Wet Weight

Seq Number: 3145671

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3520**	50.1	mg/kg	12.21.2020 16:21		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture: Basis: Wet Weight

Seq Number: 3145521

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	12.22.2020 22:30	U	5
Diesel Range Organics (DRO)	C10C28DRO	**2910**	250	mg/kg	12.22.2020 22:30		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<250	250	mg/kg	12.22.2020 22:30	U	5
Total TPH	PHC635	**2910**	250	mg/kg	12.22.2020 22:30		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	12.22.2020 22:30	
o-Terphenyl	84-15-1	117	%	70-135	12.22.2020 22:30	

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WSP USA, Dallas, TX

RDU 11

Sample Id:	**FS02**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-002	Date Collected:	12.18.2020 09:02	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:26	% Moisture:	
Seq Number:	3145518			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0233	0.0233	mg/kg	12.19.2020 23:17	U	1
Toluene	108-88-3	**0.774**	0.0233	mg/kg	12.19.2020 23:17		1
Ethylbenzene	100-41-4	**1.55**	0.0233	mg/kg	12.19.2020 23:17		1
m,p-Xylenes	179601-23-1	**4.43**	0.0465	mg/kg	12.19.2020 23:17		1
o-Xylene	95-47-6	**2.08**	0.0233	mg/kg	12.19.2020 23:17		1
Total Xylenes	1330-20-7	**6.51**	0.0233	mg/kg	12.19.2020 23:17		1
Total BTEX		**8.83**	0.0233	mg/kg	12.19.2020 23:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.19.2020 23:17	
1,4-Difluorobenzene	540-36-3	86	%	70-130	12.19.2020 23:17	

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WSP USA, Dallas, TX

RDU 11

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-003	Date Collected:	12.18.2020 09:05	Sample Depth:	0.5 - 0.75 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture: Basis: Wet Weight

Seq Number: 3145671

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6640**	50.1	mg/kg	12.21.2020 16:27		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture: Basis: Wet Weight

Seq Number: 3145521

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.22.2020 22:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**51.2**	49.8	mg/kg	12.22.2020 22:51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.22.2020 22:51	U	1
Total TPH	PHC635	**51.2**	49.8	mg/kg	12.22.2020 22:51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	12.22.2020 22:51	
o-Terphenyl	84-15-1	113	%	70-135	12.22.2020 22:51	

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RDU 11

Sample Id:	**FS03**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-003	Date Collected:	12.18.2020 09:05	Sample Depth:	0.5 - 0.75 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.19.2020 00:23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.19.2020 00:23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.19.2020 00:23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.19.2020 00:23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.19.2020 00:23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.19.2020 00:23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.19.2020 00:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	12.19.2020 00:23	
1,4-Difluorobenzene	540-36-3	96	%	70-130	12.19.2020 00:23	

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RDU 11

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-004	Date Collected:	12.18.2020 09:07	Sample Depth:	0.3 - 0.75 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture:

Seq Number: 3145671 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6810**	49.9	mg/kg	12.21.2020 16:33		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture:

Seq Number: 3145521 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**278**	249	mg/kg	12.22.2020 23:11		5
Diesel Range Organics (DRO)	C10C28DRO	**3340**	249	mg/kg	12.22.2020 23:11		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<249	249	mg/kg	12.22.2020 23:11	U	5
Total TPH	PHC635	**3620**	249	mg/kg	12.22.2020 23:11		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	12.22.2020 23:11	
o-Terphenyl	84-15-1	113	%	70-135	12.22.2020 23:11	

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WSP USA, Dallas, TX

RDU 11

Sample Id:	**FS04**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-004	Date Collected:	12.18.2020 09:07	Sample Depth:	0.3 - 0.75 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.19.2020 00:45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.19.2020 00:45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.19.2020 00:45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.19.2020 00:45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.19.2020 00:45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.19.2020 00:45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.19.2020 00:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	12.19.2020 00:45	
1,4-Difluorobenzene	540-36-3	97	%	70-130	12.19.2020 00:45	

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RDU 11

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-005	Date Collected:	12.18.2020 09:10	Sample Depth:	0.5 - 0.5 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture:

Seq Number: 3145671 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2680**	49.9	mg/kg	12.21.2020 16:39		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture:

Seq Number: 3145521 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1040**	499	mg/kg	12.22.2020 23:32		10
Diesel Range Organics (DRO)	C10C28DRO	**7470**	499	mg/kg	12.22.2020 23:32		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<499	499	mg/kg	12.22.2020 23:32	U	10
Total TPH	PHC635	**8510**	499	mg/kg	12.22.2020 23:32		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	12.22.2020 23:32	
o-Terphenyl	84-15-1	111	%	70-135	12.22.2020 23:32	

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RDU 11

Sample Id:	**FS05**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-005	Date Collected:	12.18.2020 09:10	Sample Depth:	0.5 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	12.19.2020 01:08	U	1
Toluene	108-88-3	<0.0196	0.0196	mg/kg	12.19.2020 01:08	U	1
Ethylbenzene	100-41-4	<0.0196	0.0196	mg/kg	12.19.2020 01:08	U	1
m,p-Xylenes	179601-23-1	<0.0392	0.0392	mg/kg	12.19.2020 01:08	U	1
o-Xylene	95-47-6	<0.0196	0.0196	mg/kg	12.19.2020 01:08	U	1
Total Xylenes	1330-20-7	<0.0196	0.0196	mg/kg	12.19.2020 01:08	U	1
Total BTEX		<0.0196	0.0196	mg/kg	12.19.2020 01:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	12.19.2020 01:08	
4-Bromofluorobenzene	460-00-4	102	%	70-130	12.19.2020 01:08	

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RDU 11

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-006	Date Collected:	12.18.2020 09:12	Sample Depth:	0.5 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture:

Seq Number: 3145671 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2080**	49.6	mg/kg	12.21.2020 16:57		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture:

Seq Number: 3145521 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**1130**	1000	mg/kg	12.22.2020 23:53		20
Diesel Range Organics (DRO)	C10C28DRO	**19700**	1000	mg/kg	12.22.2020 23:53		20
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<1000	1000	mg/kg	12.22.2020 23:53	U	20
Total TPH	PHC635	**20800**	1000	mg/kg	12.22.2020 23:53		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	12.22.2020 23:53	
o-Terphenyl	84-15-1	96	%	70-135	12.22.2020 23:53	

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RDU 11

Sample Id:	**FS06**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-006	Date Collected:	12.18.2020 09:12	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	12.19.2020 01:31	U	1
Toluene	108-88-3	<0.0196	0.0196	mg/kg	12.19.2020 01:31	U	1
Ethylbenzene	100-41-4	<0.0196	0.0196	mg/kg	12.19.2020 01:31	U	1
m,p-Xylenes	179601-23-1	<0.0392	0.0392	mg/kg	12.19.2020 01:31	U	1
o-Xylene	95-47-6	**0.761**	0.0196	mg/kg	12.19.2020 01:31		1
Total Xylenes	1330-20-7	**0.761**	0.0196	mg/kg	12.19.2020 01:31		1
Total BTEX		**0.761**	0.0196	mg/kg	12.19.2020 01:31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.19.2020 01:31	
4-Bromofluorobenzene	460-00-4	124	%	70-130	12.19.2020 01:31	

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RDU 11

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-007	Date Collected:	12.18.2020 09:15	Sample Depth:	0.5 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture:

Seq Number: 3145671 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1410**	50.1	mg/kg	12.21.2020 17:03		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture:

Seq Number: 3145521 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**522**	500	mg/kg	12.23.2020 00:14		10
Diesel Range Organics (DRO)	C10C28DRO	**6360**	500	mg/kg	12.23.2020 00:14		10
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<500	500	mg/kg	12.23.2020 00:14	U	10
Total TPH	PHC635	**6880**	500	mg/kg	12.23.2020 00:14		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	12.23.2020 00:14	
o-Terphenyl	84-15-1	91	%	70-135	12.23.2020 00:14	

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Certificate of Analytical Results 681867

WSP USA, Dallas, TX

RDU 11

Sample Id:	**FS07**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681867-007	Date Collected:	12.18.2020 09:15	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0175	0.0175	mg/kg	12.19.2020 02:51	U	1
Toluene	108-88-3	<0.0175	0.0175	mg/kg	12.19.2020 02:51	U	1
Ethylbenzene	100-41-4	<0.0175	0.0175	mg/kg	12.19.2020 02:51	U	1
m,p-Xylenes	179601-23-1	<0.0351	0.0351	mg/kg	12.19.2020 02:51	U	1
o-Xylene	95-47-6	<0.0175	0.0175	mg/kg	12.19.2020 02:51	U	1
Total Xylenes	1330-20-7	<0.0175	0.0175	mg/kg	12.19.2020 02:51	U	1
Total BTEX		<0.0175	0.0175	mg/kg	12.19.2020 02:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	12.19.2020 02:51	
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.19.2020 02:51	

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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

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QC Summary 681867

WSP USA

RDU 11

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145671 — Matrix: Solid — Date Prep: 12.19.2020
MB Sample Id: 7717519-1-BLK — LCS Sample Id: 7717519-1-BKS — LCSD Sample Id: 7717519-1-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	260	104	261	104	90-110	0	20	mg/kg	12.21.2020 15:51	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145671 — Matrix: Soil — Date Prep: 12.19.2020
Parent Sample Id: 681867-001 — MS Sample Id: 681867-001 S — MSD Sample Id: 681867-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1970	202	2160	94	2150	90	90-110	0	20	mg/kg	12.21.2020 16:09	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145671 — Matrix: Soil — Date Prep: 12.19.2020
Parent Sample Id: 681876-004 — MS Sample Id: 681876-004 S — MSD Sample Id: 681876-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	103	200	316	107	317	107	90-110	0	20	mg/kg	12.21.2020 17:33	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145521 — Matrix: Solid — Date Prep: 12.19.2020
MB Sample Id: 7717503-1-BLK — LCS Sample Id: 7717503-1-BKS — LCSD Sample Id: 7717503-1-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	1030	103	1050	105	70-135	2	35	mg/kg	12.19.2020 13:21	
Diesel Range Organics (DRO)	<50.0	1000	974	97	1120	112	70-135	14	35	mg/kg	12.19.2020 13:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		116		113		70-135	%	12.19.2020 13:21
o-Terphenyl	97		97		106		70-135	%	12.19.2020 13:21

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145521 — Matrix: Solid — Date Prep: 12.19.2020
MB Sample Id: 7717503-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.19.2020 13:01	

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

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QC Summary 681867

WSP USA

RDU 11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145521 — Matrix: Soil — Date Prep: 12.19.2020
Parent Sample Id: 681869-001 — MS Sample Id: 681869-001 S — MSD Sample Id: 681869-001 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	1110	111	1090	109	70-135	2	35	mg/kg	12.19.2020 14:21	
Diesel Range Organics (DRO)	<49.9	997	1220	122	1140	114	70-135	7	35	mg/kg	12.19.2020 14:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		125		70-135	%	12.19.2020 14:21
o-Terphenyl	109		99		70-135	%	12.19.2020 14:21

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3145459 — Matrix: Solid — Date Prep: 12.18.2020
MB Sample Id: 7717487-1-BLK — LCS Sample Id: 7717487-1-BKS — LCSD Sample Id: 7717487-1-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	0.0929	93	0.0942	94	70-130	1	35	mg/kg	12.18.2020 20:03	
Toluene	<0.00200	0.100	0.0864	86	0.0938	94	70-130	8	35	mg/kg	12.18.2020 20:03	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0951	95	71-129	4	35	mg/kg	12.18.2020 20:03	
m,p-Xylenes	<0.00400	0.200	0.186	93	0.199	100	70-135	7	35	mg/kg	12.18.2020 20:03	
o-Xylene	<0.00200	0.100	0.0913	91	0.0969	97	71-133	6	35	mg/kg	12.18.2020 20:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		97		99		70-130	%	12.18.2020 20:03
4-Bromofluorobenzene	116		108		111		70-130	%	12.18.2020 20:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3145518 — Matrix: Solid — Date Prep: 12.18.2020
MB Sample Id: 7717509-1-BLK — LCS Sample Id: 7717509-1-BKS — LCSD Sample Id: 7717509-1-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	0.0953	95	0.0943	94	70-130	1	35	mg/kg	12.19.2020 14:21	
Toluene	<0.00200	0.100	0.0937	94	0.0908	91	70-130	3	35	mg/kg	12.19.2020 14:21	
Ethylbenzene	<0.00200	0.100	0.0845	85	0.0833	83	71-129	1	35	mg/kg	12.19.2020 14:21	
m,p-Xylenes	<0.00400	0.200	0.172	86	0.165	83	70-135	4	35	mg/kg	12.19.2020 14:21	
o-Xylene	<0.00200	0.100	0.0868	87	0.0845	85	71-133	3	35	mg/kg	12.19.2020 14:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		88		70-130	%	12.19.2020 14:21
4-Bromofluorobenzene	86		85		77		70-130	%	12.19.2020 14:21

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

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QC Summary 681867

WSP USA

RDU 11

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Seq Number: 3145459 Matrix: Soil Date Prep: 12.18.2020

Parent Sample Id: 681869-001 MS Sample Id: 681869-001 S MSD Sample Id: 681869-001 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	0.0961	96	0.0883	87	70-130	8	35	mg/kg	12.18.2020 20:48	
Toluene	<0.00200	0.100	0.0904	90	0.0796	79	70-130	13	35	mg/kg	12.18.2020 20:48	
Ethylbenzene	<0.00200	0.100	0.0922	92	0.0794	79	71-129	15	35	mg/kg	12.18.2020 20:48	
m,p-Xylenes	<0.00401	0.200	0.191	96	0.161	80	70-135	17	35	mg/kg	12.18.2020 20:48	
o-Xylene	<0.00200	0.100	0.0967	97	0.0834	83	71-133	15	35	mg/kg	12.18.2020 20:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		102		70-130	%	12.18.2020 20:48
4-Bromofluorobenzene	113		113		70-130	%	12.18.2020 20:48

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Seq Number: 3145518 Matrix: Soil Date Prep: 12.18.2020

Parent Sample Id: 681884-001 MS Sample Id: 681884-001 S MSD Sample Id: 681884-001 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	0.107	107	0.0917	92	70-130	15	35	mg/kg	12.19.2020 15:06	
Toluene	<0.00200	0.0998	0.102	102	0.0863	87	70-130	17	35	mg/kg	12.19.2020 15:06	
Ethylbenzene	<0.00200	0.0998	0.0924	93	0.0786	79	71-129	16	35	mg/kg	12.19.2020 15:06	
m,p-Xylenes	<0.00399	0.200	0.186	93	0.157	79	70-135	17	35	mg/kg	12.19.2020 15:06	
o-Xylene	<0.00200	0.0998	0.0936	94	0.0781	79	71-133	18	35	mg/kg	12.19.2020 15:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		94		70-130	%	12.19.2020 15:06
4-Bromofluorobenzene	87		87		70-130	%	12.19.2020 15:06

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: 1681867

Page 1 of 1

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP USA Inc	Company Name:	WPX Energy
Address:	3300 North 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 11	Turn Around	
Project Number:	n/a	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:	nRM2034258716	Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2/1.0	Thermometer ID	T-NM-007
Received Intact:	Yes No	Correction Factor:	-0.2
Cooler Custody Seals:	Yes No N/A	Total Containers:	7
Sample Custody Seals:	Yes No N/A		

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

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	Sample Comments
	FS01	S	12/12/22	0900	0.5'	1		X	X	X	
	FS02			0902	0.3-0.5'	1					
	FS03			0905	0.5-0.75'	1					
	FS04			0907	0.5-0.75'	1					
	FS05			0910	0.3-0.5'	1					
	FS06			0912	0.5'	1					
	FS07	↓	↓	0915	0.5-1'	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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Clue Cliff	12.18.22 1551	1		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.18.2020 03.51.00 PM

Work Order #: 681867

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)?	1	
#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: 12.18.2020

Cloe Clifton

Checklist reviewed by: Jessica Kramer Date: 12.21.2020

Jessica Kramer

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Certificate of Analysis Summary 681876

WSP USA, Dallas, TX

Project Name: RDU 11

Project Id: TE034820044
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 12.18.2020 15:51
Report Date: 01.21.2021 08:49
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	681876-001		681876-002		681876-003		681876-004		681876-005		681876-006	
	Field Id:	BH01		BH01		BH02		BH02		BH03		BH03	
	Depth:	0.3-0.5 ft		0.75-1 ft		0.3-0.5 ft		0.75-1 ft		0.3-0.5 ft		0.75-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.18.2020 10:30		12.18.2020 10:35		12.18.2020 10:45		12.18.2020 10:47		12.18.2020 11:00		12.18.2020 11:05	
BTEX by EPA 8021B	***Extracted:***	12.18.2020 17:04		12.18.2020 17:04		12.18.2020 17:04		12.18.2020 17:04		12.18.2020 17:04		12.18.2020 17:04	
	Analyzed:	12.19.2020 03:48		12.19.2020 04:10		12.19.2020 04:33		12.19.2020 04:56		12.19.2020 05:18		12.19.2020 05:41	
	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	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Toluene		<0.00198	0.00198	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Ethylbenzene		<0.00198	0.00198	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
m,p-Xylenes		<0.00396	0.00396	<0.00402	0.00402	<0.00396	0.00396	<0.00401	0.00401	<0.00403	0.00403	<0.00398	0.00398
o-Xylene		<0.00198	0.00198	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Total Xylenes		<0.00198	0.00198	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Total BTEX		<0.00198	0.00198	<0.00201	0.00201	<0.00198	0.00198	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11		12.19.2020 18:11	
	Analyzed:	12.21.2020 17:09		12.21.2020 17:15		12.21.2020 17:21		12.21.2020 17:27		12.21.2020 17:45		12.21.2020 17:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		200	10.1	226	9.92	104	49.9	103	9.94	411	49.9	49.1	10.0
TPH by SW8015 Mod	***Extracted:***	12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00		12.19.2020 11:00	
	Analyzed:	12.19.2020 16:01		12.19.2020 16:21		12.19.2020 16:41		12.19.2020 17:01		12.19.2020 17:21		12.19.2020 17:41	
	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	<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.1	50.1
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.1	50.1
Total TPH		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<50.1	50.1

BRL - Below Reporting Limit

Jessica Kramer

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

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Certificate of Analysis Summary 681876

WSP USA, Dallas, TX

Project Name: RDU 11

Project Id: TE034820044
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 12.18.2020 15:51
Report Date: 01.21.2021 08:49
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	681876-007		681876-008			
	Field Id:	BH04		BH04			
	Depth:	0.3-0.5 ft		0.75-1 ft			
	Matrix:	SOIL		SOIL			
	Sampled:	12.18.2020 11:10		12.18.2020 11:15			
BTEX by EPA 8021B	***Extracted:***	12.18.2020 17:04		12.18.2020 17:04			
	Analyzed:	12.19.2020 06:03		12.19.2020 06:26			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	<0.00200	0.00200		
Toluene		<0.00200	0.00200	<0.00200	0.00200		
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200		
m,p-Xylenes		<0.00399	0.00399	<0.00399	0.00399		
o-Xylene		<0.00200	0.00200	<0.00200	0.00200		
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200		
Total BTEX		<0.00200	0.00200	<0.00200	0.00200		
Inorganic Anions by EPA 300	***Extracted:***	12.19.2020 18:11		12.19.2020 18:11			
	Analyzed:	12.21.2020 18:09		12.21.2020 18:15			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		244	50.4	175	10.0		
TPH by SW8015 Mod	***Extracted:***	12.19.2020 11:00		12.19.2020 11:00			
	Analyzed:	12.22.2020 21:28		12.22.2020 21:48			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0		
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0		
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0		
Total TPH		<49.9	49.9	<50.0	50.0		

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 681876

for

WSP USA

Project Manager: Joseph Hernandez

RDU 11

TE034820044

01.21.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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01.21.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **681876**
RDU 11
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) 681876. 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. 681876 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

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Sample Cross Reference 681876

WSP USA, Dallas, TX

RDU 11

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01	S	12.18.2020 10:30	0.3 - 0.5 ft	681876-001
BH01	S	12.18.2020 10:35	0.75 - 1 ft	681876-002
BH02	S	12.18.2020 10:45	0.3 - 0.5 ft	681876-003
BH02	S	12.18.2020 10:47	0.75 - 1 ft	681876-004
BH03	S	12.18.2020 11:00	0.3 - 0.5 ft	681876-005
BH03	S	12.18.2020 11:05	0.75 - 1 ft	681876-006
BH04	S	12.18.2020 11:10	0.3 - 0.5 ft	681876-007
BH04	S	12.18.2020 11:15	0.75 - 1 ft	681876-008

CASE NARRATIVE

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Client Name: WSP USA
Project Name: RDU 11

Project ID: *TE034820044*
Work Order Number(s): *681876*

Report Date: *01.21.2021*
Date Received: *12.18.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-001	Date Collected:	12.18.2020 10:30	Sample Depth:	0.3 - 0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.19.2020 18:11	% Moisture:	
Seq Number:	3145671			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**200**	10.1	mg/kg	12.21.2020 17:09		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.19.2020 11:00	% Moisture:	
Seq Number:	3145521			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.19.2020 16:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.19.2020 16:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.19.2020 16:01	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.19.2020 16:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	12.19.2020 16:01	
o-Terphenyl	84-15-1	107	%	70-135	12.19.2020 16:01	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-001	Date Collected:	12.18.2020 10:30	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.19.2020 03:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.19.2020 03:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.19.2020 03:48	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.19.2020 03:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.19.2020 03:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.19.2020 03:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.19.2020 03:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	12.19.2020 03:48	
1,4-Difluorobenzene	540-36-3	101	%	70-130	12.19.2020 03:48	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-002	Date Collected:	12.18.2020 10:35	Sample Depth:	0.75 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture: Basis: Wet Weight

Seq Number: 3145671

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**226**	9.92	mg/kg	12.21.2020 17:15		1

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture: Basis: Wet Weight

Seq Number: 3145521

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.19.2020 16:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.19.2020 16:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.19.2020 16:21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.19.2020 16:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	12.19.2020 16:21	
o-Terphenyl	84-15-1	113	%	70-135	12.19.2020 16:21	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH01**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-002	Date Collected:	12.18.2020 10:35	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.19.2020 04:10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.19.2020 04:10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.19.2020 04:10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.19.2020 04:10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.19.2020 04:10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	12.19.2020 04:10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	12.19.2020 04:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	12.19.2020 04:10	
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.19.2020 04:10	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id: **BH02** Matrix: Soil Date Received: 12.18.2020 15:51
Lab Sample Id: 681876-003 Date Collected: 12.18.2020 10:45 Sample Depth: 0.3 - 0.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.19.2020 18:11 % Moisture:
Seq Number: 3145671 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**104**	49.9	mg/kg	12.21.2020 17:21		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.19.2020 11:00 % Moisture:
Seq Number: 3145521 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.19.2020 16:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.19.2020 16:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.19.2020 16:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.19.2020 16:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	12.19.2020 16:41	
o-Terphenyl	84-15-1	106	%	70-135	12.19.2020 16:41	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-003	Date Collected:	12.18.2020 10:45	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.19.2020 04:33	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.19.2020 04:33	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.19.2020 04:33	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.19.2020 04:33	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.19.2020 04:33	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.19.2020 04:33	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.19.2020 04:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.19.2020 04:33	
1,4-Difluorobenzene	540-36-3	109	%	70-130	12.19.2020 04:33	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-004	Date Collected:	12.18.2020 10:47	Sample Depth:	0.75 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture: Basis: Wet Weight

Seq Number: 3145671

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**103**	9.94	mg/kg	12.21.2020 17:27		1

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture: Basis: Wet Weight

Seq Number: 3145521

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.19.2020 17:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.19.2020 17:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.19.2020 17:01	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.19.2020 17:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.19.2020 17:01	
o-Terphenyl	84-15-1	113	%	70-135	12.19.2020 17:01	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH02**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-004	Date Collected:	12.18.2020 10:47	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.19.2020 04:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.19.2020 04:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.19.2020 04:56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.19.2020 04:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.19.2020 04:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.19.2020 04:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.19.2020 04:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	12.19.2020 04:56	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.19.2020 04:56	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-005	Date Collected:	12.18.2020 11:00	Sample Depth:	0.3 - 0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.19.2020 18:11	% Moisture:	
Seq Number:	3145671			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**411**	49.9	mg/kg	12.21.2020 17:45		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.19.2020 11:00	% Moisture:	
Seq Number:	3145521			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.19.2020 17:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.19.2020 17:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.19.2020 17:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.19.2020 17:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	12.19.2020 17:21	
o-Terphenyl	84-15-1	109	%	70-135	12.19.2020 17:21	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-005	Date Collected:	12.18.2020 11:00	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.19.2020 05:18	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.19.2020 05:18	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.19.2020 05:18	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.19.2020 05:18	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.19.2020 05:18	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.19.2020 05:18	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.19.2020 05:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.19.2020 05:18	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.19.2020 05:18	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-006	Date Collected:	12.18.2020 11:05	Sample Depth:	0.75 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture: Basis: Wet Weight

Seq Number: 3145671

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.1**	10.0	mg/kg	12.21.2020 17:51		1

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture: Basis: Wet Weight

Seq Number: 3145521

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.19.2020 17:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.19.2020 17:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.19.2020 17:41	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.19.2020 17:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	12.19.2020 17:41	
o-Terphenyl	84-15-1	97	%	70-135	12.19.2020 17:41	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH03**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-006	Date Collected:	12.18.2020 11:05	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.19.2020 05:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.19.2020 05:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.19.2020 05:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.19.2020 05:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.19.2020 05:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.19.2020 05:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.19.2020 05:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	12.19.2020 05:41	
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.19.2020 05:41	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-007	Date Collected:	12.18.2020 11:10	Sample Depth:	0.3 - 0.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.19.2020 18:11	% Moisture:	
Seq Number:	3145671			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**244**	50.4	mg/kg	12.21.2020 18:09		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.19.2020 11:00	% Moisture:	
Seq Number:	3145521			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.22.2020 21:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.22.2020 21:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.22.2020 21:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.22.2020 21:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	12.22.2020 21:28	
o-Terphenyl	84-15-1	109	%	70-135	12.22.2020 21:28	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-007	Date Collected:	12.18.2020 11:10	Sample Depth:	0.3 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.19.2020 06:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.19.2020 06:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.19.2020 06:03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.19.2020 06:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.19.2020 06:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.19.2020 06:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.19.2020 06:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.19.2020 06:03	
4-Bromofluorobenzene	460-00-4	125	%	70-130	12.19.2020 06:03	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-008	Date Collected:	12.18.2020 11:15	Sample Depth:	0.75 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.19.2020 18:11 — % Moisture: Basis: Wet Weight

Seq Number: 3145671

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**175**	10.0	mg/kg	12.21.2020 18:15		1

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

Tech: CAC

Analyst: CAC — Date Prep: 12.19.2020 11:00 — % Moisture: Basis: Wet Weight

Seq Number: 3145521

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.22.2020 21:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.22.2020 21:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.22.2020 21:48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.22.2020 21:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	12.22.2020 21:48	
o-Terphenyl	84-15-1	103	%	70-135	12.22.2020 21:48	

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Certificate of Analytical Results 681876

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH04**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681876-008	Date Collected:	12.18.2020 11:15	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.18.2020 17:04	% Moisture:	
Seq Number:	3145459			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.19.2020 06:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.19.2020 06:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.19.2020 06:26	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.19.2020 06:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.19.2020 06:26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.19.2020 06:26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.19.2020 06:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	124	%	70-130	12.19.2020 06:26	
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.19.2020 06:26	

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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 681876

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WSP USA

RDU 11

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145671 — Matrix: Solid — Date Prep: 12.19.2020
MB Sample Id: 7717519-1-BLK — LCS Sample Id: 7717519-1-BKS — LCSD Sample Id: 7717519-1-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	260	104	261	104	90-110	0	20	mg/kg	12.21.2020 15:51	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145671 — Matrix: Soil — Date Prep: 12.19.2020
Parent Sample Id: 681867-001 — MS Sample Id: 681867-001 S — MSD Sample Id: 681867-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1970	202	2160	94	2150	90	90-110	0	20	mg/kg	12.21.2020 16:09	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3145671 — Matrix: Soil — Date Prep: 12.19.2020
Parent Sample Id: 681876-004 — MS Sample Id: 681876-004 S — MSD Sample Id: 681876-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	103	200	316	107	317	107	90-110	0	20	mg/kg	12.21.2020 17:33	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145521 — Matrix: Solid — Date Prep: 12.19.2020
MB Sample Id: 7717503-1-BLK — LCS Sample Id: 7717503-1-BKS — LCSD Sample Id: 7717503-1-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	1030	103	1050	105	70-135	2	35	mg/kg	12.19.2020 13:21	
Diesel Range Organics (DRO)	<50.0	1000	974	97	1120	112	70-135	14	35	mg/kg	12.19.2020 13:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		116		113		70-135	%	12.19.2020 13:21
o-Terphenyl	97		97		106		70-135	%	12.19.2020 13:21

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145521 — Matrix: Solid — Date Prep: 12.19.2020
MB Sample Id: 7717503-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.19.2020 13:01	

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

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QC Summary 681876

WSP USA

RDU 11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3145521 — Matrix: Soil — Date Prep: 12.19.2020
Parent Sample Id: 681869-001 — MS Sample Id: 681869-001 S — MSD Sample Id: 681869-001 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	1110	111	1090	109	70-135	2	35	mg/kg	12.19.2020 14:21	
Diesel Range Organics (DRO)	<49.9	997	1220	122	1140	114	70-135	7	35	mg/kg	12.19.2020 14:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		125		70-135	%	12.19.2020 14:21
o-Terphenyl	109		99		70-135	%	12.19.2020 14:21

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3145459 — Matrix: Solid — Date Prep: 12.18.2020
MB Sample Id: 7717487-1-BLK — LCS Sample Id: 7717487-1-BKS — LCSD Sample Id: 7717487-1-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	0.0929	93	0.0942	94	70-130	1	35	mg/kg	12.18.2020 20:03	
Toluene	<0.00200	0.100	0.0864	86	0.0938	94	70-130	8	35	mg/kg	12.18.2020 20:03	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0951	95	71-129	4	35	mg/kg	12.18.2020 20:03	
m,p-Xylenes	<0.00400	0.200	0.186	93	0.199	100	70-135	7	35	mg/kg	12.18.2020 20:03	
o-Xylene	<0.00200	0.100	0.0913	91	0.0969	97	71-133	6	35	mg/kg	12.18.2020 20:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		97		99		70-130	%	12.18.2020 20:03
4-Bromofluorobenzene	116		108		111		70-130	%	12.18.2020 20:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3145459 — Matrix: Soil — Date Prep: 12.18.2020
Parent Sample Id: 681869-001 — MS Sample Id: 681869-001 S — MSD Sample Id: 681869-001 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	0.0961	96	0.0883	87	70-130	8	35	mg/kg	12.18.2020 20:48	
Toluene	<0.00200	0.100	0.0904	90	0.0796	79	70-130	13	35	mg/kg	12.18.2020 20:48	
Ethylbenzene	<0.00200	0.100	0.0922	92	0.0794	79	71-129	15	35	mg/kg	12.18.2020 20:48	
m,p-Xylenes	<0.00401	0.200	0.191	96	0.161	80	70-135	17	35	mg/kg	12.18.2020 20:48	
o-Xylene	<0.00200	0.100	0.0967	97	0.0834	83	71-133	15	35	mg/kg	12.18.2020 20:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		102		70-130	%	12.18.2020 20:48
4-Bromofluorobenzene	113		113		70-130	%	12.18.2020 20:48

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

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: 581876

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP USA Inc	Company Name:	WPX Energy
Address:	3300 North 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 11	Turn Around	
Project Number:	n/a	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:	nRM2103425e716	Quote #:	

SAMPLE RECEIPT

Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	
Received Intact:	(Yes) No		1-NM-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	8

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	Pres. Code	TPH - EPA 8015mod	BTEX - EPA 8021B	Chloride-EPA 300.0	Sample Comments
	BH01	S	12/18/21	1030	0.3-0.5'	1					
	BH01			1035	0.75-1'	1					
	BH02			1045	0.3-0.5'	1					
	BH02			1047	0.75-1'	1					
	BH03			1100	0.3-0.5'	1					
	BH03			1105	0.75-1'	1					
	BH04			1110	0.3-0.5'	1					
	BH04			1115	0.75-1'	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	Cole Clifton	12.18.21 1551	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.18.2020 03.51.00 PM

Work Order #: 681876

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)?	1	
#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: 12.18.2020

Cloe Clifton

Checklist reviewed by: Jessica Kramer Date: 12.21.2020

Jessica Kramer

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Certificate of Analysis Summary 681880

WSP USA, Dallas, TX

Project Name: RDU 11

Project Id: TE034820044
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 12.18.2020 15:51
Report Date: 01.22.2021 09:41
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	681880-001		681880-002		681880-003		681880-004		681880-005		681880-006	
	Field Id:	BH05		BH05		BH06		BH06		BH07		BH07	
	Depth:	0.75-1 ft		1-1.5 ft		0.75-1 ft		1-1.5 ft		0.75-1 ft		1-1.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.18.2020 12:24		12.18.2020 12:26		12.18.2020 12:29		12.18.2020 12:30		12.18.2020 12:33		12.18.2020 12:35	
BTEX by EPA 8021B	***Extracted:***	12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00	
	Analyzed:	12.29.2020 05:51		12.29.2020 06:14		12.29.2020 06:36		12.29.2020 06:59		12.29.2020 07:21		12.29.2020 07:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00204	0.00204	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199
Toluene		<0.00204	0.00204	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199
Ethylbenzene		<0.00204	0.00204	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199
m,p-Xylenes		<0.00408	0.00408	<0.00403	0.00403	<0.00399	0.00399	<0.00397	0.00397	<0.00399	0.00399	<0.00398	0.00398
o-Xylene		<0.00204	0.00204	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199
Total Xylenes		<0.00204	0.00204	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199
Total BTEX		<0.00204	0.00204	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199
Inorganic Anions by EPA 300	***Extracted:***	12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00	
	Analyzed:	12.28.2020 18:53		12.28.2020 19:11		12.28.2020 19:17		12.28.2020 19:23		12.28.2020 19:29		12.28.2020 19:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2110	49.5	42.7	10.0	354	10.0	76.7	10.1	1000	9.94	46.7	9.98
TPH by SW8015 Mod	***Extracted:***	12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00	
	Analyzed:	12.28.2020 19:36		12.28.2020 19:56		12.28.2020 20:16		12.28.2020 20:36		12.28.2020 20:56		12.28.2020 21:17	
	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	<49.8	49.8	<50.1	50.1	<50.3	50.3	<50.2	50.2	<50.1	50.1
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<50.1	50.1	<50.3	50.3	<50.2	50.2	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.1	50.1	<50.3	50.3	<50.2	50.2	<50.1	50.1
Total TPH		<50.0	50.0	<49.8	49.8	<50.1	50.1	<50.3	50.3	<50.2	50.2	<50.1	50.1

BRL - Below Reporting Limit

Jessica Kramer

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

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Certificate of Analysis Summary 681880

WSP USA, Dallas, TX

Project Name: RDU 11

Project Id: TE034820044
Contact: Joseph Hernandez
Project Location: Eddy County, New Mexico

Date Received in Lab: Fri 12.18.2020 15:51
Report Date: 01.22.2021 09:41
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	681880-007		681880-008		681880-009		681880-010		681880-011		681880-012	
	Field Id:	BH08		BH08		BH09		BH09		BH10		BH10	
	Depth:	0.75-1 ft		1-1.5 ft		0.75-1 ft		1-1.5 ft		0.75-1 ft		1-1.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	12.18.2020 12:36		12.18.2020 12:37		12.18.2020 12:40		12.18.2020 12:42		12.18.2020 12:45		12.18.2020 12:47	
BTEX by EPA 8021B	***Extracted:***	12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00	
	Analyzed:	12.29.2020 08:06		12.29.2020 08:29		12.29.2020 08:51		12.29.2020 09:13		12.29.2020 10:33		12.29.2020 10:56	
	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	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00402	0.00402	<0.00401	0.00401	<0.00403	0.00403	<0.00401	0.00401	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00201	0.00201	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00		12.28.2020 16:00	
	Analyzed:	12.28.2020 19:52		12.28.2020 19:58		12.28.2020 20:04		12.28.2020 20:10		12.28.2020 20:16		12.28.2020 20:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		852	9.96	4730	50.1	1300	49.7	2320	49.6	6610	99.0	810	10.0
TPH by SW8015 Mod	***Extracted:***	12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00		12.28.2020 12:00	
	Analyzed:	12.28.2020 21:37		12.28.2020 21:57		12.28.2020 20:56		12.28.2020 21:17		12.28.2020 21:37		12.28.2020 21:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<251	251	<50.1	50.1	706	251	<50.3	50.3	<50.0	50.0	<49.8	49.8
Diesel Range Organics (DRO)		2830	251	<50.1	50.1	4290	251	88.3	50.3	83.4	50.0	52.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<251	251	<50.1	50.1	<251	251	<50.3	50.3	<50.0	50.0	<49.8	49.8
Total TPH		2830	251	<50.1	50.1	5000	251	88.3	50.3	83.4	50.0	52.8	49.8

BRL - Below Reporting Limit

Jessica Kramer

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Analytical Report 681880

for

WSP USA

Project Manager: Joseph Hernandez

RDU 11

TE034820044

01.22.2021

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 (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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01.22.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **681880**
RDU 11
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) 681880. 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. 681880 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

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Sample Cross Reference 681880

WSP USA, Dallas, TX

RDU 11

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH05	S	12.18.2020 12:24	0.75 - 1 ft	681880-001
BH05	S	12.18.2020 12:26	1 - 1.5 ft	681880-002
BH06	S	12.18.2020 12:29	0.75 - 1 ft	681880-003
BH06	S	12.18.2020 12:30	1 - 1.5 ft	681880-004
BH07	S	12.18.2020 12:33	0.75 - 1 ft	681880-005
BH07	S	12.18.2020 12:35	1 - 1.5 ft	681880-006
BH08	S	12.18.2020 12:36	0.75 - 1 ft	681880-007
BH08	S	12.18.2020 12:37	1 - 1.5 ft	681880-008
BH09	S	12.18.2020 12:40	0.75 - 1 ft	681880-009
BH09	S	12.18.2020 12:42	1 - 1.5 ft	681880-010
BH10	S	12.18.2020 12:45	0.75 - 1 ft	681880-011
BH10	S	12.18.2020 12:47	1 - 1.5 ft	681880-012

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CASE NARRATIVE

Client Name: WSP USA

Project Name: RDU 11

Project ID: *TE034820044*
Work Order Number(s): *681880*

Report Date: *01.22.2021*
Date Received: *12.18.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-001	Date Collected:	12.18.2020 12:24	Sample Depth:	0.75 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146200			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2110**	49.5	mg/kg	12.28.2020 18:53		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.28.2020 12:00	% Moisture:	
Seq Number:	3146194			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.28.2020 19:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.28.2020 19:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.28.2020 19:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.28.2020 19:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	12.28.2020 19:36	
o-Terphenyl	84-15-1	99	%	70-135	12.28.2020 19:36	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-001	Date Collected:	12.18.2020 12:24	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00204	0.00204	mg/kg	12.29.2020 05:51	U	1
Toluene	108-88-3	<0.00204	0.00204	mg/kg	12.29.2020 05:51	U	1
Ethylbenzene	100-41-4	<0.00204	0.00204	mg/kg	12.29.2020 05:51	U	1
m,p-Xylenes	179601-23-1	<0.00408	0.00408	mg/kg	12.29.2020 05:51	U	1
o-Xylene	95-47-6	<0.00204	0.00204	mg/kg	12.29.2020 05:51	U	1
Total Xylenes	1330-20-7	<0.00204	0.00204	mg/kg	12.29.2020 05:51	U	1
Total BTEX		<0.00204	0.00204	mg/kg	12.29.2020 05:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.29.2020 05:51	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.29.2020 05:51	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id: **BH05** Matrix: Soil Date Received:12.18.2020 15:51
Lab Sample Id: 681880-002 Date Collected: 12.18.2020 12:26 Sample Depth: 1 - 1.5 ft

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
Tech: MAB
Analyst: MAB Date Prep: 12.28.2020 16:00 % Moisture:
Seq Number: 3146200 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**42.7**	10.0	mg/kg	12.28.2020 19:11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
Tech: CAC
Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:
Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.28.2020 19:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.28.2020 19:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.28.2020 19:56	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.28.2020 19:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	12.28.2020 19:56	
o-Terphenyl	84-15-1	97	%	70-135	12.28.2020 19:56	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH05**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-002	Date Collected:	12.18.2020 12:26	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.29.2020 06:14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.29.2020 06:14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.29.2020 06:14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.29.2020 06:14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.29.2020 06:14	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.29.2020 06:14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.29.2020 06:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	12.29.2020 06:14	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.29.2020 06:14	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-003	Date Collected:	12.18.2020 12:29	Sample Depth:	0.75 - 1 ft

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

Tech: MAB
Analyst: MAB
Seq Number: 3146200

Date Prep: 12.28.2020 16:00

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**354**	10.0	mg/kg	12.28.2020 19:17		1

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

Tech: CAC
Analyst: CAC
Seq Number: 3146194

Date Prep: 12.28.2020 12:00

% 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	12.28.2020 20:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.28.2020 20:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.28.2020 20:16	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.28.2020 20:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.28.2020 20:16	
o-Terphenyl	84-15-1	109	%	70-135	12.28.2020 20:16	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-003	Date Collected:	12.18.2020 12:29	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.29.2020 06:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.29.2020 06:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.29.2020 06:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.29.2020 06:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.29.2020 06:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.29.2020 06:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.29.2020 06:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	12.29.2020 06:36	
4-Bromofluorobenzene	460-00-4	116	%	70-130	12.29.2020 06:36	

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RDU 11

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-004	Date Collected:	12.18.2020 12:30	Sample Depth:	1 - 1.5 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.28.2020 16:00 — % Moisture:

Seq Number: 3146200 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**76.7**	10.1	mg/kg	12.28.2020 19:23		1

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

Tech: CAC

Analyst: CAC — Date Prep: 12.28.2020 12:00 — % Moisture:

Seq Number: 3146194 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.28.2020 20:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	12.28.2020 20:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.28.2020 20:36	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	12.28.2020 20:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	12.28.2020 20:36	
o-Terphenyl	84-15-1	109	%	70-135	12.28.2020 20:36	

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RDU 11

Sample Id:	**BH06**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-004	Date Collected:	12.18.2020 12:30	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.29.2020 06:59	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.29.2020 06:59	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.29.2020 06:59	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.29.2020 06:59	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.29.2020 06:59	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.29.2020 06:59	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.29.2020 06:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	12.29.2020 06:59	
1,4-Difluorobenzene	540-36-3	102	%	70-130	12.29.2020 06:59	

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RDU 11

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-005	Date Collected:	12.18.2020 12:33	Sample Depth:	0.75 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.28.2020 16:00 — % Moisture: Basis: Wet Weight

Seq Number: 3146200

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1000**	9.94	mg/kg	12.28.2020 19:29		1

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

Tech: CAC

Analyst: CAC — Date Prep: 12.28.2020 12:00 — % Moisture: Basis: Wet Weight

Seq Number: 3146194

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.28.2020 20:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.28.2020 20:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.28.2020 20:56	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	12.28.2020 20:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.28.2020 20:56	
o-Terphenyl	84-15-1	117	%	70-135	12.28.2020 20:56	

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RDU 11

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-005	Date Collected:	12.18.2020 12:33	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.29.2020 07:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.29.2020 07:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.29.2020 07:21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.29.2020 07:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.29.2020 07:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.29.2020 07:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.29.2020 07:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	12.29.2020 07:21	
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.29.2020 07:21	

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RDU 11

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-006	Date Collected:	12.18.2020 12:35	Sample Depth:	1 - 1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146200			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.7**	9.98	mg/kg	12.28.2020 19:46		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.28.2020 12:00	% Moisture:	
Seq Number:	3146194			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.28.2020 21:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.28.2020 21:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.28.2020 21:17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.28.2020 21:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	12.28.2020 21:17	
o-Terphenyl	84-15-1	105	%	70-135	12.28.2020 21:17	

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RDU 11

Sample Id:	**BH07**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-006	Date Collected:	12.18.2020 12:35	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.29.2020 07:44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.29.2020 07:44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.29.2020 07:44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.29.2020 07:44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.29.2020 07:44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.29.2020 07:44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.29.2020 07:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	12.29.2020 07:44	
4-Bromofluorobenzene	460-00-4	115	%	70-130	12.29.2020 07:44	

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RDU 11

Sample Id:	**BH08**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-007	Date Collected:	12.18.2020 12:36	Sample Depth:	0.75 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146200			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**852**	9.96	mg/kg	12.28.2020 19:52		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.28.2020 12:00	% Moisture:	
Seq Number:	3146194			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<251	251	mg/kg	12.28.2020 21:37	U	5
Diesel Range Organics (DRO)	C10C28DRO	**2830**	251	mg/kg	12.28.2020 21:37		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<251	251	mg/kg	12.28.2020 21:37	U	5
Total TPH	PHC635	**2830**	251	mg/kg	12.28.2020 21:37		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.28.2020 21:37	
o-Terphenyl	84-15-1	107	%	70-135	12.28.2020 21:37	

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RDU 11

Sample Id:	**BH08**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-007	Date Collected:	12.18.2020 12:36	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.29.2020 08:06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.29.2020 08:06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.29.2020 08:06	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.29.2020 08:06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.29.2020 08:06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.29.2020 08:06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.29.2020 08:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.29.2020 08:06	
4-Bromofluorobenzene	460-00-4	104	%	70-130	12.29.2020 08:06	

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RDU 11

Sample Id:	**BH08**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-008	Date Collected:	12.18.2020 12:37	Sample Depth:	1 - 1.5 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Tech: MAB
Analyst: MAB — Date Prep: 12.28.2020 16:00 — % Moisture:
Seq Number: 3146200 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4730**	50.1	mg/kg	12.28.2020 19:58		5

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Tech: CAC
Analyst: CAC — Date Prep: 12.28.2020 12:00 — % Moisture:
Seq Number: 3146194 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.28.2020 21:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.28.2020 21:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.28.2020 21:57	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.28.2020 21:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	12.28.2020 21:57	
o-Terphenyl	84-15-1	113	%	70-135	12.28.2020 21:57	

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Sample Id:	**BH08**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-008	Date Collected:	12.18.2020 12:37	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.29.2020 08:29	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.29.2020 08:29	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.29.2020 08:29	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.29.2020 08:29	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.29.2020 08:29	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	12.29.2020 08:29	U	1
Total BTEX		<0.00201	0.00201	mg/kg	12.29.2020 08:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	12.29.2020 08:29	
4-Bromofluorobenzene	460-00-4	109	%	70-130	12.29.2020 08:29	

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RDU 11

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-009	Date Collected:	12.18.2020 12:40	Sample Depth:	0.75 - 1 ft

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

Tech: MAB

Analyst: MAB — Date Prep: 12.28.2020 16:00 — % Moisture:

Seq Number: 3146200 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1300**	49.7	mg/kg	12.28.2020 20:04		5

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

Tech: CAC

Analyst: CAC — Date Prep: 12.28.2020 12:00 — % Moisture:

Seq Number: 3146196 — Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**706**	251	mg/kg	12.28.2020 20:56		5
Diesel Range Organics (DRO)	C10C28DRO	**4290**	251	mg/kg	12.28.2020 20:56		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<251	251	mg/kg	12.28.2020 20:56	U	5
Total TPH	PHC635	**5000**	251	mg/kg	12.28.2020 20:56		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.28.2020 20:56	
o-Terphenyl	84-15-1	113	%	70-135	12.28.2020 20:56	

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RDU 11

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-009	Date Collected:	12.18.2020 12:40	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.29.2020 08:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.29.2020 08:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.29.2020 08:51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.29.2020 08:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.29.2020 08:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.29.2020 08:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.29.2020 08:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	12.29.2020 08:51	
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.29.2020 08:51	

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RDU 11

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-010	Date Collected:	12.18.2020 12:42	Sample Depth:	1 - 1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146200			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2320**	49.6	mg/kg	12.28.2020 20:10		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.28.2020 12:00	% Moisture:	
Seq Number:	3146196			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.28.2020 21:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**88.3**	50.3	mg/kg	12.28.2020 21:17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.28.2020 21:17	U	1
Total TPH	PHC635	**88.3**	50.3	mg/kg	12.28.2020 21:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	12.28.2020 21:17	
o-Terphenyl	84-15-1	104	%	70-135	12.28.2020 21:17	

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RDU 11

Sample Id:	**BH09**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-010	Date Collected:	12.18.2020 12:42	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.29.2020 09:13	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.29.2020 09:13	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.29.2020 09:13	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.29.2020 09:13	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.29.2020 09:13	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.29.2020 09:13	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.29.2020 09:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.29.2020 09:13	
4-Bromofluorobenzene	460-00-4	125	%	70-130	12.29.2020 09:13	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-011	Date Collected:	12.18.2020 12:45	Sample Depth:	0.75 - 1 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146200			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6610**	99.0	mg/kg	12.28.2020 20:16		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.28.2020 12:00	% Moisture:	
Seq Number:	3146196			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.28.2020 21:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	**83.4**	50.0	mg/kg	12.28.2020 21:37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.28.2020 21:37	U	1
Total TPH	PHC635	**83.4**	50.0	mg/kg	12.28.2020 21:37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	12.28.2020 21:37	
o-Terphenyl	84-15-1	114	%	70-135	12.28.2020 21:37	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-011	Date Collected:	12.18.2020 12:45	Sample Depth:	0.75 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.29.2020 10:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.29.2020 10:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.29.2020 10:33	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.29.2020 10:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.29.2020 10:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.29.2020 10:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.29.2020 10:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	12.29.2020 10:33	
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.29.2020 10:33	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-012	Date Collected:	12.18.2020 12:47	Sample Depth:	1 - 1.5 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146200			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**810**	10.0	mg/kg	12.28.2020 20:34		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	12.28.2020 12:00	% Moisture:	
Seq Number:	3146196			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.28.2020 21:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	**52.8**	49.8	mg/kg	12.28.2020 21:57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.28.2020 21:57	U	1
Total TPH	PHC635	**52.8**	49.8	mg/kg	12.28.2020 21:57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	12.28.2020 21:57	
o-Terphenyl	84-15-1	114	%	70-135	12.28.2020 21:57	

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Certificate of Analytical Results 681880

WSP USA, Dallas, TX

RDU 11

Sample Id:	**BH10**	Matrix:	Soil	Date Received:	12.18.2020 15:51
Lab Sample Id:	681880-012	Date Collected:	12.18.2020 12:47	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.28.2020 16:00	% Moisture:	
Seq Number:	3146281			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.29.2020 10:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.29.2020 10:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.29.2020 10:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.29.2020 10:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.29.2020 10:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.29.2020 10:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.29.2020 10:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.29.2020 10:56	
4-Bromofluorobenzene	460-00-4	118	%	70-130	12.29.2020 10:56	

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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

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QC Summary 681880

WSP USA

RDU 11

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3146200 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717985-1-BLK — LCS Sample Id: 7717985-1-BKS — LCSD Sample Id: 7717985-1-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	257	103	258	103	90-110	0	20	mg/kg	12.28.2020 18:41	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3146200 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 681880-001 — MS Sample Id: 681880-001 S — MSD Sample Id: 681880-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2110	199	2300	95	2320	105	90-110	1	20	mg/kg	12.28.2020 18:59	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3146200 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 681880-011 — MS Sample Id: 681880-011 S — MSD Sample Id: 681880-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6610	200	6800	95	6810	99	90-110	0	20	mg/kg	12.28.2020 20:22	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK — LCS Sample Id: 7717990-1-BKS — LCSD Sample Id: 7717990-1-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	998	100	1080	108	70-135	8	35	mg/kg	12.28.2020 13:52	
Diesel Range Organics (DRO)	<50.0	1000	937	94	1060	106	70-135	12	35	mg/kg	12.28.2020 13:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		103		101		70-135	%	12.28.2020 13:52
o-Terphenyl	107		102		99		70-135	%	12.28.2020 13:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146196 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717992-1-BLK — LCS Sample Id: 7717992-1-BKS — LCSD Sample Id: 7717992-1-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	1100	110	1160	116	70-135	5	35	mg/kg	12.28.2020 13:52	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1020	102	70-135	3	35	mg/kg	12.28.2020 13:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		118		106		70-135	%	12.28.2020 13:52
o-Terphenyl	114		92		107		70-135	%	12.28.2020 13:52

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

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QC Summary 681880

WSP USA

RDU 11

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.28.2020 13:32	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146196 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717992-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.28.2020 13:32	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682305-001 — MS Sample Id: 682305-001 S — MSD Sample Id: 682305-001 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	998	1120	112	980	98	70-135	13	35	mg/kg	12.28.2020 14:55	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1130	113	70-135	12	35	mg/kg	12.28.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		102		70-135	%	12.28.2020 14:55
o-Terphenyl	106		116		70-135	%	12.28.2020 14:55

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146196 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682650-002 — MS Sample Id: 682650-002 S — MSD Sample Id: 682650-002 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	1200	120	1290	129	70-135	7	35	mg/kg	12.28.2020 14:55	
Diesel Range Organics (DRO)	96.8	1000	1210	111	1090	99	70-135	10	35	mg/kg	12.28.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		107		70-135	%	12.28.2020 14:55
o-Terphenyl	106		114		70-135	%	12.28.2020 14:55

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 681880

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RDU 11

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3146281 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717986-1-BLK — LCS Sample Id: 7717986-1-BKS — LCSD Sample Id: 7717986-1-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	0.0925	93	0.0948	95	70-130	2	35	mg/kg	12.29.2020 03:46	
Toluene	<0.00200	0.100	0.0859	86	0.0889	89	70-130	3	35	mg/kg	12.29.2020 03:46	
Ethylbenzene	<0.00200	0.100	0.0876	88	0.0909	91	71-129	4	35	mg/kg	12.29.2020 03:46	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.188	94	70-135	3	35	mg/kg	12.29.2020 03:46	
o-Xylene	<0.00200	0.100	0.0909	91	0.0935	94	71-133	3	35	mg/kg	12.29.2020 03:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		100		104		70-130	%	12.29.2020 03:46
4-Bromofluorobenzene	119		107		109		70-130	%	12.29.2020 03:46

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3146281 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 681880-001 — MS Sample Id: 681880-001 S — MSD Sample Id: 681880-001 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	0.103	103	0.109	108	70-130	6	35	mg/kg	12.29.2020 04:31	
Toluene	<0.00200	0.0998	0.0952	95	0.0977	97	70-130	3	35	mg/kg	12.29.2020 04:31	
Ethylbenzene	<0.00200	0.0998	0.0981	98	0.104	103	71-129	6	35	mg/kg	12.29.2020 04:31	
m,p-Xylenes	<0.00399	0.200	0.199	100	0.207	102	70-135	4	35	mg/kg	12.29.2020 04:31	
o-Xylene	<0.00200	0.0998	0.0982	98	0.102	101	71-133	4	35	mg/kg	12.29.2020 04:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		70-130	%	12.29.2020 04:31
4-Bromofluorobenzene	112		110		70-130	%	12.29.2020 04:31

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: 1681880

Page 1 of 2

Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 North A St	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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 11	Turn Around	
Project Number:	n/a	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:	nRm2034258716	Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	
Received Intact:	(Yes) No		T-NM-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	12

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	Pres. Code	TPH (EPA 8015Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
	BH05	S	12/18/20	1224	0.75-1'	1					HOLD
	BH05			1226	1-1.5'	1					
	BH06			1229	0.75-1'	1					
	BH06			1230	1-1.5'	1					
	BH07			1233	0.75-1'	1					
	BH07			1235	1-1.5'	1					
	BH08			1236	0.75-1'	1					
	BH08			1237	1-1.5'	1					
	BH09			1240	0.75-1'	1					
	BH09			1242	1-1.5'	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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	Joe Hernandez	12.18.20 1551	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 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

Work Order No: 681880

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Project Manager:	Joseph Hernandez	Bill to: (if different)	Jim Raley
Company Name:	WSP USA Inc.	Company Name:	WPX Energy
Address:	3300 North A St	Address:	5315 Buena Vista Dr.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(281) 782-2329	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 11	Turn Around	
Project Number:	n/a	Routine	☒
Project Location	Eddy County	Rush:	
Sampler's Name:	Anna Byers	Due Date:	
PO #:	nRm2303258716	Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	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:	12

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015 Mod)	BTEX (EPA 8021 B)	Chloride (EPA 300.0)	Sample Comments
	BH~~10~~	S	12/18/20	1245	0.75-1'	1	X	X	X	HOLD
	BH10	S	12/18/20	1247	1-1.5'	1	X	X	X	HOLD

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:
Circle Method(s) and Metal(s) to be analyzed
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
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		12.18.20 1551	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.18.2020 03.51.00 PM

Work Order #: 681880

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)?	1	
#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: 12.18.2020

Cloe Clifton

Checklist reviewed by: Jessica Kramer Date: 12.28.2020

Jessica Kramer

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 45626
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	WPX's deferral requests to defer the remaining residual impacts within the tank battery earthen containment during any future major deconstruction/alteration and/or abandonment, whichever occurs first. The areas requested for deferral is identified on the site map as "FS02", "FS04", "FS05", "FS06", and "FS07". The areas have been delineated and documented in the report. At this time, OCD approves the request. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. This is a Federal site and will require like approval from BLM.	1/13/2022

ENSOLUM

APPENDIX D

Photographic Log

ENSOLUM

Photographic Log
WPX Energy Permian, LLC
Ross Draw Unit 11
Incident Number nAB1632647780
Ensolum Job Number: 03A1987006

Photograph 1
Date: August 31, 2022
Description: View of the Area of Concern

Photograph 2
Date: August 31, 2022
Description: View of the Area of Concern

Photograph 3
Date: August 31, 2022
Description: View of the Area of Concern

Photograph 4
Date: August 31, 2022
Description: View of the Area of Concern

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 140553

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 140553
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	WPX's deferral requests to defer the remaining residual impacts within the tank battery earthen containment during any future major deconstruction/alteration and/or abandonment, whichever occurs first. The areas requested for deferral is identified on the site map as "FS02", "FS04", "FS05", "FS06", and "FS07". The areas have been delineated and documented in the report. At this time, OCD approves the request. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. This is a Federal site and will require like approval from BLM.	3/16/2023
bhall	Please disregard the previous rejection of this application.	3/16/2023