District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	nAPP2116548791
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)* nAPP2116548791
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

Latitude 32.0175972 Longitude -103.9520569
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: HOLLY A FEDERAL #006	Site Type: Oil Production Facility
Date Release Discovered: June 13th, 2021	API# *(if applicable) 30-015-25331*

Unit Letter	Section	Township	Range	County
B	26	26S	29E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 29	Volume Recovered (bbls) 20
	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: Hole developed in bottom of production tank, allowing release of fluids to secondary containment.

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

District I
1625 N. French Dr., Hobbs, NM 88240
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Release Notification

Responsible Party

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Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: Jim.Raley@dvn.com	Incident # *(assigned by OCD)*: nAPP2116548791
Contact mailing address: 5315 Buena Vista Drive, Carlsbad NM	

Location of Release Source

Latitude 32.014103 Longitude -103.952298
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Holly A Federal #006	Site Type: Oil Production Facility
Date Release Discovered: 06/13/2021	API# *(if applicable)*: 30-015-25331

Unit Letter	Section	Township	Range	County
G	26	26S	29E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 1	Volume Recovered (bbls): 0
☒ Produced Water	Volume Released (bbls): 29	Volume Recovered (bbls): 20
	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: Hole developed in bottom of tank, allowing release of fluids to secondary containment.

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Volume exceeded 25bbls.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Notification was submitted via email on 6/13/2021 to Robert Hamlet and Emily Hernandez.

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: 8/2/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2116548791
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?	51-100 (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.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
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: 8/2/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: Shelly Wells Date: 8/2/2023

Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 8/2/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: Shelly Wells Date: 8/2/2023

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

CLOSURE REQUEST REPORT

Holly A Federal #006

Eddy County, New Mexico

Incident Number nAPP2116548791

Prepared For:

WPX Energy Permian, LLC

5315 Buena Vista Dr.

Carlsbad, NM 88220

Carlsbad ● Midland ● San Antonio ● Lubbock ● Hobbs ● Lafayette

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request Report (CRR) to document excavation activities and subsequent soil sampling activities in accordance with an approved Remediation Work Plan (RWP), for an inadvertent release of crude oil and produced water at the Holly A Federal #006 ((Site) (**Figure 1** in **Appendix A**)).

Based on completed remedial actions and laboratory analytical results from confirmation soil sampling activities, WPX is requesting No Further Action (NFA) at the Site.

SITE LOCATION AND RELEASE BACKGROUND

The production well (API 30-015-25331) for this Site is located in Unit B, Section 26, Township 26 South, Range 29 East, in Eddy County, New Mexico (32.0175972°, -103.9520569°) as provided on the initial Release Notification and Corrective Action Form C-141 (Form C-141) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management. The storage tanks for the well, where the release occurred, is located south of the production well in Unit G, Section 26, Township 26 South, Range 29 East, in Eddy County New Mexico (32.014103°, -103.952298°). The updated legals and coordinates are provided on the Final Form C-141.

On June 13, 2021, corrosion on the bottom of a production storage tank caused approximately 1 barrel (bbls) of crude oil and 29 bbls of produced water to be released within the secondary containment earthen berm. A vacuum truck was dispatched to the Site and recovered approximately 20 bbls of produced water. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on June 22, 2021, and was subsequently assigned Incident Number nAPP2116548791. **Figure 2** in **Appendix A** depicts the observed release footprint, hereafter referred to as the Area of Concern (AOC).

Shortly following the release incident, a third-party environmental consultant conducted site assessment and delineation activities to characterize the release. A RWP was prepared proposing corrective actions to address residual soil impacts exceeding the Site Closure Criteria based on laboratory analytical results from delineation activities. The RWP was approved by the NMOCD on January 14, 2022, with the following condition:

"The Workplan/Remediation Plan is approved with the following conditions: Please make sure the floor samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release."

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As previously described in the approved RWP, the Site was characterized according to Table I, 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) considering depth to groundwater and the proximity to:

- Any continuously flowing watercourse or any other significant watercourse;
- Any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- An occupied permanent residence, school, hospital, institution or church;
- A spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Any freshwater well or spring;
- Incorporated municipal boundaries or a defined municipal fresh water well field covered under a municipal ordinance;

- A wetland;
- A subsurface mine;
- An unstable area (i.e. high karst potential); and
- A 100-year floodplain.

Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based a recent measurement of a nearby well on the JC Williams Yard owned by WPX, located approximately 0.21 miles south of the Site. The well does not appear to have an identification number corresponding to the New Mexico Office of the State Engineer (NMOSE) or United States Geological Survey (USGS) well records. However, a depth to groundwater measurement at the well was obtained on August 15, 2022, and measured 82.9 feet bgs. The location of the JC Williams well is provided in **Figure 1** in **Appendix A**. The Groundwater Measurement Form summarizing findings is provided as **Appendix B**.

Based on the desktop review of the current BLM Carlsbad Field Office (CFO) karst cave potential map, this Site is located in a medium potential karst area. All other potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details and sources used to determine the site characterization is included in **Figure 1** in **Appendix A**.

Based on the results from the desktop review and estimated regional depth to groundwater at the Site, the following Closure Criteria was applied:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria
Chloride	Environmental Protection Agency (EPA) 300.0	10,000 milligram per kilogram (mg/kg)
TPH (Total Petroleum Hydrocarbon)	EPA 8015 M/D	2,500 mg/kg
Gasoline Range Organics (GRO) + Diesel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

EXCAVATION AND DELINEATION SOIL SAMPLING ACTIVITIES

On June 20 and June 21, 2023, Etech oversaw the excavation of identified impacts based on laboratory analytical results associated with delineation soil sampling activities and visual observations via mechanical equipment. Excavation activities were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following the removal of soil, Etech collected 5-point composite soil samples at a sampling frequency of 200 square feet from the excavation sidewalls and floors. The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. The samples were then placed into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech, Inc. in Hobbs, New Mexico, for analysis of COCs. The location of confirmation excavation soil samples is shown in **Figure 2** in **Appendix A**.

Delineation activities were conducted concurrently with excavation activities to assist with lateral delineation and confirm residual impacts were contained to the secondary containment earthen berm. Four delineation potholes (PH01 through PH04) were advanced with a hand auger and/or mechanical equipment in every cardinal direction surrounding the AOC. Delineation activities were driven by field screening for VOCs and chloride as described above. A total of two samples were collected from each

delineation soil sample location, representing the highest observed field screening concentrations and the greatest depth. The soil samples were handled, collected, and analyzed as previously described. Field screening results and soil descriptions are included on soil sampling logs shown in **Appendix C**. The location of the delineation soil samples is shown in **Figure 3** in **Appendix A.**

Impacted soil was removed from the Site and transported to a licensed and approved New Mexico landfill under WPX approved manifests. Upon receipt of the final confirmation excavation soil samples results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. Photographic documentation of excavation activities is included in **Appendix D**.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all final confirmation excavation and delineation soil samples indicated all analyzed COCs were below the Site Closure Criteria. Per the conditions, excavation floor samples were excavated to meet closure criteria standards for proven depth to water determination and excavation sidewall samples were excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Laboratory analytical results are summarized in **Table 1** included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

CLOSURE REQUEST

Based on laboratory analytical results for confirmation excavation and delineation soil samples, WPX believes that residual soil impacts associated with the inadvertent release have been excavated and removed from the Site. Concentrations of COCs for all final excavation confirmation soil samples were below the Site Closure Criteria. As such, NFA appears warranted at this time and Incident Number nAPP2116548791 should be respectfully considered for Closure by the NMOCD. WPX believes the completed remedial actions have mitigated impacts at the Site and the requirements set forth in NMAC 19.15.29.13 guidelines to be protective of human health, the environment and groundwater. As such, WPX respectfully requests NFA of Incident Number nAPP2116548791.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (281) 702-2329 or joseph@etechenv.com or Erick Herrera at (281) 777-4152 or erick@etechenv.com. **Appendix G** provides correspondence email notification receipts associated with the subject release. Previous remediation activities and soil sample analytical results for the subject release can be referenced in the original RWP in **Appendix H**.

Sincerely,
Etech Environmental and Safety Solutions, Inc.

Erick Herrera
Staff Geologist

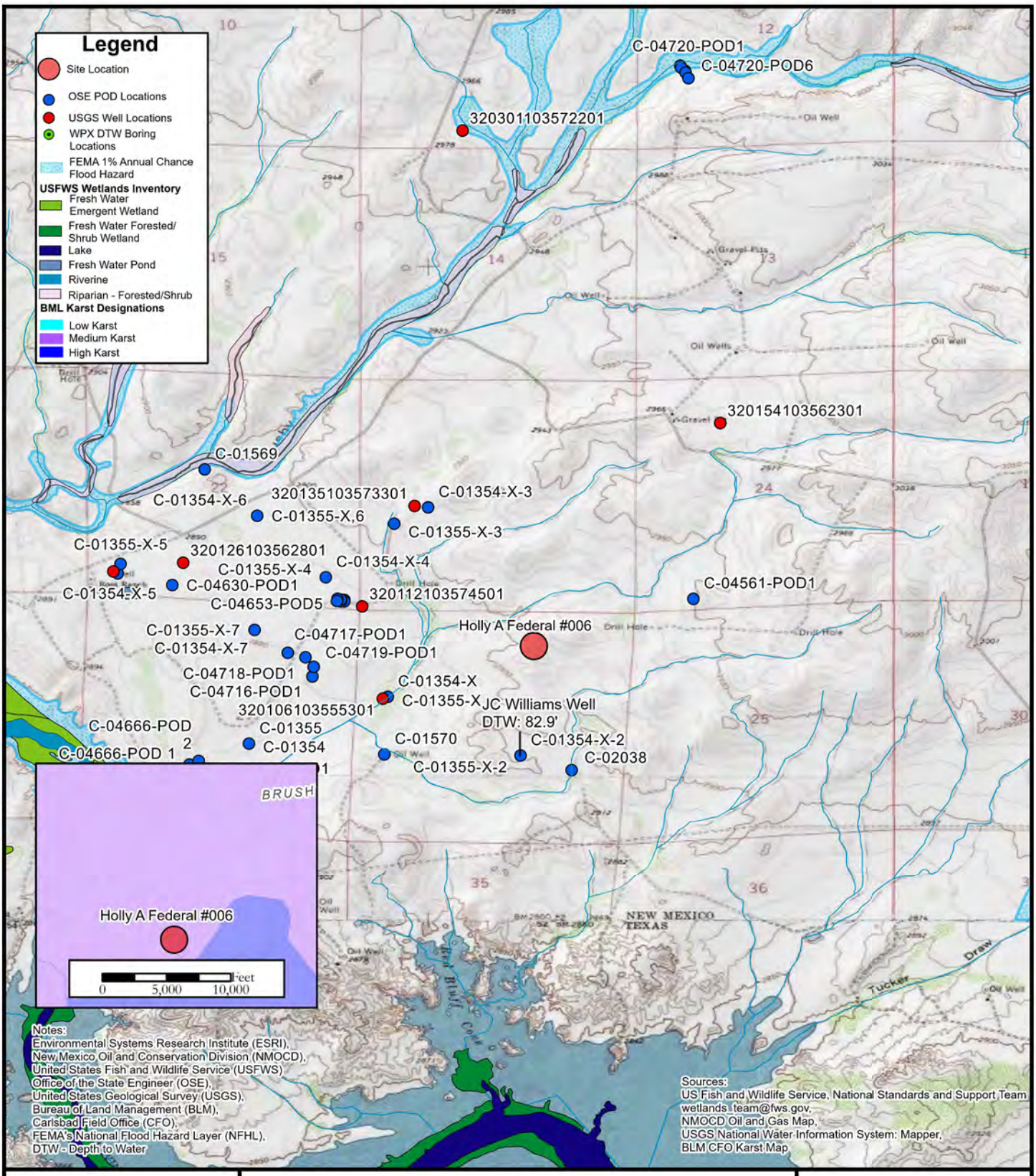
Joseph S. Hernandez
Senior Managing Geologist

cc: Jim Raley, WPX
New Mexico Oil Conservation Division
Bureau of Land Management

Appendices:

APPENDIX A

Figures



eTECH

FIGURE 1

Site Map

WPX ENERGY PERMIAN, LLC
Holly A Federal #006
Unit G Sec 26 T26S R29E
Eddy County, New Mexico

N

0 1,500 3,000 Feet

FIGURE 2

Excavation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
Holly A Federal #006
Unit G Sec 26 T26S R29E
Eddy County, New Mexico

N

0 20 40 Feet

eTECH

FIGURE 3

Delineation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
Holly A Federal #006
Unit G Sec 26 T26S R29E
Eddy County, New Mexico

N

0 20 40 Feet

APPENDIX B

Referenced Well Records

Client: Devon Energy

Project Name: JC Williams Well GW measurement

Project Location: 32.0105289,-103.9534960

Project Manager: Joseph Hernandez

GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Soil Boring / Monitor Well Number: NA

Project #: 03A1987013

Date Completed: NA

Type of Water Quality Meter:

Total Depth of Monitor Well: NA

Date Calibrated NA

Screen Interval: NA

Other Notes: used decontaminated water level indicator meter to measure groundwater depth in existing well

Sample Tubing Intake Depth: NA

Geologist: Gilbert Moreno

Monitor Well Detail	Tubing Placement	GW Depth (static)	After Purge

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
NR	NR	NR	NR	NR	NR	NR	82.9

Comments:

NA = Not Available
NR = Not Recorded

ENSOLUM

APPENDIX C

Lithologic Sampling Logs

eTECH	Sample Name: PH01	Date: 06/21/2022
	Site Name: Holly A Federal #006	
	Incident Number: nAPP2116548791	
	Job Number:18156	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Coordinates: 32.013921, -103.952533	Hole Diameter: N/A	Total Depth: 1'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP-SM	(0-1') SAND, dry, red, poorly graded, very fine to fine, no stain, no odor, non-plastic, and noncohesive and some silt.
Dry	236.0	0.5	No	PH01	0.5	0.5		
Dry	<168	0.4	No	PH01	1	1		

Total Depth: 1 foot bgs.

eTECH	Sample Name: PH02	Date: 06/212022
	Site Name: Holly A Federal #006	
	Incident Number: nAPP2116548791	
	Job Number:18156	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Coordinates: 32.013921, -103.952533	Hole Diameter: N/A	Total Depth: 1'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP-SM	(0-1') SAND, dry, red, poorly graded, very fine to fine, no stain, no odor, non-plastic, and noncohesive and some silt.
Dry	131.4	0.5	No	PH02	0.5	0.5		
Dry	<168	0.1	No	PH02	1	1		

Total Depth: 1 foot bgs.

eTECH	Sample Name: PH03	Date: 06/21/2022
	Site Name: Holly A Federal #006	
	Incident Number: nAPP2116548791	
	Job Number:18156	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Hand Auger
Coordinates: 32.013921, -103.952533	Hole Diameter: 4"	Total Depth: 1'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP-SM	(0-1') SAND, dry, red, poorly graded, very fine to fine, no stain, no odor, non-plastic, and noncohesive and some silt.
Dry	<168	0.5	No	PH03	0.5	0.5		
Dry	<168	0.1	No	PH03	1	1		

Total Depth: 1 foot bgs.

eTECH	Sample Name: PH04	Date: 06/21/2022
	Site Name: Holly A Federal #006	
	Incident Number: nAPP2116548791	
	Job Number:18156	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: EK	Method: Backhoe
Coordinates: 32.013921, -103.952533	Hole Diameter: N/A	Total Depth: 1'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	SP-SM	(0-1') SAND, dry, red, poorly graded, very fine to fine, no stain, no odor, non-plastic, and noncohesive and some silt.
Dry	<168	0.5	No	PH04	0.5	0.5		
Dry	<168	0.4	No	PH04	1	1		

Total Depth: 1 foot bgs.

APPENDIX D

Photographic Logs

eTECH

PHOTOGRAPHIC LOG

WPX Energy Permian, LLC

Holly A Federal #006

Incident Number: nAPP2116548791

Photograph 1	**Date: 06/21/2023**

Description: View of southern excavation activities

Photograph 2	**Date: 06/21/2023**

Description: Northern view of final excavation extents.

eTECH

PHOTOGRAPHIC LOG

WPX Energy Permian, LLC

Holly A Federal #006

Incident Number: nAPP2116548791

Photograph 3	**Date: 06/21/2023**

Description: View of northern excavation extent.

Photograph 4	**Date: 07/11/2023**

Description: Eastern view of backfilled excavations.

APPENDIX E

Tables

eTECH

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC
Holly A Federal #006
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**10,000**
Excavation Soil Samples Analytical Results - nAPP2116548791										
FS01	06/21/2023	5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	74.5
FS02	06/21/2023	5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	220
FS03	06/21/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	900
SW01	06/21/2023	0-5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	95.9
SW02	06/21/2023	0-5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	73.2
SW03	06/21/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	543
SW04	06/21/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	543
Delineation Soil Samples Analytical Results - nAPP2116548791										
PH01	06/21/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	242
PH01	06/21/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	22.0
PH02	06/21/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	103
PH02	06/21/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	22.0
PH03	06/21/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	<40.0
PH03	06/21/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	<40.0
PH04	06/21/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	23.3
PH04	06/21/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<50.0	<50.0	22.4

Notes:
bgs: below ground surface
mg/kg: milligrams per kilogram
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213

Report to:

Gilbert Moreno

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Holly A Federal #006
Work Order:	E306180
Job Number:	01058-0007
Received:	6/23/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/26/23

Date Reported: 6/26/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Holly A Federal #006
Workorder: E306180
Date Received: 6/23/2023 7:19:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/23/2023 7:19:00AM, under the Project Name: Holly A Federal #006.

The analytical test results summarized in this report with the Project Name: Holly A Federal #006 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

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Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/26/23 16:46

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 5'	E306180-01A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.
FS02 5'	E306180-02A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.
SW01 0-5'	E306180-03A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.
SW02 0-5'	E306180-04A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

FS01 5'

E306180-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*99.7 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*84.4 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*79.0 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**74.5**	20.0	1	06/23/23	06/23/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

FS02 5'

E306180-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*99.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.7 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*77.3 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**220**	20.0	1	06/23/23	06/23/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

SW01 0-5'

E306180-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*99.7 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.2 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*74.0 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**95.9**	20.0	1	06/23/23	06/23/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

SW02 0-5'

E306180-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*99.6 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*84.6 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*72.8 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**73.2**	20.0	1	06/23/23	06/23/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325072-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.74*		*8.00*		*96.8*	*70-130*			
LCS (2325072-BS1)									Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	15.0	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.73*		*8.00*		*96.6*	*70-130*			
Matrix Spike (2325072-MS1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.78	0.0250	5.00	ND	95.6	61-133			
Toluene	4.97	0.0250	5.00	ND	99.4	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.89	0.0500	10.0	ND	98.9	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.7*	*70-130*			
Matrix Spike Dup (2325072-MSD1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	5.07	0.0250	5.00	ND	101	54-133	1.84	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.7	61-133	2.11	20	
Toluene	5.07	0.0250	5.00	ND	101	61-130	1.94	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	1.80	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.98	20	
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	1.92	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.60*		*8.00*		*95.0*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325072-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.92*		*8.00*		*86.5*	*70-130*			
LCS (2325072-BS2)									Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	46.0	20.0	50.0		92.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			
Matrix Spike (2325072-MS2)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.03*		*8.00*		*87.9*	*70-130*			
Matrix Spike Dup (2325072-MSD2)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.7	70-130	2.45	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.11*		*8.00*		*88.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325076-BLK1)									Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*33.2*		*50.0*		*66.5*	*50-200*			
LCS (2325076-BS1)									Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	249	25.0	250		99.4	38-132			
Surrogate: n-Nonane	*29.0*		*50.0*		*57.9*	*50-200*			
Matrix Spike (2325076-MS1)				**Source: E306176-04**					Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	246	25.0	250	ND	98.5	38-132			
Surrogate: n-Nonane	*28.0*		*50.0*		*56.1*	*50-200*			
Matrix Spike Dup (2325076-MSD1)				**Source: E306176-04**					Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	246	25.0	250	ND	98.5	38-132	0.0367	20	
Surrogate: n-Nonane	*25.2*		*50.0*		*50.4*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:46:22PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325073-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	ND	20.0							
LCS (2325073-BS1)									Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2325073-MS1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	341	20.0	250	74.5	106	80-120			
Matrix Spike Dup (2325073-MSD1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	337	20.0	250	74.5	105	80-120	1.17	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/26/23 16:46

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Client: WPX Energy Permian LLC.	**Bill To**	Lab Use Only	TAT / EPA Program
Project: Holly A Federal #006	Attention: Jim Raley	Lab WO# E306180	Job Number 01058.0007
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.		1D 2D 3D Standard: 24 HR
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		CWA SDWA RCRA
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502		State: NM CO UT AZ TX
Phone: 832-541-7719	Email: jim.raley@dvn.com		
Email: Devon-team@etechenv.com	WBS/WO: 21181923		
Collected by: Edyte Konan	Incident ID: nAPP2116548791		

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM		GDOC TX		Remarks
9:10	6/21/2023	S	1	FS01	1	5'								X				
9:00	6/21/2023	S	1	FS02	2	5'								X				
9:30	6/21/2023	S	1	SW01	3	0-5'								X				
9:40	6/21/2023	S	1	SW02	4	0-5'								X				

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	6.22.23	1300	Michelle Gaylor	6-22-23	1300
Michelle Gaylor	6-22-23	1730	Andrew Mesa	6-22-23	1845
Andrew Mesa	6-23-23	2400		06/23/23	7:19

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4.0

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 6/23/2023 10:19:19AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	06/23/23 07:19	Work Order ID:	E306180
Phone:	(539) 573-4018	Date Logged In:	06/22/23 16:46	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/23/23 17:00 (0 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	Yes	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 4°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No	
22. Are sample(s) correctly preserved?	NA	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Gilbert Moreno

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Holly A Federal #006
Work Order:	E306181
Job Number:	01058-0007
Received:	6/23/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/26/23

Date Reported: 6/26/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Holly A Federal #006
Workorder: E306181
Date Received: 6/23/2023 7:30:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/23/2023 7:30:00AM, under the Project Name: Holly A Federal #006.

The analytical test results summarized in this report with the Project Name: Holly A Federal #006 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
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Cell: 505-320-4759
ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/26/23 16:29

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS03 4'	E306181-01A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.
SW03 0-4'	E306181-02A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.
SW04 0-4'	E306181-03A	Soil	06/21/23	06/23/23	Glass Jar, 4 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

FS03 4'

E306181-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*99.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.2 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325078
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*60.2 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**900**	20.0	1	06/23/23	06/23/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

SW03 0-4'

E306181-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*97.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.6 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325078
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*82.1 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**543**	20.0	1	06/23/23	06/23/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

SW04 0-4'

E306181-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*97.1 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2325078
Diesel Range Organics (C10-C28)	ND	25.0	1	06/23/23	06/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/23/23	06/23/23	
Surrogate: n-Nonane		*79.0 %*	*50-200*	*06/23/23*	*06/23/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS			Batch: 2325073
Chloride	**543**	20.0	1	06/23/23	06/23/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325072-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.74*		*8.00*		*96.8*	*70-130*			
LCS (2325072-BS1)									Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	15.0	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.73*		*8.00*		*96.6*	*70-130*			
Matrix Spike (2325072-MS1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.78	0.0250	5.00	ND	95.6	61-133			
Toluene	4.97	0.0250	5.00	ND	99.4	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.89	0.0500	10.0	ND	98.9	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.7*	*70-130*			
Matrix Spike Dup (2325072-MSD1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	5.07	0.0250	5.00	ND	101	54-133	1.84	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.7	61-133	2.11	20	
Toluene	5.07	0.0250	5.00	ND	101	61-130	1.94	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	1.80	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.98	20	
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	1.92	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.60*		*8.00*		*95.0*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325072-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.92*		*8.00*		*86.5*	*70-130*			
LCS (2325072-BS2)									Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	46.0	20.0	50.0		92.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			
Matrix Spike (2325072-MS2)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.03*		*8.00*		*87.9*	*70-130*			
Matrix Spike Dup (2325072-MSD2)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.7	70-130	2.45	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.11*		*8.00*		*88.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325078-BLK1)									Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*41.7*		*50.0*		*83.5*	*50-200*			
LCS (2325078-BS1)									Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	245	25.0	250		98.0	38-132			
Surrogate: n-Nonane	*31.9*		*50.0*		*63.7*	*50-200*			
Matrix Spike (2325078-MS1)				**Source: E306181-03**					Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	247	25.0	250	ND	98.8	38-132			
Surrogate: n-Nonane	*30.1*		*50.0*		*60.3*	*50-200*			
Matrix Spike Dup (2325078-MSD1)				**Source: E306181-03**					Prepared: 06/23/23 Analyzed: 06/26/23
Diesel Range Organics (C10-C28)	229	25.0	250	ND	91.7	38-132	7.46	20	
Surrogate: n-Nonane	*30.6*		*50.0*		*61.1*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/26/2023 4:29:03PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325073-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	ND	20.0							
LCS (2325073-BS1)									Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2325073-MS1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	341	20.0	250	74.5	106	80-120			
Matrix Spike Dup (2325073-MSD1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Chloride	337	20.0	250	74.5	105	80-120	1.17	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/26/23 16:29

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Client: WPX Energy Permian LLC.	Bill To	Lab Use Only		TAT				EPA Program	
Project: Holly A Federal #006	Attention: Jim Raley	Lab WO#	Job Number	1D	2D	3D	Standard	CWA	SDWA
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.	E306181	01058-0007				24 HR		
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220	Analysis and Method							RCRA
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502								
Phone: 832-541-7719	Email: jim.raley@dvn.com							State	
Email: Devon-team@etechenv.com	WBS/WO: 21181923							NM CO UT AZ TX	
Collected by: Edyte Konan	Incident ID: nAPP2116548791								

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM		GDOC TX		Remarks
9:20	6/21/2023	S	1	FS03	1	4'								X				
9:50	6/21/2023	S	1	SW03	2	0-4'								X				
10:00	6/21/2023	S	1	SW04	3	0-4'								X				

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6.22.23	1300	Michelle Gonzales	6-22-23	1300
Michelle Gonzales	6-22-23	1730	Andrew Musso	6-22-23	1845
Andrew Musso	6-23-23	2400	[signature]	6/23/23	7:30

Lab Use Only
Received on ice: (Y) / N
T1 ______ T2 ______ T3 ______
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other ______

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 6/23/2023 10:21:45AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	06/23/23 07:30	Work Order ID:	E306181
Phone:	(539) 573-4018	Date Logged In:	06/22/23 16:47	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/23/23 17:00 (0 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
13. If no visible ice, record the temperature. Actual sample temperature: 4°C	

Sample Container

14. Are aqueous VOC samples present?	No
15. Are VOC samples collected in VOA Vials?	NA
16. Is the head space less than 6-8 mm (pea sized or less)?	NA
17. Was a trip blank (TB) included for VOC analyses?	NA
18. Are non-VOC samples collected in the correct containers?	Yes
19. Is the appropriate volume/weight or number of sample containers collected?	Yes

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	Yes
Collectors name?	Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No
22. Are sample(s) correctly preserved?	NA
24. Is lab filteration required and/or requested for dissolved metals?	No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Report to:

Gilbert Moreno

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name:	Holly A Federal #006
Work Order:	E306183
Job Number:	01058-0007
Received:	6/23/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/29/23

Date Reported: 6/29/23

Gilbert Moreno
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: Holly A Federal #006
Workorder: E306183
Date Received: 6/23/2023 7:30:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/23/2023 7:30:00AM, under the Project Name: Holly A Federal #006.

The analytical test results summarized in this report with the Project Name: Holly A Federal #006 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
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ljarboe@envirotech-inc.com

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Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/29/23 11:13

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
PH01 0.5'	E306183-01A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH01 1'	E306183-02A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH02 0.5'	E306183-03A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH02 1'	E306183-04A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH03 0.5'	E306183-05A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH03 1'	E306183-06A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH04 0.5'	E306183-07A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
PH04 1'	E306183-08A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH01 0.5'

E306183-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*95.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.7 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*100 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	**242**	20.0	1	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH01 1'

E306183-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*95.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.6 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*109 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	**22.0**	20.0	1	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH02 0.5'

E306183-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*96.6 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*84.7 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*98.7 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	**103**	40.0	2	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH02 1'

E306183-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*97.7 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.0 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*119 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	**22.0**	20.0	1	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH03 0.5'

E306183-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*98.4 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.5 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*104 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	ND	40.0	2	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH03 1'

E306183-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*97.6 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.5 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*104 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	ND	40.0	2	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH04 0.5'

E306183-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*97.1 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.9 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*108 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	**23.3**	20.0	1	06/23/23	06/28/23	

Sample Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

PH04 1'

E306183-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
Surrogate: 4-Bromochlorobenzene-PID		*97.0 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.5 %*	*70-130*	*06/23/23*	*06/23/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2326023
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/27/23	
Surrogate: n-Nonane		*115 %*	*50-200*	*06/27/23*	*06/27/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA			Batch: 2325081
Chloride	**22.4**	20.0	1	06/23/23	06/28/23	

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325072-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.74*		*8.00*		*96.8*	*70-130*			
LCS (2325072-BS1)									Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	15.0	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.73*		*8.00*		*96.6*	*70-130*			
Matrix Spike (2325072-MS1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.78	0.0250	5.00	ND	95.6	61-133			
Toluene	4.97	0.0250	5.00	ND	99.4	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.89	0.0500	10.0	ND	98.9	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.7*	*70-130*			
Matrix Spike Dup (2325072-MSD1)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Benzene	5.07	0.0250	5.00	ND	101	54-133	1.84	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.7	61-133	2.11	20	
Toluene	5.07	0.0250	5.00	ND	101	61-130	1.94	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	1.80	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.98	20	
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	1.92	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.60*		*8.00*		*95.0*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325072-BLK1)									Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.92*		*8.00*		*86.5*	*70-130*			
LCS (2325072-BS2)									Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	46.0	20.0	50.0		92.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.10*		*8.00*		*88.7*	*70-130*			
Matrix Spike (2325072-MS2)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.03*		*8.00*		*87.9*	*70-130*			
Matrix Spike Dup (2325072-MSD2)				**Source: E306180-01**					Prepared: 06/23/23 Analyzed: 06/23/23
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.7	70-130	2.45	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.11*		*8.00*		*88.9*	*70-130*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2326023-BLK1)									Prepared: 06/27/23 Analyzed: 06/27/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*55.0*		*50.0*		*110*	*50-200*			
LCS (2326023-BS1)									Prepared: 06/27/23 Analyzed: 06/27/23
Diesel Range Organics (C10-C28)	304	25.0	250		121	38-132			
Surrogate: n-Nonane	*53.6*		*50.0*		*107*	*50-200*			
Matrix Spike (2326023-MS1)				**Source: E306187-03**					Prepared: 06/27/23 Analyzed: 06/27/23
Diesel Range Organics (C10-C28)	311	25.0	250	ND	125	38-132			
Surrogate: n-Nonane	*49.6*		*50.0*		*99.2*	*50-200*			
Matrix Spike Dup (2326023-MSD1)				**Source: E306187-03**					Prepared: 06/27/23 Analyzed: 06/27/23
Diesel Range Organics (C10-C28)	308	25.0	250	ND	123	38-132	1.22	20	
Surrogate: n-Nonane	*54.0*		*50.0*		*108*	*50-200*			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	**Reported:**
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/29/2023 11:13:24AM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2325081-BLK1)									Prepared: 06/23/23 Analyzed: 06/28/23
Chloride	ND	20.0							
LCS (2325081-BS1)									Prepared: 06/23/23 Analyzed: 06/28/23
Chloride	267	20.0	250		107	90-110			
Matrix Spike (2325081-MS1)				**Source: E306183-01**					Prepared: 06/23/23 Analyzed: 06/28/23
Chloride	540	20.0	250	242	119	80-120			
Matrix Spike Dup (2325081-MSD1)				**Source: E306183-01**					Prepared: 06/23/23 Analyzed: 06/28/23
Chloride	548	20.0	250	242	122	80-120	1.48	20	M2

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	
5315 Buena Vista Dr	Project Number:	01058-0007	**Reported:**
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/29/23 11:13

M2	Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 2 of 1

Client: WPX Energy Permian LLC.	**Bill To**	Lab Use Only	TAT / EPA Program
Project: Holly A Federal #006	Attention: Jim Raley	Lab WO# E306183 / Job Number 01058-0007	1D 2D 3D Standard: 5 day TAT; CWA; SDWA
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.		RCRA
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		
City, State, Zip_Odessa,TX, 79765	Phone: 575-885-7502		State: NM CO UT AZ TX
Phone: 832-541-7719	Email: jim.raley@dvn.com		
Email: Devon-team@etechenv.com	WBS/WO: 21181923		
Collected by: Edyte Konan	Incident ID: nAPP2116548791		

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM		GDOC TX		Remarks
10:10	6/21/2023	S	1	PH01	1	0.5'								X				
10:20	6/21/2023	S	1	PH01	2	1'								X				
10:30	6/21/2023	S	1	PH02	3	0.5'								X				
10:40	6/21/2023	S	1	PH02	4	1'								X				
10:50	6/21/2023	S	1	PH03	5	0.5'								X				
11:00	6/21/2023	S	1	PH03	6	1'								X				
11:10	6/21/2023	S	1	PH04	7	0.5'								X				
11:20	6/21/2023	S	1	PH04	8	1'								X				

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	6.22.23	1300		6-22-23	1300
	6-22-23	1730		6.22.23	1845
	6.23.23	2400		6/23/23	7:30

Lab Use Only
Received on ice: (Y) N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____
Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above

envirotech

Envirotech Analytical Laboratory

Printed: 6/23/2023 10:28:46AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	06/23/23 07:30	Work Order ID:	E306183
Phone:	(539) 573-4018	Date Logged In:	06/23/23 07:55	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/29/23 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
13. If no visible ice, record the temperature. Actual sample temperature: 4°C	

Sample Container

14. Are aqueous VOC samples present?	No
15. Are VOC samples collected in VOA Vials?	NA
16. Is the head space less than 6-8 mm (pea sized or less)?	NA
17. Was a trip blank (TB) included for VOC analyses?	NA
18. Are non-VOC samples collected in the correct containers?	Yes
19. Is the appropriate volume/weight or number of sample containers collected?	Yes

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	Yes
Collectors name?	Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No
22. Are sample(s) correctly preserved?	NA
24. Is lab filteration required and/or requested for dissolved metals?	No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

APPENDIX G

NMOCD Correspondence

Erick Herrera

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Friday, June 16, 2023 3:37 PM
To: Erick Herrera
Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD
Subject: RE: [EXTERNAL] WPX Site Sampling Activity Update (6/20 - 6/23)

Erick,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Erick Herrera <erick@etechenv.com>
Sent: Thursday, June 15, 2023 3:14 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov
Cc: Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@etechenv.com>
Subject: [EXTERNAL] WPX Site Sampling Activity Update (6/20 - 6/23)

WPX anticipates conducting confirmation soil sampling activities at the following sites between June 20 – June 23, 2023:

Site Name: North Brushy PW Line
Incident Numbers: nAPP2231126594 & nAPP2312845934

Site Name: RDX 9#004
Incident Number: nAB1803254347
API: 30-015-40180

Site Name: RDX Federal COM 28 #009H
Incident Number: nAB1632648516
API: 30-015-43294

Site Name: Holly A Federal #006

Incident Number: nAPP2116548791
API: 30-015-25331

Site Name: Ross Draw #012
Incident Numbers: nHMP1407235518 and nAPP2315142829
API: 30-015-24793

Thank you,

Erick Herrera
Staff Geologist

Work: (432) 305-6416
Cell: (281) 777-4152

APPENDIX H

Approved Remediation Work Plan

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	nAPP2116548791
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)* nAPP2116548791
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

Latitude 32.0175972 Longitude -103.9520569
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: HOLLY A FEDERAL #006	Site Type: Oil Production Facility
Date Release Discovered: June 13th, 2021	API# *(if applicable) 30-015-25331*

Unit Letter	Section	Township	Range	County
B	26	26S	29E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 29	Volume Recovered (bbls) 20
	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: Hole developed in bottom of production tank, allowing release of fluids to secondary containment.

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

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Volume exceeded 25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notification was submitted via email on 6/13/2021 to Robert Hamlet and Emily Hernandez	

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: ___06/22/2021_____

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

OCD Only

Received by: Ramona Marcus Date: 6/28/2021

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:	OGRID:
WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	246289
	Action Number: 33251
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	6/28/2021

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
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?	51-100 (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.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
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: 9-1-2021

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
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: 9/1/2021

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 22, 2021

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

RE: Remediation Work Plan
Holly A Federal #006
Incident Number nAPP2116548791
Eddy County, New Mexico
WPX Energy Permian, LLC.

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of WPX Energy Permian, LLC. (WPX), presents the following Remediation Work Plan detailing site assessment, previous soil sampling activities and an excavation plan at the Holly A Federal #006 (Site), located in Unit B, Section 26, Township 26 South, Range 29 East, Eddy County, New Mexico (Figure 1). Based on field observations, field screening activities, and laboratory analytical results from soil sampling activities, WPX is submitting this Remediation Work Plan, describing the site assessment and soil sampling that has occurred and proposed remedial activities.

RELEASE BACKGROUND

On June 13, 2021, a hole in the bottom of a production tank caused the release of approximately 1 barrel (bbl) of crude oil and 29 bbls of produced water into the secondary earthen containment. A vacuum truck was dispatched to the Site and recovered approximately 20 bbls of produced water. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on June 22, 2021 and was subsequently assigned Incident Number nAPP2116548791.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 50 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is United States Geological Survey (USGS) 320106103555301, located approximately 1/2-mile west of the Site. On February 24, 2021, measurements conducted by USGS determined the water well had a depth to groundwater of 53.46 feet bgs and a total depth

of 140 feet bgs. Ground surface elevation at the water well location is 2,883 feet above mean sea level (AMSL), which is approximately 33 feet lower in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well record is included as Attachment 1.

The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 740 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

The reclamation requirement for removal of waste containing soil with chloride and TPH concentrations of 600 mg/kg and 100 mg/kg, respectively, applies to the top 4 feet of the pasture to be reclaimed following remediation, per NMAC 19.15.29.13.D (1).

SITE ASSESSMENT AND DELINEATION SOIL SAMPLING ACTIVITIES

On June 15, 2021, WSP personnel conducted site assessment activities to evaluate the release extent. WSP reviewed and verified the Form C-141 incident descriptions (release source and release location) with visual soil impacts present onsite; it was confirmed that the subject release was contained within the earthen berm.

WSP personnel collected one representative surface sample nearest to the release source. The soil sample was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Based on elevated field screening results, the soil sample was not submitted for laboratory analysis. The release extent was mapped using a handheld Global Positioning System (GPS)

unit, which is depicted on Figure 2. Based on visual observation and results from field screening, delineation of impacted soil within the earthen berm appeared warranted. Photographs documenting the site visit are included in Attachment 2.

On June 18, 2021, WSP personnel visited the Site for further evaluation of the release extent and proceeded to advance six delineation boreholes (BH01 through BH06) within the mapped release extent. Delineation depths were driven by field screening soil samples for and volatile aromatic hydrocarbons. WSP collected three discrete soil samples per borehole; one at 1 feet bgs in accordance with the highest field screening concentration, one at 4 feet bgs, and one at 6 feet bgs corresponding with the borehole terminus. The borehole locations were mapped utilizing a GPS unit and are depicted on Figure 2. Lithologic sampling logs are included in Attachment 3. Photographs documenting the site visit are included in Attachment 2.

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

LABORATORY ANALYTICAL RESULTS

TPH-GRO/TPH-DRO, TPH concentrations for borehole samples BH01 and BH03 exceeded the Closure Criteria standards at approximately 1-foot bgs. Additionally, BH01 located closest to the release source exceeded TPH-GRO/TPH-DRO and TPH concentration standards at 4 feet bgs. Vertical delineation was achieved as laboratory analytical results indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria for all borehole terminuses. The laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included in Attachment 4.

PROPOSED WORK PLAN

Impacts within the release have been defined through soil borings BH01 though BH06. WPX proposes to excavate hydrocarbon impacts present in the vicinity of BH01 and BH03 to meet Closure Criteria requirements. Based on laboratory analytical results of boreholes BH01 through BH06, WPX anticipates excavating up to 6 feet bgs over an approximated area of 530 square feet, which equates to approximately 120 cubic yards of impacted soil to be removed. Horizontal delineation will be achieved through 5-point composite sidewall samples.

Based on laboratory analytical results for delineation borehole BH02 and BH04 through BH06, no additional remediation efforts are required in those areas within the earthen containment affected by the subject release.

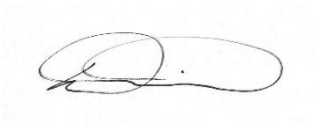
CONCLUSION

Following successful removal of residual impacts as demonstrated through laboratory analytical results, a Closure Request or Deferral Request if soil impacts within the anticipated excavation area cannot be safely removed due to the configuration of the Site, will be provided to the NMOCD.

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

Sincerely,

WSP USA Inc.



Anna Byers
Consultant, Geologist

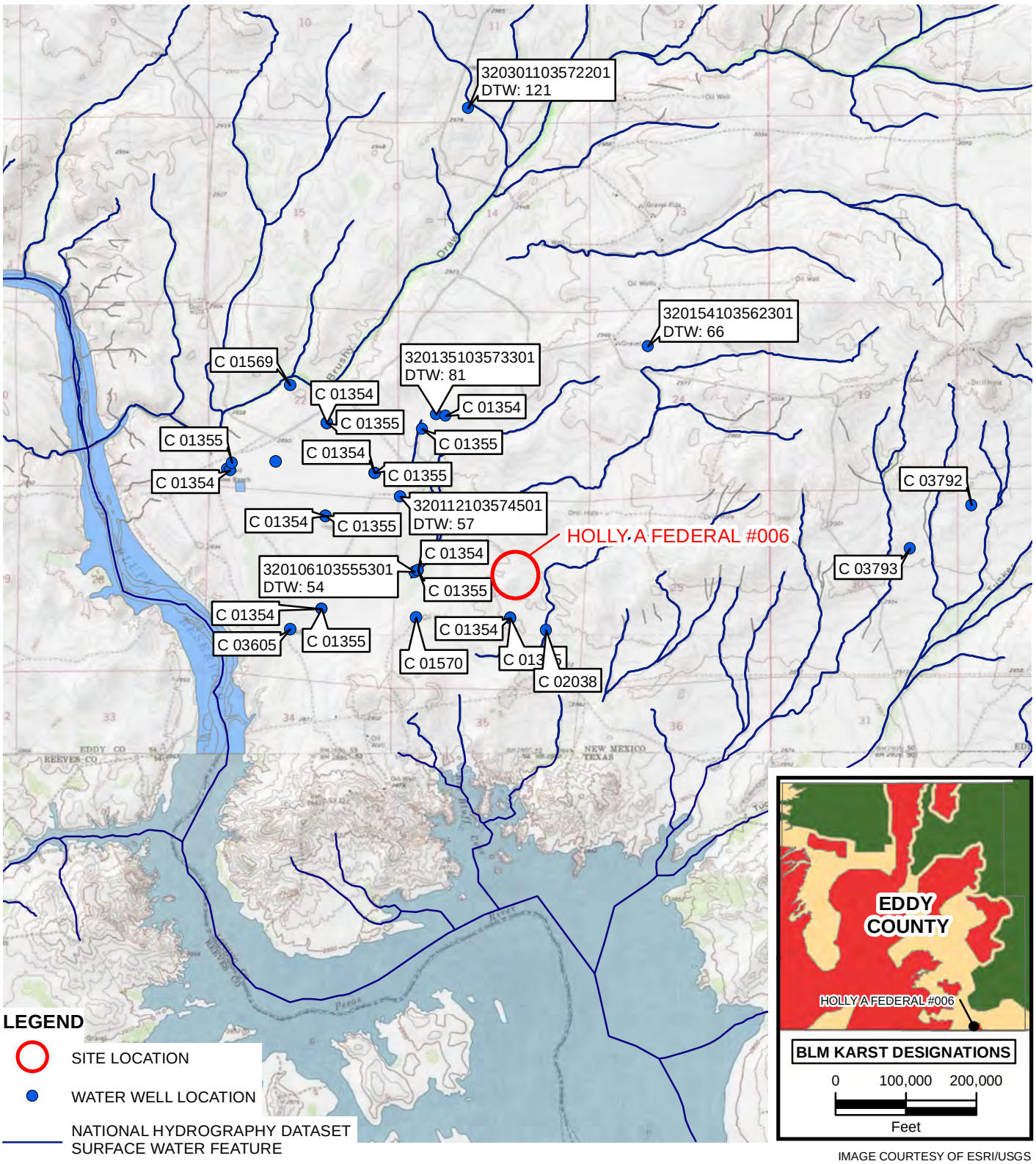
Daniel R. Moir, P.G.
Lead Consultant, Geologist

cc: Jim Raley, Devon
Bureau of Land Management

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Proposed Excavation Extent
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Record
Attachment 2	Photographic Log
Attachment 3	Lithologic/Soil Sampling Log
Attachment 4	Laboratory Analytical Reports

FIGURES



LEGEND

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER nAPP2116548791

FIGURE 1
SITE LOCATION MAP
HOLLY A FEDERAL #006
UNIT B SEC 26 T26S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\WPX-Devon\GIS\31403360.001.0348_HOLLY A FEDERAL #006\MXD\31403360.001.0348_FIG01_SL_RECEPTOR_2021.mxd

LEGEND

- RELEASE LOCATION
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT
- EARTHEN BERM
- ESTIMATED EXCAVATION EXTENT

NOTE: INCIDENT NUMBER nAPP2116548791
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
HOLLY A FEDERAL #006
UNIT B SEC 26 T26S R29E
EDDY COUNTY, NEW MEXICO
WPX ENERGY PERMIAN, LLC

P:\WPX-Devon\GIS\31403360.001.0348_HOLLY A FEDERAL #006\MXD\31403360.001.0348_FIG02_DELINEATION_2021_1.mxd

TABLES

Table 1

Soil Analytical Results
Holly A Federal #006
Incident Number nAPP2116548791
Eddy County, New Mexico
WPX Energy Permian, LLC.

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total DRO+GRO (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**	**10,000**
Delineation Samples										
BH01	06/18/2021	1	0.0258	1.77	1,730	257	367	**1,990**	2,350	6,680
BH01	06/18/2021	4	<0.00200	0.0131	2,380	<49.7	757	**2,380**	**3,140**	158
BH01	06/18/2021	6	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	<49.7	153
BH02	06/18/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,730
BH02	06/18/2021	4	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	11.2
BH02	06/18/2021	6	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	30.9
BH03	06/18/2021	1	<0.00198	<0.00396	10,400	<249	2,290	**10,400**	**12,700**	4,350
BH03	06/18/2021	4	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	600
BH03	06/18/2021	6	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,060
BH04	06/18/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	173
BH04	06/18/2021	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	334
BH04	06/18/2021	6	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	215

Table 1

Soil Analytical Results
Holly A Federal #006
Incident Number nAPP2116548791
Eddy County, New Mexico
WPX Energy Permian, LLC.

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total DRO+GRO (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**	**10,000**
BH05	06/18/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	243
BH05	06/18/2021	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	469
BH05	06/18/2021	6	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	854
BH06	06/18/2021	1	<0.00202	<0.00403	89.8	<50.0	<50.0	89.8	89.8	24.0
BH06	06/18/2021	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	96.6
BH06	06/18/2021	6	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	22.4

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 - motor 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

ATTACHMENT 1: REFERENCED WELL RECORD

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320106103555301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320106103555301 26S.29E.26.13143

Eddy County, New Mexico
Latitude 32°00'51.3", Longitude 103°57'42.0" NAD83
Land-surface elevation 2,883.00 feet above NGVD29
The depth of the well is 140 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1983-01-26		D	62610		2828.70	NGVD29	1	Z			A
1983-01-26		D	62611		2830.22	NAVD88	1	Z			A
1983-01-26		D	72019	54.30			1	Z			A
1987-10-14		D	62610		2847.71	NGVD29	1	Z			A
1987-10-14		D	62611		2849.23	NAVD88	1	Z			A
1987-10-14		D	72019	35.29			1	Z			A
1992-11-04		D	62610		2838.94	NGVD29	1	S			A
1992-11-04		D	62611		2840.46	NAVD88	1	S			A
1992-11-04		D	72019	44.06			1	S			A
1998-01-28		D	62610		2829.99	NGVD29	1	S			A
1998-01-28		D	62611		2831.51	NAVD88	1	S			A
1998-01-28		D	72019	53.01			1	S			A
2003-01-27		D	62610		2827.07	NGVD29	1	S	USGS	S	A
2003-01-27		D	62611		2828.59	NAVD88	1	S	USGS	S	A
2003-01-27		D	72019	55.93			1	S	USGS	S	A
2013-01-09	19:00 UTC	m	62610		2825.19	NGVD29	1	S	USGS	S	A
2013-01-09	19:00 UTC	m	62611		2826.71	NAVD88	1	S	USGS	S	A
2013-01-09	19:00 UTC	m	72019	57.81			1	S	USGS	S	A
2021-02-24	21:10 UTC	m	62610		2829.54	NGVD29	1	S	USGS	S	A
2021-02-24	21:10 UTC	m	62611		2831.06	NAVD88	1	S	USGS	S	A
2021-02-24	21:10 UTC	m	72019	53.46			1	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet

Section	Code	Description
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Accessibility FOIA Privacy Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-08-18 10:04:41 EDT
0.34 0.29 nadww01

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
WPX Energy Permian, LLC.	HOLLY A FEDERAL #006 Eddy County, NM	31403360.000.0348

Photo No.	Date
1	June 15, 2021

Southeast view of the Site during the assessment.

Photo No.	Date
2	June 15, 2021

West view of the Site during the assessment.

PHOTOGRAPHIC LOG		
WPX Energy Permian, LLC.	HOLLY A FEDERAL #006 Eddy County, NM	31403360.000.0348

Photo No.	Date
3	June 18, 2021

View of the release area following removal of decommissioned tank.

Photo No.	Date
4	June 18, 2021

View of the release area following removal of decommissioned tank.

ATTACHMENT 3: LITHOLOGIC/SOIL SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH Name: BH01	Date: 6/18/2021
Site Name: Holly A Federal #006	
Incident Number: nAPP2116548791	
WSP Job Number: 31403306.001.0348	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Hand Auger		
Lat/Long: 32.014105, -103.952305	Field Screening: Chloride, PID	Hole Diameter: 2.5 inches	Total Depth: 6 feet

Comments:
Moisture Content "M" - Moist; Staining "Y" - Yes; Vapor "MAX" - PID reading >15,000 ppm; Chloride values do no include correction factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	6,896	MAX	Y	BH01	1	1	SW-SM	brown well-graded sand (f. to c.) with gravel, odor
M	376	MAX	Y	-	2	2	SP-SM	brown well-graded sand (f. to c.) with gravel, odor
						3		
M	132	310.6	N	BH01	4	4	SC	red clayey-sand (m.), low plasticity, odor
						5		
M	156	MAX	N	BH01	6	6	SC	red clayey-sand (m.), moderate plasticity, compacted, odor

Total Depth

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH Name:	Date:
BH02	6/18/2021
Site Name: Holly A Federal #006	
Incident Number: nAPP2116548791	
WSP Job Number: 31403306.001.0348	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.014068, -103.952343	Chloride, PID	2.5 inches	6 feet

Comments:
Moisture Content "M" - Moist; BDL - Below Detection Limit of HACH Low Range Chloride Test Strips; Chloride values do no include correction factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	588	111	No	BH02	1	1	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
M	5,464	23.9	No	-	2	2	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
						3		
M	BDL	1.4	No	BH02	4	4	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
						5		
M	BDL	0	No	BH02	6	6	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor

Total Depth

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH Name:	Date:
BH03	6/18/2021

Site Name: Holly A Federal #006
Incident Number: nAPP2116548791
WSP Job Number: 31403306.001.0348

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers | Method: Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.014147, -103.952401	Chloride, PID	2.5 inches	6 feet

Comments:
Moisture Content "M" - Moist/"D" - Dry; Staining "Y" - Yes; Vapor "MAX" - PID reading >15,000 ppm; Chloride values do no include correction factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	3,976	MAX	Y	BH03	1	1	SP-SM	dark brown poorly-graded sand with gravel, poorly consolidated, no odor
M	5,464	MAX	No	-	2	2	SP-SM	dark brown poorly-graded sand with gravel, poorly consolidated, no odor
						3		
D	1,988	156.4	No	BH03	4	4	SP-SM	light brown poorly-graded sand with gravel, poorly consolidated, no odor
						5		
D	8,052	112.2	No	BH03	6	6	SP-SM	light brown poorly-graded sand with gravel, poorly consolidated, no odor

Total Depth

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH Name:	Date:
BH04	6/18/2021
Site Name: Holly A Federal #006	
Incident Number: nAPP2116548791	
WSP Job Number: 31403306.001.0348	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers	Method: Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.014137, -103.952285	Chloride, PID	2.5 inches	6 feet

Comments:
Moisture Content "M" - Moist; BDL - Below Detection Limit of HACH Low Range Chloride Test Strips; Chloride values do no include correction factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	BDL	40.9	No	BH04	1	1	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
M	240	10.6	No	-	2	2	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
						3		
M	456	3.6	No	BH04	4	4	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
						5		
M	456	2.8	No	BH04	6	6	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor

Total Depth

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH Name:	Date:
BH05	6/18/2021

Site Name: Holly A Federal #006

Incident Number: nAPP2116548791

WSP Job Number: 31403306.001.0348

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers | Method: Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.014207, -103.952261	Chloride, PID	2.5 inches	6 feet

Comments:
Moisture Content "M" - Moist; Moisture Content "D" - Dry; Chloride values do no include correction factor

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	272	278.6	No	BH05	1	1	SP-SM	brown poorly-graded sand (m.) with silt and gravel, poorly consolidated, odor
M	928	175.7	No	-	2	2	CCHE	tan, poorly cemented caliche with gravel, odor
						3		
D	500	20.8	No	BH05	4	4	SM	light brown silty sand (m.), well consolidated, no odor
						5		
D	928	16.2	No	BH05	6	6	SM	light brown silty sand (m.), well consolidated, no odor

Total Depth

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH Name:	Date:
BH06	6/18/2021

Site Name: Holly A Federal #006

Incident Number: nAPP2116548791

WSP Job Number: 31403306.001.0348

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Anna Byers | Method: Hand Auger

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.014142, -103.952205	Chloride, PID	2.5 inches	6 feet

Comments:
Moisture Content "M" - Moist/"D" - Dry; Chloride values do no include correction factor; BDL - Below Detection Limit of HACH Low Range Chloride Test Strips

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	BDL	24.7	No	BH06	1	1	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
M	BDL	10.8	No	-	2	2	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor
						3		
D	BDL	7.8	No	BH06	4	4	SP-SM	red poorly-graded sand with gravel and capsules of white caliche, poorly consolidated, no odor
						5		
D	BDL	6.2	No	BH06	6	6	SP-SM	red poorly-graded sand with gravel and capsules of white caliche, poorly consolidated, no odor

Total Depth

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-844-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
6/28/2021 1:39:48 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-844-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Job ID: 890-844-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-844-1

Receipt
The samples were received on 6/22/2021 11:41 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH01 (890-844-1), BH01 (890-844-2), BH02 (890-844-3), BH02 (890-844-4), BH03 (890-844-5), BH03 (890-844-6), BH04 (890-844-7), BH04 (890-844-8), BH05 (890-844-9), BH05 (890-844-10), BH06 (890-844-11) and BH06 (890-844-12).

GC VOA
Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: BH01 (890-844-2), BH03 (890-844-5), BH03 (890-844-6), BH04 (890-844-7), BH06 (890-844-11) and BH06 (890-844-12). The sample(s) shows evidence of matrix interference.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH01 (890-844-2), BH03 (890-844-5) and BH03 (890-844-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH01
Date Collected: 06/18/21 09:15
Date Received: 06/22/21 11:41
Sample Depth: - 1

Lab Sample ID: 890-844-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0258**		0.00199		mg/Kg		06/23/21 09:59	06/23/21 16:27	1
Toluene	**0.0580**		0.00199		mg/Kg		06/23/21 09:59	06/23/21 16:27	1
Ethylbenzene	**0.294**		0.00199		mg/Kg		06/23/21 09:59	06/23/21 16:27	1
m-Xylene & p-Xylene	**0.245**		0.00398		mg/Kg		06/23/21 09:59	06/23/21 16:27	1
o-Xylene	**0.825**		0.0199		mg/Kg		06/23/21 09:59	06/25/21 22:18	10
Xylenes, Total	**1.65**		0.0398		mg/Kg		06/23/21 09:59	06/25/21 22:18	10
Total BTEX	**1.77**		0.0398		mg/Kg		06/23/21 09:59	06/25/21 22:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*181*	*S1+*	*70 - 130*	*06/23/21 09:59*	*06/23/21 16:27*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/23/21 09:59*	*06/23/21 16:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**257**	***1**	249		mg/Kg		06/23/21 14:00	06/23/21 23:02	5
Diesel Range Organics (Over C10-C28)	**1730**		249		mg/Kg		06/23/21 14:00	06/23/21 23:02	5
Oil Range Organics (Over C28-C36)	**367**		249		mg/Kg		06/23/21 14:00	06/23/21 23:02	5
Total TPH	**2350**		249		mg/Kg		06/23/21 14:00	06/23/21 23:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*06/23/21 14:00*	*06/23/21 23:02*	*5*
o-Terphenyl	*100*		*70 - 130*	*06/23/21 14:00*	*06/23/21 23:02*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6680**		50.5		mg/Kg			06/24/21 17:01	10

Client Sample ID: BH01
Date Collected: 06/18/21 09:25
Date Received: 06/22/21 11:41
Sample Depth: - 4

Lab Sample ID: 890-844-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 16:48	1
Toluene	**0.00498**		0.00200		mg/Kg		06/23/21 09:59	06/23/21 16:48	1
Ethylbenzene	**0.00294**		0.00200		mg/Kg		06/23/21 09:59	06/23/21 16:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 16:48	1
o-Xylene	**0.00514**		0.00200		mg/Kg		06/23/21 09:59	06/23/21 16:48	1
Xylenes, Total	**0.00514**		0.00400		mg/Kg		06/23/21 09:59	06/23/21 16:48	1
Total BTEX	**0.0131**		0.00400		mg/Kg		06/23/21 09:59	06/23/21 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*06/23/21 09:59*	*06/23/21 16:48*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/23/21 09:59*	*06/23/21 16:48*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH01

Lab Sample ID: 890-844-2
Matrix: Solid
Date Collected: 06/18/21 09:25
Date Received: 06/22/21 11:41
Sample Depth: - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		06/23/21 14:00	06/23/21 23:23	1
Diesel Range Organics (Over C10-C28)	**2380**		49.7		mg/Kg		06/23/21 14:00	06/23/21 23:23	1
Oil Range Organics (Over C28-C36)	**757**		49.7		mg/Kg		06/23/21 14:00	06/23/21 23:23	1
Total TPH	**3140**		49.7		mg/Kg		06/23/21 14:00	06/23/21 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*06/23/21 14:00*	*06/23/21 23:23*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*06/23/21 14:00*	*06/23/21 23:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**158**		5.03		mg/Kg			06/24/21 17:07	1

Client Sample ID: BH02

Lab Sample ID: 890-844-3
Matrix: Solid
Date Collected: 06/18/21 11:10
Date Received: 06/22/21 11:41
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 17:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 17:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 17:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 17:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 17:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 17:08	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*06/23/21 09:59*	*06/23/21 17:08*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/23/21 09:59*	*06/23/21 17:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1 F2	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1
Total TPH	<50.0	U F2	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:38*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*06/23/21 14:00*	*06/23/21 21:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4730**		100		mg/Kg			06/24/21 17:12	20

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH02

Lab Sample ID: 890-844-4
Matrix: Solid
Date Collected: 06/18/21 11:30
Date Received: 06/22/21 11:41
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:28	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:28	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:28	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/23/21 09:59	06/23/21 17:28	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:28	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/23/21 09:59	06/23/21 17:28	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		06/23/21 09:59	06/23/21 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/23/21 09:59*	*06/23/21 17:28*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/23/21 09:59*	*06/23/21 17:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/23/21 14:00	06/23/21 20:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/23/21 14:00	06/23/21 20:56	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/23/21 14:00	06/23/21 20:56	1
Total TPH	<49.8	U	49.8		mg/Kg		06/23/21 14:00	06/23/21 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/23/21 14:00*	*06/23/21 20:56*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/23/21 14:00*	*06/23/21 20:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.2**		5.00		mg/Kg			06/24/21 17:18	1

Client Sample ID: BH03

Lab Sample ID: 890-844-5
Matrix: Solid
Date Collected: 06/18/21 12:10
Date Received: 06/22/21 11:41
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:49	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:49	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/23/21 09:59	06/23/21 17:49	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/23/21 09:59	06/23/21 17:49	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/23/21 09:59	06/23/21 17:49	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/23/21 09:59	06/23/21 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*06/23/21 09:59*	*06/23/21 17:49*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/23/21 09:59*	*06/23/21 17:49*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH03
Date Collected: 06/18/21 12:10
Date Received: 06/22/21 11:41
Sample Depth: - 1

Lab Sample ID: 890-844-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U *1	249		mg/Kg		06/23/21 14:00	06/23/21 22:41	5
Diesel Range Organics (Over C10-C28)	**10400**		249		mg/Kg		06/23/21 14:00	06/23/21 22:41	5
Oil Range Organics (Over C28-C36)	**2290**		249		mg/Kg		06/23/21 14:00	06/23/21 22:41	5
Total TPH	**12700**		249		mg/Kg		06/23/21 14:00	06/23/21 22:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*06/23/21 14:00*	*06/23/21 22:41*	*5*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*06/23/21 14:00*	*06/23/21 22:41*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4350**		49.5		mg/Kg			06/24/21 17:29	10

Client Sample ID: BH03
Date Collected: 06/18/21 12:30
Date Received: 06/22/21 11:41
Sample Depth: - 4

Lab Sample ID: 890-844-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:09	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/23/21 09:59	06/23/21 18:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:09	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/23/21 09:59	06/23/21 18:09	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/23/21 09:59	06/23/21 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*156*	*S1+*	*70 - 130*	*06/23/21 09:59*	*06/23/21 18:09*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*06/23/21 09:59*	*06/23/21 18:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/23/21 14:00	06/23/21 21:17	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/23/21 14:00	06/23/21 21:17	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/23/21 14:00	06/23/21 21:17	1
Total TPH	<49.7	U	49.7		mg/Kg		06/23/21 14:00	06/23/21 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:17*	*1*
o-Terphenyl	*127*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**600**		4.98		mg/Kg			06/24/21 17:23	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH04

Lab Sample ID: 890-844-7
Matrix: Solid
Date Collected: 06/18/21 10:45
Date Received: 06/22/21 11:41
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/23/21 09:59	06/23/21 18:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 18:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/23/21 09:59	06/23/21 18:30	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/23/21 09:59	06/23/21 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*06/23/21 09:59*	*06/23/21 18:30*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/23/21 09:59*	*06/23/21 18:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:38*	*1*
o-Terphenyl	*121*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**173**		25.1		mg/Kg			06/24/21 17:45	5

Client Sample ID: BH04

Lab Sample ID: 890-844-8
Matrix: Solid
Date Collected: 06/18/21 11:05
Date Received: 06/22/21 11:41
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 18:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 18:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 18:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 18:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 18:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 18:50	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/23/21 09:59*	*06/23/21 18:50*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/23/21 09:59*	*06/23/21 18:50*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH04

Lab Sample ID: 890-844-8
Matrix: Solid
Date Collected: 06/18/21 11:05
Date Received: 06/22/21 11:41
Sample Depth: - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:59	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:59*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/23/21 14:00*	*06/23/21 21:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**334**		5.04		mg/Kg			06/25/21 11:28	1

Client Sample ID: BH05

Lab Sample ID: 890-844-9
Matrix: Solid
Date Collected: 06/18/21 12:50
Date Received: 06/22/21 11:41
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 20:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 20:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 20:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/23/21 09:59	06/23/21 20:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 20:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/23/21 09:59	06/23/21 20:40	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/23/21 09:59	06/23/21 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/23/21 09:59*	*06/23/21 20:40*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/23/21 09:59*	*06/23/21 20:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:20	1
Total TPH	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/23/21 14:00*	*06/23/21 22:20*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/23/21 14:00*	*06/23/21 22:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**243**		25.2		mg/Kg			06/24/21 18:07	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH05

Lab Sample ID: 890-844-10
Matrix: Solid
Date Collected: 06/18/21 13:25
Date Received: 06/22/21 11:41
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 21:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 21:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 21:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 21:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 21:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 21:01	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*06/23/21 09:59*	*06/23/21 21:01*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/23/21 09:59*	*06/23/21 21:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:41	1
Total TPH	<49.9	U	49.9		mg/Kg		06/23/21 14:00	06/23/21 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*06/23/21 14:00*	*06/23/21 22:41*	*1*
o-Terphenyl	*128*		*70 - 130*	*06/23/21 14:00*	*06/23/21 22:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**469**		5.03		mg/Kg			06/24/21 18:13	1

Client Sample ID: BH06

Lab Sample ID: 890-844-11
Matrix: Solid
Date Collected: 06/18/21 13:45
Date Received: 06/22/21 11:41
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/23/21 09:59	06/23/21 21:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/23/21 09:59	06/23/21 21:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/23/21 09:59	06/23/21 21:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/23/21 09:59	06/23/21 21:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/23/21 09:59	06/23/21 21:21	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/23/21 09:59	06/23/21 21:21	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		06/23/21 09:59	06/23/21 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*06/23/21 09:59*	*06/23/21 21:21*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/23/21 09:59*	*06/23/21 21:21*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH06

Lab Sample ID: 890-844-11
Matrix: Solid
Date Collected: 06/18/21 13:45
Date Received: 06/22/21 11:41
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Diesel Range Organics (Over C10-C28)	**89.8**		50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Total TPH	**89.8**		50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*06/23/21 14:00*	*06/23/21 20:35*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*06/23/21 14:00*	*06/23/21 20:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24.0**		5.03		mg/Kg			06/24/21 18:18	1

Client Sample ID: BH06

Lab Sample ID: 890-844-12
Matrix: Solid
Date Collected: 06/18/21 14:10
Date Received: 06/22/21 11:41
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 21:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 21:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 21:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 21:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/23/21 09:59	06/23/21 21:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 21:42	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/23/21 09:59	06/23/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*06/23/21 09:59*	*06/23/21 21:42*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/23/21 09:59*	*06/23/21 21:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 23:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 23:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 23:02	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*06/23/21 14:00*	*06/23/21 23:02*	*1*
o-Terphenyl	*123*		*70 - 130*	*06/23/21 14:00*	*06/23/21 23:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**96.6**		4.97		mg/Kg			06/25/21 11:33	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
890-844-1	BH01	181 S1+	95
890-844-2	BH01	140 S1+	82
890-844-3	BH02	116	98
890-844-4	BH02	117	98
890-844-5	BH03	134 S1+	99
890-844-6	BH03	156 S1+	88
890-844-7	BH04	126	97
890-844-8	BH04	117	100
890-844-9	BH05	108	98
890-844-10	BH05	115	100
890-844-11	BH06	106	96
890-844-12	BH06	127	94
LCS 880-4500/1-A	Lab Control Sample	109	95
LCS 880-4592/1-A	Lab Control Sample	93	99
LCSD 880-4500/2-A	Lab Control Sample Dup	109	91
LCSD 880-4592/2-A	Lab Control Sample Dup	85	98
MB 880-4500/5-A	Method Blank	110	94
MB 880-4592/5-A	Method Blank	60 S1-	80

Surrogate Legend

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

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
890-844-1	BH01	95	100
890-844-2	BH01	131 S1+	140 S1+
890-844-3	BH02	127	137 S1+
890-844-3 MS	BH02	98	97
890-844-3 MSD	BH02	118	114
890-844-4	BH02	102	126
890-844-5	BH03	118	140 S1+
890-844-6	BH03	103	127
890-844-7	BH04	99	121
890-844-8	BH04	93	114
890-844-9	BH05	102	126
890-844-10	BH05	104	128
890-844-11	BH06	110	136 S1+
890-844-12	BH06	100	123
LCS 880-4520/2-A	Lab Control Sample	120	121
LCSD 880-4520/3-A	Lab Control Sample Dup	140 S1+	141 S1+
MB 880-4520/1-A	Method Blank	114	124

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4500/5-A
Matrix: Solid
Analysis Batch: 4515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4500

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 15:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 15:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/23/21 09:59	06/23/21 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*06/23/21 09:59*	*06/23/21 15:17*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/23/21 09:59*	*06/23/21 15:17*	*1*

Lab Sample ID: LCS 880-4500/1-A
Matrix: Solid
Analysis Batch: 4515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4500

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1014		mg/Kg		101	70 - 130		
Toluene			0.100	0.1179		mg/Kg		118	70 - 130		
Ethylbenzene			0.100	0.1207		mg/Kg		121	70 - 130		
m-Xylene & p-Xylene			0.200	0.2524		mg/Kg		126	70 - 130		
o-Xylene			0.100	0.1235		mg/Kg		123	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-4500/2-A
Matrix: Solid
Analysis Batch: 4515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4500

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09466		mg/Kg		95	70 - 130	7	35
Toluene			0.100	0.1147		mg/Kg		115	70 - 130	3	35
Ethylbenzene			0.100	0.1194		mg/Kg		119	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2526		mg/Kg		126	70 - 130	0	35
o-Xylene			0.100	0.1247		mg/Kg		125	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: MB 880-4592/5-A
Matrix: Solid
Analysis Batch: 4608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/24/21 13:20	06/25/21 12:41	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4592/5-A
Matrix: Solid
Analysis Batch: 4608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/Kg		06/24/21 13:20	06/25/21 12:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/24/21 13:20	06/25/21 12:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/24/21 13:20	06/25/21 12:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/24/21 13:20	06/25/21 12:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/24/21 13:20	06/25/21 12:41	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/24/21 13:20	06/25/21 12:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/24/21 13:20*	*06/25/21 12:41*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*06/24/21 13:20*	*06/25/21 12:41*	*1*

Lab Sample ID: LCS 880-4592/1-A
Matrix: Solid
Analysis Batch: 4608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4592

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09074		mg/Kg		91	70 - 130		
Toluene			0.100	0.1020		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.08452		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene			0.200	0.1776		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.09260		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-4592/2-A
Matrix: Solid
Analysis Batch: 4608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4592

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08762		mg/Kg		88	70 - 130	3	35
Toluene			0.100	0.08407		mg/Kg		84	70 - 130	19	35
Ethylbenzene			0.100	0.07970		mg/Kg		80	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1673		mg/Kg		84	70 - 130	6	35
o-Xylene			0.100	0.08667		mg/Kg		87	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4520/1-A
Matrix: Solid
Analysis Batch: 4496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 20:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*06/23/21 14:00*	*06/23/21 20:35*	*1*
o-Terphenyl	*124*		*70 - 130*	*06/23/21 14:00*	*06/23/21 20:35*	*1*

Lab Sample ID: LCS 880-4520/2-A
Matrix: Solid
Analysis Batch: 4496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	850.3		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	989.8		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*121*		*70 - 130*

Lab Sample ID: LCSD 880-4520/3-A
Matrix: Solid
Analysis Batch: 4496

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4520

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1064	*1	mg/Kg		106	70 - 130	22	20
Diesel Range Organics (Over C10-C28)			1000	1162		mg/Kg		116	70 - 130	16	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*140*	*S1+*	*70 - 130*
o-Terphenyl	*141*	*S1+*	*70 - 130*

Lab Sample ID: 890-844-3 MS
Matrix: Solid
Analysis Batch: 4496

Client Sample ID: BH02
Prep Type: Total/NA
Prep Batch: 4520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1 F2	999	779.7		mg/Kg		78	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	874.4		mg/Kg		86	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

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

Lab Sample ID: 890-844-3 MS
Matrix: Solid
Analysis Batch: 4496

Client Sample ID: BH02
Prep Type: Total/NA
Prep Batch: 4520

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 890-844-3 MSD
Matrix: Solid
Analysis Batch: 4496

Client Sample ID: BH02
Prep Type: Total/NA
Prep Batch: 4520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1 F2	997	999.9	F2	mg/Kg		100	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1040		mg/Kg		103	70 - 130	17	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4512/1-A
Matrix: Solid
Analysis Batch: 4595

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/24/21 15:56	1

Lab Sample ID: LCS 880-4512/2-A
Matrix: Solid
Analysis Batch: 4595

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.9		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-4512/3-A
Matrix: Solid
Analysis Batch: 4595

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	249.9		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-844-5 MS
Matrix: Solid
Analysis Batch: 4595

Client Sample ID: BH03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4350		2480	6955		mg/Kg		105	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-844-5 MSD
Matrix: Solid
Analysis Batch: 4595

Client Sample ID: BH03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4350		2480	6925		mg/Kg		104	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

GC VOA

Prep Batch: 4500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Total/NA	Solid	5035	
890-844-2	BH01	Total/NA	Solid	5035	
890-844-3	BH02	Total/NA	Solid	5035	
890-844-4	BH02	Total/NA	Solid	5035	
890-844-5	BH03	Total/NA	Solid	5035	
890-844-6	BH03	Total/NA	Solid	5035	
890-844-7	BH04	Total/NA	Solid	5035	
890-844-8	BH04	Total/NA	Solid	5035	
890-844-9	BH05	Total/NA	Solid	5035	
890-844-10	BH05	Total/NA	Solid	5035	
890-844-11	BH06	Total/NA	Solid	5035	
890-844-12	BH06	Total/NA	Solid	5035	
MB 880-4500/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4500/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4500/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Total/NA	Solid	8021B	4500
890-844-2	BH01	Total/NA	Solid	8021B	4500
890-844-3	BH02	Total/NA	Solid	8021B	4500
890-844-4	BH02	Total/NA	Solid	8021B	4500
890-844-5	BH03	Total/NA	Solid	8021B	4500
890-844-6	BH03	Total/NA	Solid	8021B	4500
890-844-7	BH04	Total/NA	Solid	8021B	4500
890-844-8	BH04	Total/NA	Solid	8021B	4500
890-844-9	BH05	Total/NA	Solid	8021B	4500
890-844-10	BH05	Total/NA	Solid	8021B	4500
890-844-11	BH06	Total/NA	Solid	8021B	4500
890-844-12	BH06	Total/NA	Solid	8021B	4500
MB 880-4500/5-A	Method Blank	Total/NA	Solid	8021B	4500
LCS 880-4500/1-A	Lab Control Sample	Total/NA	Solid	8021B	4500
LCSD 880-4500/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4500

Prep Batch: 4592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4592/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4592/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4592/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Total/NA	Solid	8021B	4500
MB 880-4592/5-A	Method Blank	Total/NA	Solid	8021B	4592
LCS 880-4592/1-A	Lab Control Sample	Total/NA	Solid	8021B	4592
LCSD 880-4592/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4592

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

GC Semi VOA

Analysis Batch: 4494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-4	BH02	Total/NA	Solid	8015B NM	4520
890-844-6	BH03	Total/NA	Solid	8015B NM	4520
890-844-7	BH04	Total/NA	Solid	8015B NM	4520
890-844-8	BH04	Total/NA	Solid	8015B NM	4520
890-844-9	BH05	Total/NA	Solid	8015B NM	4520
890-844-10	BH05	Total/NA	Solid	8015B NM	4520
890-844-11	BH06	Total/NA	Solid	8015B NM	4520
890-844-12	BH06	Total/NA	Solid	8015B NM	4520

Analysis Batch: 4496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Total/NA	Solid	8015B NM	4520
890-844-2	BH01	Total/NA	Solid	8015B NM	4520
890-844-3	BH02	Total/NA	Solid	8015B NM	4520
890-844-5	BH03	Total/NA	Solid	8015B NM	4520
MB 880-4520/1-A	Method Blank	Total/NA	Solid	8015B NM	4520
LCS 880-4520/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4520
LCSD 880-4520/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4520
890-844-3 MS	BH02	Total/NA	Solid	8015B NM	4520
890-844-3 MSD	BH02	Total/NA	Solid	8015B NM	4520

Prep Batch: 4520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Total/NA	Solid	8015NM Prep	
890-844-2	BH01	Total/NA	Solid	8015NM Prep	
890-844-3	BH02	Total/NA	Solid	8015NM Prep	
890-844-4	BH02	Total/NA	Solid	8015NM Prep	
890-844-5	BH03	Total/NA	Solid	8015NM Prep	
890-844-6	BH03	Total/NA	Solid	8015NM Prep	
890-844-7	BH04	Total/NA	Solid	8015NM Prep	
890-844-8	BH04	Total/NA	Solid	8015NM Prep	
890-844-9	BH05	Total/NA	Solid	8015NM Prep	
890-844-10	BH05	Total/NA	Solid	8015NM Prep	
890-844-11	BH06	Total/NA	Solid	8015NM Prep	
890-844-12	BH06	Total/NA	Solid	8015NM Prep	
MB 880-4520/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4520/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4520/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-844-3 MS	BH02	Total/NA	Solid	8015NM Prep	
890-844-3 MSD	BH02	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 4512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Soluble	Solid	DI Leach	
890-844-2	BH01	Soluble	Solid	DI Leach	
890-844-3	BH02	Soluble	Solid	DI Leach	
890-844-4	BH02	Soluble	Solid	DI Leach	
890-844-5	BH03	Soluble	Solid	DI Leach	
890-844-6	BH03	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

HPLC/IC (Continued)

Leach Batch: 4512 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-7	BH04	Soluble	Solid	DI Leach	
890-844-8	BH04	Soluble	Solid	DI Leach	
890-844-9	BH05	Soluble	Solid	DI Leach	
890-844-10	BH05	Soluble	Solid	DI Leach	
890-844-11	BH06	Soluble	Solid	DI Leach	
890-844-12	BH06	Soluble	Solid	DI Leach	
MB 880-4512/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4512/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4512/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-844-5 MS	BH03	Soluble	Solid	DI Leach	
890-844-5 MSD	BH03	Soluble	Solid	DI Leach	

Analysis Batch: 4595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-844-1	BH01	Soluble	Solid	300.0	4512
890-844-2	BH01	Soluble	Solid	300.0	4512
890-844-3	BH02	Soluble	Solid	300.0	4512
890-844-4	BH02	Soluble	Solid	300.0	4512
890-844-5	BH03	Soluble	Solid	300.0	4512
890-844-6	BH03	Soluble	Solid	300.0	4512
890-844-7	BH04	Soluble	Solid	300.0	4512
890-844-8	BH04	Soluble	Solid	300.0	4512
890-844-9	BH05	Soluble	Solid	300.0	4512
890-844-10	BH05	Soluble	Solid	300.0	4512
890-844-11	BH06	Soluble	Solid	300.0	4512
890-844-12	BH06	Soluble	Solid	300.0	4512
MB 880-4512/1-A	Method Blank	Soluble	Solid	300.0	4512
LCS 880-4512/2-A	Lab Control Sample	Soluble	Solid	300.0	4512
LCSD 880-4512/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4512
890-844-5 MS	BH03	Soluble	Solid	300.0	4512
890-844-5 MSD	BH03	Soluble	Solid	300.0	4512

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH01
Date Collected: 06/18/21 09:15
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 16:27	MR	XEN MID
Total/NA	Prep	5035			5.02 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	4608	06/25/21 22:18	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		5			4496	06/23/21 23:02	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		10			4595	06/24/21 17:01	CH	XEN MID

Client Sample ID: BH01
Date Collected: 06/18/21 09:25
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 16:48	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4496	06/23/21 23:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/24/21 17:07	CH	XEN MID

Client Sample ID: BH02
Date Collected: 06/18/21 11:10
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 17:08	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4496	06/23/21 21:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		20			4595	06/24/21 17:12	CH	XEN MID

Client Sample ID: BH02
Date Collected: 06/18/21 11:30
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 17:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 20:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/24/21 17:18	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH03
Date Collected: 06/18/21 12:10
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 17:49	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		5			4496	06/23/21 22:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		10			4595	06/24/21 17:29	CH	XEN MID

Client Sample ID: BH03
Date Collected: 06/18/21 12:30
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 18:09	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 21:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/24/21 17:23	CH	XEN MID

Client Sample ID: BH04
Date Collected: 06/18/21 10:45
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 18:30	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 21:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		5			4595	06/24/21 17:45	CH	XEN MID

Client Sample ID: BH04
Date Collected: 06/18/21 11:05
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 18:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 21:59	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/25/21 11:28	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Client Sample ID: BH05
Date Collected: 06/18/21 12:50
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 20:40	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 22:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		5			4595	06/24/21 18:07	CH	XEN MID

Client Sample ID: BH05
Date Collected: 06/18/21 13:25
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 21:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 22:41	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/24/21 18:13	CH	XEN MID

Client Sample ID: BH06
Date Collected: 06/18/21 13:45
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 21:21	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 20:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/24/21 18:18	CH	XEN MID

Client Sample ID: BH06
Date Collected: 06/18/21 14:10
Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4515	06/23/21 21:42	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4494	06/23/21 23:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1			4595	06/25/21 11:33	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-844-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-844-1	BH01	Solid	06/18/21 09:15	06/22/21 11:41	- 1
890-844-2	BH01	Solid	06/18/21 09:25	06/22/21 11:41	- 4
890-844-3	BH02	Solid	06/18/21 11:10	06/22/21 11:41	- 1
890-844-4	BH02	Solid	06/18/21 11:30	06/22/21 11:41	- 4
890-844-5	BH03	Solid	06/18/21 12:10	06/22/21 11:41	- 1
890-844-6	BH03	Solid	06/18/21 12:30	06/22/21 11:41	- 4
890-844-7	BH04	Solid	06/18/21 10:45	06/22/21 11:41	- 1
890-844-8	BH04	Solid	06/18/21 11:05	06/22/21 11:41	- 4
890-844-9	BH05	Solid	06/18/21 12:50	06/22/21 11:41	- 1
890-844-10	BH05	Solid	06/18/21 13:25	06/22/21 11:41	- 4
890-844-11	BH06	Solid	06/18/21 13:45	06/22/21 11:41	- 1
890-844-12	BH06	Solid	06/18/21 14:10	06/22/21 11:41	- 4

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Chain of Custody

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

Work Order No: _____

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR.
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	3140336Ø.ØØ1.Ø348	☐ Routine ☒ Rush	
Project Location:	EDDY COUNTY	Due Date:	3 DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	6/13/21 Release		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TNM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2/5.0	
Total Containers:		Corrected Temperature:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021 B)	Chloride (EPA 300.0)	Parameters
BH01	S	6/18/21	0915	1'	Grab	1		X	X	X	
BH01			0925	4'		1		X	X	X	
BH02			1110	1'		1		X	X	X	
BH02			1130	4'		1		X	X	X	
BH03			1210	1'		1		X	X	X	
BH03			1230	4'		1		X	X	X	
BH04			1045	1'		1		X	X	X	
BH04			1105	4'		1		X	X	X	
BH05			1250	1'		1		X	X	X	
BH05			1325	4'		1		X	X	X	

890-844 Chain of Custody

Preservative Codes

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

Sample Comments

nAPP2116548791

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	Coe Cuyo	6.22.21 1138	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: ____________

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR.
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	31403360.001.0348	☐ Routine	☑ Rush
Project Location:	EDDY COUNTY	Due Date:	3DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	6/13/21 Release		

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH06	S	6/18/21	1345	1'	Grab	1	X	X	X	nAPP2116548791
BH06	S	6/18/21	1410	4'	Grab	1	X	X	X	

AB

Preservative Codes

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

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	[illegible]	6-22-21 1130	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

6/28/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-844-1
SDG Number: Eddy County

Login Number: 844
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-844-1
SDG Number: Eddy County

Login Number: 844
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:31 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-845-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/2/2021 9:28:28 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-845-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Job ID: 890-845-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-845-1

Receipt
The sample was received on 6/22/2021 11:44 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH01 (890-845-1)

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Client Sample ID: BH01

Date Collected: 06/18/21 10:00
Date Received: 06/22/21 11:44
Sample Depth: - 6

Lab Sample ID: 890-845-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		06/29/21 14:37	06/29/21 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*06/29/21 14:37*	*06/29/21 17:48*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/29/21 14:37*	*06/29/21 17:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 13:19	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 13:19	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 13:19	1
Total TPH	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 13:19*	*1*
o-Terphenyl	*98*		*70 - 130*	*06/29/21 09:38*	*06/29/21 13:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**153**		25.2		mg/Kg			07/01/21 19:53	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-845-1	BH01	103	99										
LCS 880-4724/1-A	Lab Control Sample	87	97										
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102										
MB 880-4724/5-A	Method Blank	60 S1-	82										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-845-1	BH01	90	98										
890-845-1 MS	BH01	90	89										
890-845-1 MSD	BH01	104	102										
LCS 880-4722/2-A	Lab Control Sample	97	98										
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107										
MB 880-4722/1-A	Method Blank	90	101										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*

Lab Sample ID: LCS 880-4724/1-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08480		mg/Kg		85	70 - 130		
Toluene			0.100	0.08425		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1733		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08872		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4724/2-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	9	35
Toluene			0.100	0.1077		mg/Kg		108	70 - 130	24	35
Ethylbenzene			0.100	0.09178		mg/Kg		92	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	11	35
o-Xylene			0.100	0.09922		mg/Kg		99	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4722/2-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.5		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	955.9		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-4722/3-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: 890-845-1 MS
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 4722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	999	783.6		mg/Kg		78	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.7	U	999	873.7		mg/Kg		85	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

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

Lab Sample ID: 890-845-1 MS
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 4722

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

Lab Sample ID: 890-845-1 MSD
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 4722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	997	892.7		mg/Kg		90	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<49.7	U	997	1000		mg/Kg		98	70 - 130	14	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/01/21 17:07	1

Lab Sample ID: LCS 880-4824/2-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	231.0		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-4824/3-A
Matrix: Solid
Analysis Batch: 4825

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	232.2		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-1	BH01	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-1	BH01	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-1	BH01	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-845-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-845-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-1	BH01	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722
890-845-1 MS	BH01	Total/NA	Solid	8015B NM	4722
890-845-1 MSD	BH01	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-1	BH01	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-1	BH01	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Client Sample ID: BH01

Date Collected: 06/18/21 10:00
Date Received: 06/22/21 11:44

Lab Sample ID: 890-845-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 17:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 13:19	AM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		5			4825	07/01/21 19:53	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-845-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-845-1	BH01	Solid	06/18/21 10:00	06/22/21 11:44	- 6

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: ____________

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	31403360.001.0348	☐ Routine	☑ Rush
Project Location:	EDDY COUNTY	Due Date:	3DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	6/13/21 Release		

SAMPLE RECEIPT	Temp Blank:	[✓ Yes] No	Wet Ice:	[✓ Yes] No
Samples Received Intact:		[✓ Yes] No	Thermometer ID:	TNM 007
Cooler Custody Seals:		Yes [✓ No] N/A	Correction Factor:	-0.2
Sample Custody Seals:		Yes [✓ No] N/A	Temperature Reading:	5.2/5.0
Total Containers:			Corrected Temperature:	

ANALYSIS REQUEST — Parameters / Pres. Code

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH (EPA 8015MOD)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH01	S	6/10/21 1000	1000	6'	Grab	1	X	X	X	HOLD nAPP2116548791

Preservative Codes

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

890-845 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	[illegible]	6.22.21 1139	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-845-1
SDG Number: Eddy County

Login Number: 845
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-845-1
SDG Number: Eddy County

Login Number: 845
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:29 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-847-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/2/2021 9:29:45 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-847-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Job ID: 890-847-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-847-1

Receipt
The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH02 (890-847-1).

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Client Sample ID: BH02

Date Collected: 06/18/21 15:35
Date Received: 06/22/21 11:39
Sample Depth: - 6

Lab Sample ID: 890-847-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*06/29/21 14:37*	*06/29/21 18:13*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/29/21 14:37*	*06/29/21 18:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1
Total TPH	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/29/21 09:38*	*06/29/21 14:22*	*1*
o-Terphenyl	*107*		*70 - 130*	*06/29/21 09:38*	*06/29/21 14:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.9**		5.03		mg/Kg			07/01/21 19:59	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-847-1	BH02	98	96										
LCS 880-4724/1-A	Lab Control Sample	87	97										
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102										
MB 880-4724/5-A	Method Blank	60 S1-	82										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-847-1	BH02	102	107										
LCS 880-4722/2-A	Lab Control Sample	97	98										
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107										
MB 880-4722/1-A	Method Blank	90	101										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*

Lab Sample ID: LCS 880-4724/1-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08480		mg/Kg		85	70 - 130		
Toluene			0.100	0.08425		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1733		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08872		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4724/2-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	9	35
Toluene			0.100	0.1077		mg/Kg		108	70 - 130	24	35
Ethylbenzene			0.100	0.09178		mg/Kg		92	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	11	35
o-Xylene			0.100	0.09922		mg/Kg		99	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4722/2-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.5		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	955.9		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-4722/3-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/01/21 17:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	231.0		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-4824/3-A
Matrix: Solid
Analysis Batch: 4825

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	232.2		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Client Sample ID: BH02

Date Collected: 06/18/21 15:35
Date Received: 06/22/21 11:39

Lab Sample ID: 890-847-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 18:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 14:22	AM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 19:59	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-847-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-847-1	BH02	Solid	06/18/21 15:35	06/22/21 11:39	- 6

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Chain of Custody

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

Work Order No: 840

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	31403360.001.0348	☐ Routine ☑ Rush	
Project Location:	EDDY COUNTY	Due Date:	3 DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2116548791		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
BH02	S	6/18/21	1535	6'	Grab	1		X	X	X

890-847 Chain of Custody

Preservative Codes

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

Sample Comments

H2O

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers		6.22.21 1139	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-847-1
SDG Number: Eddy County

Login Number: 847
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-847-1
SDG Number: Eddy County

Login Number: 847
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:27 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-848-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/2/2021 9:30:57 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-848-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Job ID: 890-848-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-848-1

Receipt
The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH03 (890-848-1).BTEX8021

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Client Sample ID: BH03

Date Collected: 06/18/21 15:25
Date Received: 06/22/21 11:39
Sample Depth: - 6

Lab Sample ID: 890-848-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/29/21 14:37*	*06/29/21 22:29*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*06/29/21 14:37*	*06/29/21 22:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/29/21 09:38*	*06/29/21 14:42*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/29/21 09:38*	*06/29/21 14:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1060**		4.97		mg/Kg			07/01/21 20:05	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-848-1	BH03	92	81
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-848-1	BH03	106	114
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*

Lab Sample ID: LCS 880-4724/1-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08480		mg/Kg		85	70 - 130		
Toluene			0.100	0.08425		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1733		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08872		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4724/2-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	9	35
Toluene			0.100	0.1077		mg/Kg		108	70 - 130	24	35
Ethylbenzene			0.100	0.09178		mg/Kg		92	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	11	35
o-Xylene			0.100	0.09922		mg/Kg		99	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4722/2-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.5		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	955.9		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-4722/3-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/01/21 17:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	231.0		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-4824/3-A
Matrix: Solid
Analysis Batch: 4825

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	232.2		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Client Sample ID: BH03

Date Collected: 06/18/21 15:25
Date Received: 06/22/21 11:39

Lab Sample ID: 890-848-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 22:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 14:42	AM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:05	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-848-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-848-1	BH03	Solid	06/18/21 15:25	06/22/21 11:39	- 6

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Chain of Custody

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

Work Order No: 848

www.xenco.com Page 1 of 1

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 782-2329	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	31403360.001.0348	☐ Routine ☒ Rush	
Project Location:	EDDY COUNTY	Due Date:	3 DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2116548791		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH03	S	6/18/21	15:25	6'	Grab	1		X	X	X	HOLD

890-848 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Otte	6/22/21 11:39	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020 2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-848-1
SDG Number: Eddy County

Login Number: 848
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-848-1
SDG Number: Eddy County

Login Number: 848
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:28 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-849-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/2/2021 9:32:17 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-849-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Job ID: 890-849-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-849-1

Receipt
The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH04 (890-849-1)

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Client Sample ID: BH04

Date Collected: 06/18/21 14:58
Date Received: 06/22/21 11:39
Sample Depth: - 6

Lab Sample ID: 890-849-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*06/29/21 14:37*	*06/29/21 22:54*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*06/29/21 14:37*	*06/29/21 22:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1
Total TPH	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/29/21 09:38*	*06/29/21 15:03*	*1*
o-Terphenyl	*115*		*70 - 130*	*06/29/21 09:38*	*06/29/21 15:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**215**		4.95		mg/Kg			07/01/21 20:12	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-849-1	BH04	91	88
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-849-1	BH04	106	115
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*

Lab Sample ID: LCS 880-4724/1-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08480		mg/Kg		85	70 - 130		
Toluene			0.100	0.08425		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1733		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08872		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4724/2-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	9	35
Toluene			0.100	0.1077		mg/Kg		108	70 - 130	24	35
Ethylbenzene			0.100	0.09178		mg/Kg		92	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	11	35
o-Xylene			0.100	0.09922		mg/Kg		99	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4722/2-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.5		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	955.9		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-4722/3-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/01/21 17:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	231.0		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-4824/3-A
Matrix: Solid
Analysis Batch: 4825

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	232.2		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Client Sample ID: BH04

Date Collected: 06/18/21 14:58
Date Received: 06/22/21 11:39

Lab Sample ID: 890-849-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 22:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 15:03	AM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:12	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-849-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-849-1	BH04	Solid	06/18/21 14:58	06/22/21 11:39	- 6

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Chain of Custody

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

Work Order No: 849

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	31403360.001.0348	☐ Routine	☑ Rush
Project Location:	EDDY COUNTY	Due Date:	3DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2116548791		

SAMPLE RECEIPT			
Temp Blank:	[✓ Yes] No	Wet Ice:	[✓ Yes] No
Samples Received Intact:	[✓ Yes] No	Thermometer ID:	T-NM-007
Cooler Custody Seals:	Yes No [✓ N/A]	Correction Factor:	-0.2
Sample Custody Seals:	Yes No [✓ N/A]	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

ANALYSIS REQUEST — Parameters; Pres. Code

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH (EPA 8015Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)	Sample Comments
BH04	S	6/18/21	1458	6'	Grab	1	X	X	X	HOLD

890-849 Chain of Custody

Preservative Codes

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

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Anna Byers	[illegible]	6/22/21 11:39	2			
3				4			
5				6			

Revised Date: 08/25/2020 Rev. 2020 2

7/2/2021

1 2 3 4 5 6 7 8 9 10 11 12 13 14

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-271 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-849-1
Address: 1211 W Florida Ave	Due Date Requested: 6/25/2021	**Analysis Requested**		**Preservation Codes**
City: Midland	TAT Requested (days):			A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA; M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			Other:
Project Name: Holly A Federal #006	Project #: 88000203			
Site	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_NM/8015NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:		X	X				X	
BH04 (890-849-1)	6/18/21	14 58 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time		Method of Shipment:	
Relinquished by: Cue Cufo 6-22-21	Date/Time:	Company	Received by: [signature]	Date/Time: 6-23-21 1:30pm	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact ∆ Yes ∆ No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks.		

Ver 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-849-1
SDG Number: Eddy County

Login Number: 849
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-849-1
SDG Number: Eddy County

Login Number: 849
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:31 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-850-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/2/2021 9:33:23 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-850-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-850-1
Project/Site: Holly A Federal #006 SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Job ID: 890-850-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-850-1

Receipt
The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH05 (890-850-1)

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Client Sample ID: BH05

Date Collected: 06/18/21 14:25
Date Received: 06/22/21 11:39
Sample Depth: - 6

Lab Sample ID: 890-850-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*06/29/21 14:37*	*06/29/21 23:20*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*06/29/21 14:37*	*06/29/21 23:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1
Total TPH	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*06/29/21 09:38*	*06/29/21 15:24*	*1*
o-Terphenyl	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 15:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**854**		5.00		mg/Kg			07/01/21 20:18	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-850-1	BH05	88	85										
LCS 880-4724/1-A	Lab Control Sample	87	97										
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102										
MB 880-4724/5-A	Method Blank	60 S1-	82										

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-850-1	BH05	82	90										
LCS 880-4722/2-A	Lab Control Sample	97	98										
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107										
MB 880-4722/1-A	Method Blank	90	101										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*

Lab Sample ID: LCS 880-4724/1-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08480		mg/Kg		85	70 - 130		
Toluene			0.100	0.08425		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1733		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08872		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4724/2-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	9	35
Toluene			0.100	0.1077		mg/Kg		108	70 - 130	24	35
Ethylbenzene			0.100	0.09178		mg/Kg		92	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	11	35
o-Xylene			0.100	0.09922		mg/Kg		99	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4722/2-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.5		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	955.9		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-4722/3-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/01/21 17:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	231.0		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-4824/3-A
Matrix: Solid
Analysis Batch: 4825

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	232.2		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Client Sample ID: BH05

Date Collected: 06/18/21 14:25
Date Received: 06/22/21 11:39

Lab Sample ID: 890-850-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 23:20	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 15:24	AM	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:18	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-850-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-850-1	BH05	Solid	06/18/21 14:25	06/22/21 11:39	- 6

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Chain of Custody

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

Work Order No: 850

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329 Email:	anna.byers@wsp.com	

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	3148336.0021.0340	☐ Routine ☒ Rush	
Project Location:	EDDY COUNTY	Due Date:	3 DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2116548791		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TNM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021B)	Chloride (EPA 300.0)
BH05	S	6/18/21	1425	6	Grab	1		X	X	X

ANALYSIS REQUEST

890-850 Chain of Custody

Preservative Codes

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

Sample Comments

HOLD

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers		6/22/21 11:39	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-850-1
SDG Number: Eddy County

Login Number: 850
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-850-1
SDG Number: Eddy County

Login Number: 850
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:29 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-851-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Holly A Federal #006

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

Attn: Joseph Hernandez

JKramer

Authorized for release by:
7/2/2021 9:34:28 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Laboratory Job ID: 890-851-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-851-1
Project/Site: Holly A Federal #006 SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Job ID: 890-851-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-851-1

Receipt
The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH06 (890-851-1)

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Client Sample ID: BH06

Date Collected: 06/18/21 14:30
Date Received: 06/22/21 11:39
Sample Depth: - 6

Lab Sample ID: 890-851-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/29/21 14:37*	*06/29/21 23:46*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/29/21 14:37*	*06/29/21 23:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1
Total TPH	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/29/21 09:38*	*06/29/21 15:45*	*1*
o-Terphenyl	*112*		*70 - 130*	*06/29/21 09:38*	*06/29/21 15:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.4**		5.01		mg/Kg			07/01/21 20:24	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-851-1	BH06	97	100
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-851-1	BH06	106	112
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/29/21 10:28*	*06/29/21 16:33*	*1*

Lab Sample ID: LCS 880-4724/1-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08480		mg/Kg		85	70 - 130		
Toluene			0.100	0.08425		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1733		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08872		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4724/2-A
Matrix: Solid
Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	9	35
Toluene			0.100	0.1077		mg/Kg		108	70 - 130	24	35
Ethylbenzene			0.100	0.09178		mg/Kg		92	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.1939		mg/Kg		97	70 - 130	11	35
o-Xylene			0.100	0.09922		mg/Kg		99	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*06/29/21 09:38*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4722/2-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.5		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	955.9		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-4722/3-A
Matrix: Solid
Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/01/21 17:07	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A
Matrix: Solid
Analysis Batch: 4825

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	231.0		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-4824/3-A
Matrix: Solid
Analysis Batch: 4825

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	232.2		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Client Sample ID: BH06

Date Collected: 06/18/21 14:30
Date Received: 06/22/21 11:39

Lab Sample ID: 890-851-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 23:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 15:45	AM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:24	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Holly A Federal #006

Job ID: 890-851-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-851-1	BH06	Solid	06/18/21 14:30	06/22/21 11:39	- 6

eurofins | Environment Testing Xenco

Chain of Custody

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

www.xenco.com Page 1 of 1

Work Order No: 851

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329 Email:		anna.byers@wsp.com

Work Order Comments

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

Project Name:	HOLLY A FEDERAL #006	Turn Around	
Project Number:	31403360.001.0348	☐ Routine ☒ Rush	
Project Location:	EDDY COUNTY	Due Date:	3 DAY TAT
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	nAPP2116548791		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	T-NM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

Preservative Codes

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

ANALYSIS REQUEST

Parameters: TPH (EPA 8015 Mod); BTEX (EPA 8021 B); Chloride (EPA 300.0)

890-851 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Sample Comments
BH06	S	6/18/21	1430	6'	Grab	1	HOLD

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Ater	6/22/21 11:39	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-851-1
SDG Number: Eddy County

Login Number: 851
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-851-1
SDG Number: Eddy County

Login Number: 851
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:28 AM

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

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2116548791
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: 9/1/2021

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

OCD Only

Received by: Robert Hamlet Date: 1/14/2022

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

Signature: Robert Hamlet Date: 1/14/2022

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

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

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 45734
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Workplan/Remediation Plan is approved with the following conditions: Please make sure the floor samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release.	1/14/2022

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

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

CONDITIONS

Action 246967

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 246967
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2116548791 HOLLY A FEDERAL #006, thank you. This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation including pictures of the contoured backfilled excavation surface and a thorough discussion on reseeding mixture, vegetation ratio, timelines, etc.., will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	1/17/2024