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				OGRI	ID: 246289		
Contact Name: Jim Raley				Conta	Contact Telephone: 575-689-7597		
Contact ema	il: jim.raley	@dvn.com		Incide	ent # (assigned by OCD) nAPP2116548791		
Contact mail 88220	ing address:	5315 Buena Vista	a Dr., Carlsbad N	M			
			Location	of Releas	se Source		
Latitude 32.0	175972		(NAD 83 in de	Longiti ecimal degrees to 5	tude -103.9520569 5 decimal places)		
Site Name: H	OLLY A FI	EDERAL #006		Site T	Type: Oil Production Facility		
Date Release	Discovered	: June 13 <sup>th</sup> , 2021		API# (	(if applicable) 30-015-25331		
Unit Letter	Section	Township	Range	, 	County		
B	26	26S	29E	Eddy	County		
		l(s) Released (Select a			of Release  pecific justification for the volumes provided below)		
Crude Oi	I	Volume Release	ed (bbls) 1		Volume Recovered (bbls) 0		
Produced	Water	Volume Release	ed (bbls) 29		Volume Recovered (bbls) 20		
Is the concentration of dissolved chloride in t produced water >10,000 mg/l?				chloride in the	⊠ Yes □ No		
Condensa	ite	Volume Release	ed (bbls)		Volume Recovered (bbls)		
Natural Gas Volume Released (Mcf)			Volume Recovered (Mcf)				
Other (describe) Volume/Weight Released (provide units)		le units)	Volume/Weight Recovered (provide units)				
Cause of Rel	ease: Hole d	leveloped in bottor	m of production to	ank, allowing re	release of fluids to secondary containment.		
$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^{\frac{3}{2}})}{4.21(\frac{ft^{3}}{bbl\ equivalent})}*\ estimated\ soil\ porosity(\%) + recovered\ fluids\ (bbl)$							

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

#### **Responsible Party**

Responsible Party: WPX Energy Permian, LLC					OGRID: 246289		
Contact Name: Jim Raley				Contact To	Contact Telephone: 575-689-7597		
Contact emai	il: Jim.Raley	@dvn.com		Incident #	(assigned by OCD)	: nAPP2116548791	
Contact mail	ing address:	5315 Buena Vista	n Drive, Carlsbad N	NM			
			Location	of Release S	ource		
Latitude		32.014103		Longitude			
			(NAD 83 in dec	cimal degrees to 5 decir	nal places)		
Site Name: H	olly A Fede	ral #006		Site Type:	Oil Production	Facility	
Date Release	Discovered	: 06/13/2021		API# (if app	plicable): 30-015-25	331	
						٦	
Unit Letter	Section	Township	Range	Cour			
G	26	26S	29E	Edd	ly		
	Materia	l(s) Released (Select a	ll that apply and attach	l Volume of 1	justification for the	volumes provided below)	
Crude Oil		Volume Release	ed (bbls): 1		Volume Recovered (bbls): 0		
Produced	Water	Volume Release	ed (bbls): 29		Volume Recovered (bbls): 20		
		Is the concentrate produced water	tion of dissolved cl >10,000 mg/l?	hloride in the	⊠ Yes □ N		
Condensa Condensa	ite	Volume Release	ed (bbls)		Volume Recovered (bbls)		
□ Natural Gas Volume Released (Mcf)				Volume Recovered (Mcf)			
Other (describe) Volume/Weight Released (provide units)			e units)	Volume/Weight Recovered (provide units)			
Cause of Release: Hole developed in bottom of tank, allowing release of fluids to secondary containment.							
	$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^3)}{4.21\ (\frac{ft^3}{bbl\ equivalent})}*\ estimated\ porosity\ (\%) + recovered\ fluids\ (bbl)$						

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Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the respon Volume exceeded 25bbls.	nsible party consider this a major release?		
19.15.29.7(A) NMAC?	Volume exceeded 250018.			
⊠ Yes □ No				
	otice given to the OCD? By whom? To when d via email on 6/13/2021 to Robert Hamlet	nom? When and by what means (phone, email, etc)? and Emily Hernandez.		
	Initial Ro	esponse		
The responsible p		y unless they could create a safety hazard that would result in injury		
The source of the rele	ase has been stopped.			
The impacted area ha	s been secured to protect human health and	the environment.		
Released materials ha	ve been contained via the use of berms or d	likes, absorbent pads, or other containment devices.		
	ecoverable materials have been removed and	d managed appropriately.		
If all the actions described above have <u>not</u> been undertaken, explain why:				
has begun, please attach a	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred clease attach all information needed for closure evaluation.		
regulations all operators are public health or the environm failed to adequately investigations.	required to report and/or file certain release notinent. The acceptance of a C-141 report by the Cate and remediate contamination that pose a thre	best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws		
	y	Title: Environmental Professional		
Signature:		Date:8/2/2023		
email: <u>Jim.Raley@dvn.</u>	com	Telephone: <u>575-689-7597</u>		
OCD Only				
Received by:		Date:		

	Page 4 of 2	47
Incident ID	nAPP2116548791	

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?	<u>51-100</u> (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?				
Are the lateral extents of the release overlying an unstable area such as karst geology? ☐ Yes ☐				
Are the lateral extents of the release within a 100-year floodplain?				
Did the release impact areas <b>not</b> 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.				
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li>Field data</li> <li>Data table of soil contaminant concentration data</li> <li>Depth to water determination</li> <li>Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> <li>Photographs including date and GIS information</li> <li>Topographic/Aerial maps</li> </ul>				

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.

☐ Laboratory data including chain of custody

Received by OCD: 8/2/2023 8:28:57 AM State of New Mexico
Page 4 Oil Conservation Division

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Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator o and/or regulations.	oCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Jim Raley	Title: Environmental Professional
Signature: In Role	8/2/2023
Signature: / /	Date:
email:Jim.Raley@dvn.com	Telephone: <u>575-689-7597</u>
OCD Only	
Received by: Shelly Wells	Date: <u>8/2/2023</u>

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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 its	ems must be included in the closure report.						
A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC						
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							
may endanger public health or the environment. The acceptance of a	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially additions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete.  Title: Environmental Professional						
OCD Only							
Received by: Shelly Wells	Date: 8/2/2023						
	of liability should their operations have failed to adequately investigate and vater, human health, or the environment nor does not relieve the responsible 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;

Closure Request Report Incident Number nAPP2116548791 Holly A Federal #006

- 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

Closure Request Report Incident Number nAPP2116548791 Holly A Federal #006 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 <a href="mailto:joseph@etechenv.com">joseph@etechenv.com</a> or Erick Herrera at (281) 777-4152 or <a href="mailto:erick@etechenv.com">erick@etechenv.com</a>. **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

Ericl &

Joseph S. Hernandez Senior Managing Geologist

cc: Jim Raley, WPX

New Mexico Oil Conservation Division

Bureau of Land Management

Appendices:

Appendix C:

Appendix A: Figure 1: Site Map

> Figure 2: Excavation Soil Sample Locations Figure 3: Delineation Soil Sample Locations

Appendix B: Referenced Well Records Lithologic Sampling Logs

Appendix D: Photographic Log

Appendix E: **Tables** 

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

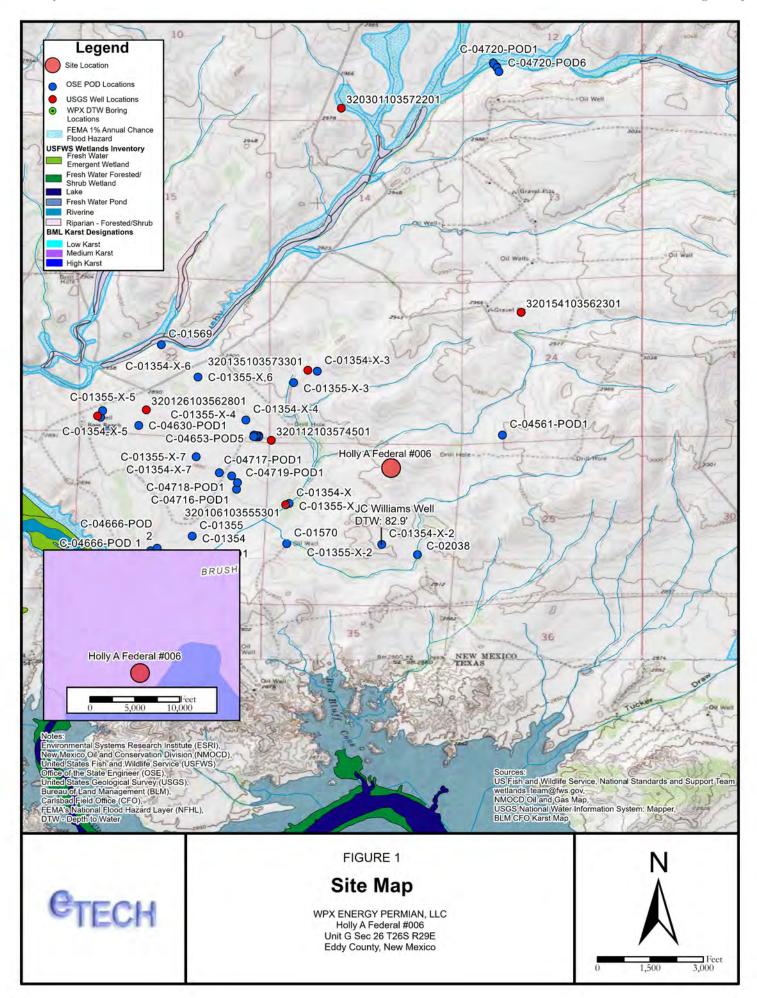
NMOCD Correspondence Appendix G:

Appendix H: Approved Remediation Work Plan

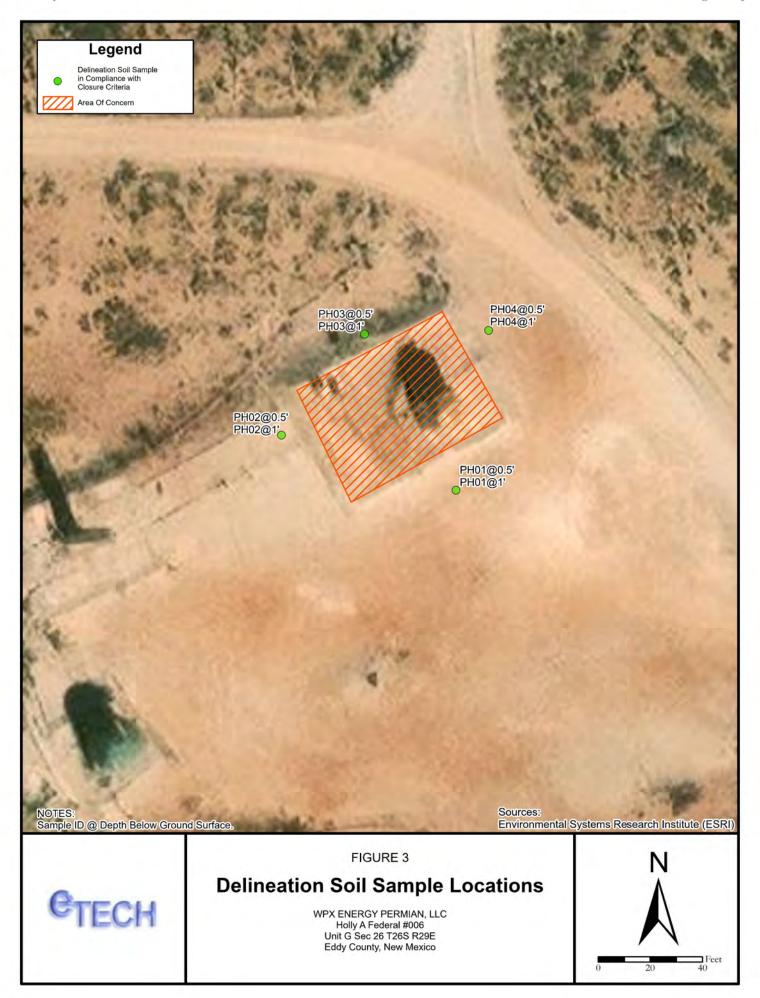
# **APPENDIX A**

**Figures** 









# **APPENDIX B**

# Referenced Well Records



SAMPLING INFORMATION  Set ill isrney / Menicer Well Number: NA Propose © OAS 1987013  Trop of Viver Quality Meers.  Described NA Total Depth of Montan Well Na Some Introno NA Some Introno NA One-Pulper  Time Pulper Rate Temp. pit DO ORP Cond. GW Depth (table) NA = Not Available NR = Not Recorded  NA = Not Recorded  NR = NR	Client:	GROUNDWATER SAMPLING FORM
NA = Not Available	Date Completed: NA  Total Depth of Monitor Well: NA  Screen Interval: NA  Sample Tubing Intake Depth: NA	Project #: 03A1987013  Type of Water Quality Meter:  Date Calibrated NA
NA = Not Available	Tubing Placement GW Deoth (static) After Purge	

# **APPENDIX C**

# Lithologic Sampling Logs



								Sample Name: PH01	Date: 06/21/2022
<b>e</b> tech								Site Name: Holly A Federa	
112011							Incident Number: nAPP2116548791		
							Job Number:18156		
					SAMPL	ING L	UG	Logged By: EK	Method: Backhoe
	nates: 32					A O L I O L I		Hole Diameter: N/A	Total Depth: 1'
								t Strips and PID for chloride water. No correction factors	
			u wit					water. No correction factors	s included.
Moisture Content	Chloride (ppm)	<u>5</u> (2)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Roc k Symbol		
oist ont	lor pdc	Vapor (ppm)	ain	ldu	Sample Depth eet bg	Depth eet bg	SS/	Lithologic De	escriptions/Notes
ဋိၓ	ည် <u> </u>	> =	St	Sar	Si Te	(fe	JSC k S		
						0		(0-1') SAND, dry, red, poor	ly graded, very fine to fine, no
Dry	236.0	0.5	No	PH01	0.5	0.5			and noncohesive and some silt.
	400			D1.10.4	_	- ,			
Dry	<168	0.4	No	PH01	1 _	_ 1			
$\vdash$			<u> </u>			Total	Depth: 1	foot bgs.	
							•	· ·	
`									
		`							
			`						
							`	<b>\</b>	

						Sample Name: PH02	Date: 06/212022		
	e	TEC				Site Name: Holly A Federal #006			
	_	IEC			Incident Number: nAPP2	2116548791			
						Job Number:18156			
	LOGIC /			ING L		Logged By: EK	Method: Backhoe		
Coordinates: 3						Hole Diameter: N/A	Total Depth: 1'		
						t Strips and PID for chlori water. No correction facto	de and vapor, respectively. ors included.		
Moisture Content Chloride (ppm)	Vapor (ppm) Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Roc k Symbol	_	Descriptions/Notes		
Dry 131.4	0.5 N	o PH02	0.5	0 0.5			orly graded, very fine to fine, no ic, and noncohesive and some silt.		
Dry <168	0.1 N	o PH02	1	1					
				Total	Depth: 1	foot bgs.			

			_					Sample Name: PH03	Date: 06/21/2022	
<b>CTECH</b>								Site Name: Holly A Federal #006		
							Incident Number: nAPP2	2116548791		
								Job Number:18156		
					SAMPL	ING L	<u>og</u>	Logged By: EK	Method: Hand Auger	
	nates: 32							Hole Diameter: 4"	Total Depth: 1'	
Comme	ents: Fie	ld scree	ening	conduc	ted with H	ACH Chlo	oride Tes	t Strips and PID for chlori water. No correction fact	ide and vapor, respectively.	
		Home	J WIL	_ 1	ulion facto			water. No correction fact	ors included.	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Roc k Symbol	_	Descriptions/Notes	
Dry	<168	0.5	No	PH03	0.5	- 0 0.5	SP-SM		oorly graded, very fine to fine, no ic, and noncohesive and some silt.	
Dry	<168	0.1	No	PH03	1 _	1				
						Total	Depth: 1	foot bgs.		
						`				

								Sample Name: PH04	Date: 06/21/2022	
<b>e</b> tech								Site Name: Holly A Federal #006		
TECH							Incident Number: nAPP2	2116548791		
								Job Number:18156		
					SAMPL	<u> ING L</u>	<u>OG</u>	Logged By: EK	Method: Backhoe	
	nates: 32							Hole Diameter: N/A	Total Depth: 1'	
									ide and vapor, respectively.	
Chlorid	ie iesi pe	norme	a wit		ution racto		T	water. No correction fact	ors included.	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Roc k Symbol	_	Descriptions/Notes	
Dry	<168	0.5	No	PH04	0.5	_ 0 _ 0.5	SP-SM		oorly graded, very fine to fine, no ic, and noncohesive and some silt.	
Dry	<168	0.4	No	PH04	1 _	_ 1		foot bgs.		

# APPENDIX D

Photographic Logs





#### **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.



#### **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** 





# 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 Closur Release (NMAC 19.15.2		s Impacted by a	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 So	il Samples Analytical R	tesults - nAPP21165487	791				
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



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

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

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

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Raina Schwanz

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

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## Sample Summary

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	Donoutoda
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
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.



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

	E300100-01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: IY	·	Batch: 2325072
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0500	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
	99.7 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Anal	yst: IY		Batch: 2325072
ND	20.0	1	06/23/23	06/23/23	
	84.4 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Anal	yst: KM		Batch: 2325076
ND	25.0	1	06/23/23	06/23/23	
ND	50.0	1	06/23/23	06/23/23	
	79.0 %	50-200	06/23/23	06/23/23	
mg/kg	mg/kg	Anal	yst: RAS		Batch: 2325073
74.5	20.0	1	06/23/23	06/23/23	
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg	Result         Reporting Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           mg/kg         mg/kg           MD         20.0           84.4 %         mg/kg           ND         25.0           ND         50.0           79.0 %         mg/kg           mg/kg         mg/kg	Reporting           Result         Limit         Dilution           mg/kg         mg/kg         Anal           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           MD         0.0250         1           MD         20.0250         1           MB/kg         mg/kg         Anal           ND         20.0         1           84.4 %         70-130           mg/kg         mg/kg         Anal           ND         25.0         1           ND         50.0         1           79.0 %         50-200           mg/kg         mg/kg         Anal	Reporting           Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0500         1         06/23/23           ND         0.0250         1         06/23/23           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         06/23/23           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         06/23/23           ND         50.0         1         06/23/23           ND         50.0         1         06/23/23           ND         50.0         1         06/23/23           ND         50.0         1         06/23/23           mg/kg         mg/kg         Analyst: RAS	Reporting           Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0500         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: IY         ND         20.0         1         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: KM         ND         25.0         1         06/23/23         06/23/23           ND         25.0         1         06/23/23         06/23/23         06/23/23           ND         50.0         1         06/23/23         06/23/23           ND         50.0         1         06/23/23         06/23/23           ND         50.0         1         06/23/23



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

		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ar	nalyst: 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	Ar	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	Ar	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	Ar	nalyst: RAS		Batch: 2325073
Chloride	220	20.0	1	06/23/23	06/23/23	



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						
Reporting						
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Aı	nalyst: 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 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	Aı	nalyst: 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	Aı	nalyst: RAS		Batch: 2325073
Chloride	95.9	20.0	1	06/23/23	06/23/23	



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				
Reporting						
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: 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	Ana	alyst: 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	Ana	alyst: 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	Ana	alyst: RAS		Batch: 2325073
Chloride	73.2	20.0	1	06/23/23	06/23/23	·



		<b>QU</b>	<b>4111111</b>	ir y Duc	••				
WPX Energy - Carlsbad		Project Name:		olly A Federa	1 #006				Reported:
5315 Buena Vista Dr		Project Number:	01	1058-0007					
Carlsbad NM, 88220		Project Manager:	G	ilbert Moreno	•			6	5/26/2023 4:46:22PM
		Volatile O	rganics b	oy EPA 802	21B				Analyst: IY
Analyte		Reporting	Spike	Source		Rec	DDD	RPD	
	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2325072-BLK1)							Prepared: 0	6/23/23 An	alyzed: 06/23/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
o,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: 0	6/23/23 An	alyzed: 06/23/23
Benzene	5.03	0.0250	5.00		101	70-130			
thylbenzene	4.85	0.0250	5.00		97.0	70-130			
Coluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
o,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: 0	6/23/23 An	alyzed: 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			
-Xylene	4.91	0.0250	5.00	ND	98.1	63-131			
o,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: 0	6/23/23 An	alyzed: 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	
o,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.98	20	
Fotal Xylenes	15.1	0.0250	15.0	ND	101	63-131	1.92	20	
Matrix Spike Dup (2325072-MSD1)  Benzene Ethylbenzene Toluene o-Xylene p,m-Xylene Total Xylenes	5.07 4.88 5.07 4.99 10.1	0.0250 0.0250 0.0250 0.0500	5.00 5.00 5.00 5.00 10.0	ND ND ND ND	101 97.7 101 99.9 101	54-133 61-133 61-130 63-131 63-131	1.84 2.11 1.94 1.80 1.98	20 20 20 20 20 20	alyzed: 0



70-130

Surrogate: 4-Bromochlorobenzene-PID

Surrogate: 1-Chloro-4-fluorobenzene-FID

# **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

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				6/2	26/2023 4:46:22PM
	Nor	halogenated	Organics	by EPA 80	15D - G	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec	Rec Limits	RPD %	RPD Limit %	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	/0	/0	70	/0	notes
Blank (2325072-BLK1)							Prepared: 0	6/23/23 Anai	lyzed: 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: 0	6/23/23 Ana	lyzed: 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: 0	6/23/23 Ana	lyzed: 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: 0	6/23/23 Ana	lyzed: 06/23/23
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.7	70-130	2.45	20	

8.00

7.11

88.9

70-130

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

Carlsbad NM, 88220		Project Manager	r: G1	lbert Moreno					6/26/2023 4:46:22PN
	Nonha	logenated Or	ganics by l	EPA 8015I	) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2325076-BLK1)							Prepared: 0	6/23/23 A	nalyzed: 06/26/23
iesel Range Organics (C10-C28)	ND	25.0							
il Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	33.2		50.0		66.5	50-200			
CS (2325076-BS1)							Prepared: 0	6/23/23 A	nalyzed: 06/26/23
iesel Range Organics (C10-C28)	249	25.0	250		99.4	38-132			
urrogate: n-Nonane	29.0		50.0		57.9	50-200			
latrix Spike (2325076-MS1)				Source:	E306176-0	04	Prepared: 0	6/23/23 A	nalyzed: 06/26/23
iesel Range Organics (C10-C28)	246	25.0	250	ND	98.5	38-132			
urrogate: n-Nonane	28.0		50.0		56.1	50-200			
1atrix Spike Dup (2325076-MSD1)				Source:	E306176-0	04	Prepared: 0	6/23/23 A	nalyzed: 06/26/23
iesel Range Organics (C10-C28)	246	25.0	250	ND	98.5	38-132	0.0367	20	
urrogate: n-Nonane	25.2		50.0		50.4	50-200			

## **QC Summary Data**

WPX Energy - Carlsbad		Project Name:		olly A Federal	#006				Reported:
5315 Buena Vista Dr Carlsbad NM, 88220		Project Number: Project Manager:		1058-0007 ilbert Moreno					6/26/2023 4:46:22PM
		Anions	by EPA 3	300.0/9056 <i>A</i>	<b>A</b>				Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2325073-BLK1)							Prepared: 0	6/23/23	Analyzed: 06/23/23
Chloride	ND	20.0							
LCS (2325073-BS1)							Prepared: 0	6/23/23	Analyzed: 06/23/23
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2325073-MS1)				Source:	E306180-0	)1	Prepared: 0	6/23/23	Analyzed: 06/23/23
Chloride	341	20.0	250	74.5	106	80-120			
Matrix Spike Dup (2325073-MSD1)				Source:	E306180-0	)1	Prepared: 0	6/23/23	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.



-300	PX Energy Pe					Bill To					_	e On					TAT		EPA P	
	Holly A Federa				Att	ention: Jim Raley		Lab	WO#	101		Job I	Number	, 10	) 2	2D 3	D	Standard	CWA	SDW
	Manager: Gilbe					dress: 5315 Buena Vista Dr.	220	E	306	180		010	58.000		-	4		24 HR		DCD
	13000 W Cou e, Zip_Odessa					y, State, Zip: Carlsbad, NM, 88 one: 575-885-7502	3220		- 1	- 1		Anaiy	sis and Met	noa	_	-	_			RCR
	32-541-7719	1,17,7570	)3		_	ail: jim.raley@dvn.com			(O b)										State	
	evon-team@e	techeny	com			S/WO: 21181923		1	0/0				0	5		11		NM CO		TX
	by: Edyte Ko				_	ident ID: nAPP2116548791		-	/DR	8021	260	010	300.0	N		i	≤	11111 00	01 /12	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	1		Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride	Jouga			STOC		Remarks	
9:10	6/21/2023	S	1			FS01	1	5'	μ ω	ш		-		)						
9:00	6/21/2023	S	1			FS02	2	5'						,	(					
9:30	6/21/2023	S	1			SW01	3	0-5'						,	(					
9:40	6/21/2023	S	1			SW02	4	0-5'						,	(	Ť	T			
	0.4									7										
	Carles in	20												1	-		t			
/																				
ddition	al Instruction	s:		1							4						_1_			
	pler), attest to the					t tampering with or intentionally mislabi	elling the sample l	ocation	n,			1000						ved on ice the day than 6 °C on subse		led or
Relinguishe	ed by: (Signature	)	Date	Time		Received by: (Signature)	Date 4		Time	300	)	Rece	eived on ic	e:	Lab	Use / N	Only			
YWO	ed by: (Signature	ws		223 1	730	Received by: (Signature)	6-22	-23	_	34	5	T1		<u></u>	2					
Relinguish	ed by: (Signature	W550	Date	73-73	2400	Received by: (Signature)	06/23	13	Time 7:	19		AVG	Temp °C_	4.0						



envirotech

envirotech Inc.

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

#### **Envirotech Analytical Laboratory**

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 Ord	ler ID:	E306180
Phone:	(539) 573-4018	Date Logged In:	06/22/23 1	16:46	Logged In	n By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/23/23	17:00 (0 day TAT)		·	
Chain of	Custody (COC)						
	ne sample ID match the COC?		Yes				
	ne number of samples per sampling site location ma	tch the COC	Yes				
	amples dropped off by client or carrier?		Yes	Carrier: Cor	<u>urier</u>		
	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes				
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes		<u>Co</u>	mment	s/Resolution
Sample T	<u> Curn Around Time (TAT)</u>			Г			
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C	Cooler						
7. Was a s	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was the	e 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				
	e sample received on ice? If yes, the recorded temp is 4°C.  Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	re received w/i 15	Yes C				
Sample C							
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers	?	Yes				
	appropriate volume/weight or number of sample contai		Yes				
Field Lal	•						
	field sample labels filled out with the minimum info	ormation:					
S	ample ID?		Yes				
	ate/Time Collected?		Yes	_			
	ollectors name?		Yes				
	Preservation	10					
	the COC or field labels indicate the samples were p	reserved?	No				
	ample(s) correctly preserved?	. 1.0	NA				
24. Is lab	filteration required and/or requested for dissolved n	netais?	No				
	se Sample Matrix						
	the sample have more than one phase, i.e., multipha		No				
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
28. Are sa	amples required to get sent to a subcontract laborato	ory?	No				
29. Was a	subcontract laboratory specified by the client and i	f so who?	NA	Subcontract Lab: 1	NA		
Client Ir	<u>ıstruction</u>						

Date

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

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

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

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

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**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

Office: 505-421-LABS(5227)

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



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## **Sample Summary**

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	Donoutoda
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
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.



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

		E300181-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Tillalyte	Result	Liiiit	Dilution	Trepared	7 thaty zed	rotes
Volatile Organics by EPA 8021B	mg/kg mg		Analy	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	Analy	yst: 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	Analy	yst: 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	Analy	yst: RAS		Batch: 2325073
Chloride	900	20.0	1	06/23/23	06/23/23	



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				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: 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	An	alyst: 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	An	alyst: 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	An	alyst: RAS		Batch: 2325073
Chloride	543	20.0	1	06/23/23	06/23/23	



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				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: 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	Ana	ılyst: 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	Ana	ılyst: 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	Ana	ılyst: RAS		Batch: 2325073
Chloride	543	20.0	1	06/23/23	06/23/23	



ported: 3 4:29:03PM est: IY
st: IY
Notes
06/23/23
06/23/23
06/23/23
06/23/23
-



Surrogate: 4-Bromochlorobenzene-PID

70-130

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

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				6/2	6/2023 4:29:03PM	
	Nonhalogenated Organics by EPA 8015D - GRO							Analyst: IY		
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes	
D. J. (22202 D. V.C.)	mg/kg	mg/ Kg		mg/kg		70				
Blank (2325072-BLK1)							Prepared: 0	6/23/23 Anal	yzed: 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: 0	6/23/23 Anal	yzed: 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: 0	6/23/23 Anal	yzed: 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: 0	6/23/23 Anal	yzed: 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				

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

	Analyst: KM
	RPD imit
%	% Notes
epared: 06/23/2	23 Analyzed: 06/26/23
epared: 06/23/2	23 Analyzed: 06/26/23
epared: 06/23/2	23 Analyzed: 06/26/23
epared: 06/23/2	23 Analyzed: 06/26/23
7.46	20
e	epared: 06/23/2

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager	01	olly A Federa 1058-0007 ilbert Moreno					Reported: 6/26/2023 4:29:03PM
		Anions	by EPA 3	300.0/9056 <i>£</i>	4				Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2325073-BLK1)							Prepared: 0	6/23/23	Analyzed: 06/23/23
Chloride	ND	20.0							
LCS (2325073-BS1)							Prepared: 0	6/23/23	Analyzed: 06/23/23
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2325073-MS1)				Source:	E306180-	01	Prepared: 0	6/23/23	Analyzed: 06/23/23
Chloride	341	20.0	250	74.5	106	80-120			
Matrix Spike Dup (2325073-MSD1)				Source:	E306180-	01	Prepared: 0	6/23/23	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	
١	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: W	PX Energy Pe	rmian II (	-			Bill To				La	b Us	e On	ly	T	T	ΔT	FPΔ	Program
	Holly A Federa				Atte	ntion: Jim Raley		Lah	WO				Number	1D 2D		Standar		SDWA
	Manager: Gilbe		no		Add	ress: 5315 Buena Vista Dr.		F	3010	181	/	010	58-0007		-	24 HR	23300	
	13000 W Cou					State, Zip: Carlsbad, NM, 8822	20	-	-	7 4	1	Analy	sis and Metho	od				RCRA
	e, Zip_Odessa	TX, 797	65		Pho	ne: 575-885-7502			by									
100000	32-541-7719				Ema	il: jim.raley@dvn.com			ORO								State	
	evon-team@e		com			5/WO: 21181923			RO/	21	0	0	300.0	ΣZ	×	NM	CO UT AZ	Z TX
Collected	by: Edyte Ko	nan			Incid	dent ID: nAPP2116548791	-	£	0/0	y 80.	, 826	601	le 30					
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 3	верос	CDOC		Remark	Program SDWA RCRA
9:20	6/21/2023	S	1			FS03	1	4'						x				
9:50	6/21/2023	S	1			SW03	2	0-4						х				
10:00	6/21/2023	S	1			SW04	3	0-4						х				
	Cold	in the																
	/							-							-			
Addition	al Instruction	s:																
				of this sample. I am be grounds for legal a		tampering with or intentionally mislabellin	g the sample l	ocatio	n,				es requiring thermal ed packed in ice at a					
			Date	22.23 Time		Received by: (Signature)	Date (6-22-	23	Time	300		Rece	eived on ice:	Lab		nly		
M	ed by: (Signature	eux	Date		30	Received by: (Signature)	Date 6-12		Time			T1		T2		<u></u>		
Relinquishe	ed by: (Signature Vix: S - Soil, Sd - Sol	usso	6.	2.0	400	Received by: Signature Man	Date (0/23/	23	Time	30	)	AVG	Temp °C	1				



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

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

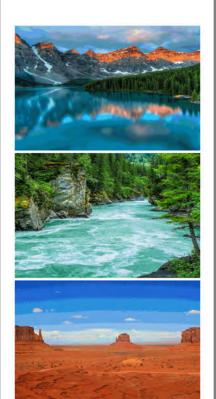
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

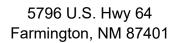
Client:	WPX Energy - Carlsbad	Date Received:	06/23/23 0	7:30	Work Order ID:	E306181
Phone:	(539) 573-4018	Date Logged In:	06/22/23 1	6:47	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/23/23 1	7:00 (0 day TAT)		
Chain of	Custody (COC)					
	ne sample ID match the COC?		Yes			
	e number of samples per sampling site location ma	tch the COC	Yes			
	amples dropped off by client or carrier?		Yes	Carrier: Cour	<u>ier</u>	
4. Was the	e COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes			
5. Were al	Il samples received within holding time?  Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes		Comment	ts/Resolution
Sample T	urn Around Time (TAT)					
6. Did the	COC indicate standard TAT, or Expedited TAT?		Yes			
Sample C	<u>Cooler</u>					
7. Was a s	sample cooler received?		Yes			
8. If yes,	was cooler received in good condition?		Yes			
9. Was the	e 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	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes			
Sample C			_			
	queous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
	trip blank (TB) included for VOC analyses?		NA			
	on-VOC samples collected in the correct containers	9	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field Lab	· · ·	ners concerca.	105			
	field sample labels filled out with the minimum info	ormation.				
	ample ID?	mation.	Yes			
	ate/Time Collected?		Yes			
C	ollectors name?		Yes			
Sample P	<u>reservation</u>					
21. Does	the COC or field labels indicate the samples were pr	reserved?	No			
22. Are sa	ample(s) correctly preserved?		NA			
24. Is lab	filteration required and/or requested for dissolved n	netals?	No			
Multipha	se Sample Matrix					
26. Does	the sample have more than one phase, i.e., multipha	se?	No			
27. If yes,	does the COC specify which phase(s) is to be analy	yzed?	NA			
Subcontr	act Laboratory					
-	imples required to get sent to a subcontract laborato	rv?	No			
	subcontract laboratory specified by the client and it	-		Subcontract Lab: NA	A	
				Subcontract Lab. 14	•	
Chent In	<u>istruction</u>					

Date

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

Report to:
Gilbert Moreno





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

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

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

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Cell: 775-287-1762

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## Sample Summary

WPX Energy - Carlsbad	Project Name:	Holly A Federal #006	Donoutoda
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
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.

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

	E300163-01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Ana	lyst: IY		Batch: 2325072
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0500	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
	95.9 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Ana	lyst: IY		Batch: 2325072
ND	20.0	1	06/23/23	06/23/23	
	88.7 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Ana	lyst: KM		Batch: 2326023
ND	25.0	1	06/27/23	06/27/23	
ND	50.0	1	06/27/23	06/27/23	
	100 %	50-200	06/27/23	06/27/23	
mg/kg	mg/kg	Ana	lyst: BA		Batch: 2325081
242	20.0	1	06/23/23	06/28/23	
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg	Result         Reporting Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           mg/kg         mg/kg           MB/kg         mg/kg           MB/kg         mg/kg           ND         20.0           88.7 %         mg/kg           ND         25.0           ND         50.0           100 %         mg/kg           mg/kg         mg/kg	Reporting           Result         Limit         Dilution           mg/kg         mg/kg         Ana           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           mg/kg         mg/kg         Ana           ND         20.0         1           88.7 %         70-130         70-130           mg/kg         mg/kg         Ana           ND         25.0         1           ND         50.0         1           100 %         50-200           mg/kg         mg/kg         Ana	Reporting           Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: 1Y           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0500         1         06/23/23           ND         0.0250         1         06/23/23           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         06/23/23           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         06/27/23           ND         50.0         1         06/27/23           ND         50.0         1         06/27/23           ng/kg         mg/kg         Analyst: KM	Reporting         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0500         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: IY         ND         20.0         1         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: KM         ND         25.0         1         06/23/23         06/23/23           ND         25.0         1         06/27/23         06/27/23         06/27/23           ND         50.0         1         06/27/23         06/27/23           ND         50.0         1         06/27/23         06/27/23           ng/kg         mg/kg         Analyst: BA



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

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: 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	Ana	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	Ana	ılyst: 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	Ana	ılyst: 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				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	rst: 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	Analy	rst: 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	Analy	st: 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	Analy	st: BA		Batch: 2325081
Chloride	103	40.0	2	06/23/23	06/28/23	



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

	2000100 0.				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: IY		Batch: 2325072
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0500	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
	97.7 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Anal	yst: IY		Batch: 2325072
ND	20.0	1	06/23/23	06/23/23	
	86.0 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Anal	yst: KM		Batch: 2326023
ND	25.0	1	06/27/23	06/27/23	
ND	50.0	1	06/27/23	06/27/23	
	119 %	50-200	06/27/23	06/27/23	
mg/kg	mg/kg	Anal	yst: BA		Batch: 2325081
	mg/kg ND	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           MD         0.0250           MD         0.0250           MD         20.0250           MD         20.0           86.0 %         mg/kg           ND         25.0           ND         50.0           119 %	mg/kg         mg/kg         Anal           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           97.7 %         70-130           mg/kg         mg/kg         Anal           ND         20.0         1           86.0 %         70-130         1           mg/kg         mg/kg         Anal           ND         25.0         1           ND         50.0         1           119 %         50-200	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0500         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         06/23/23           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         06/27/23           ND         50.0         1         06/27/23           ND         50.0         1         06/27/23	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY         Analyst: IY           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0500         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           97.7 %         70-130         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         06/27/23         06/27/23           ND         50.0         1         06/27/23         06/27/23           ND         50.0         1         06/27/23         06/27/23



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						
Reporting								
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes		
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: 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	An	alyst: 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	An	alyst: 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	An	alyst: BA		Batch: 2325081		
Chloride	ND	40.0	2	06/23/23	06/28/23	·		



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

		D				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: 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	Anal	yst: 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	Anal	yst: 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	Anal	yst: BA		Batch: 2325081
Chloride	ND	40.0	2	06/23/23	06/28/23	



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

	E300103-07				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Ana	lyst: IY		Batch: 2325072
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
ND	0.0500	1	06/23/23	06/23/23	
ND	0.0250	1	06/23/23	06/23/23	
	97.1 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Ana	lyst: IY		Batch: 2325072
ND	20.0	1	06/23/23	06/23/23	
	85.9 %	70-130	06/23/23	06/23/23	
mg/kg	mg/kg	Ana	lyst: KM		Batch: 2326023
ND	25.0	1	06/27/23	06/27/23	
ND	50.0	1	06/27/23	06/27/23	
	108 %	50-200	06/27/23	06/27/23	
mg/kg	mg/kg	Ana	lyst: BA		Batch: 2325081
23.3	20.0	1	06/23/23	06/28/23	
	mg/kg ND Mg/kg ND mg/kg	mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           MD         0.0250           MD         0.0250           97.1 %           mg/kg         mg/kg           ND         20.0           85.9 %         mg/kg           ND         25.0           ND         50.0           108 %         mg/kg           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Ana           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           MD         0.0250         1           MD         70-130         0           mg/kg         mg/kg         Ana           ND         20.0         1           85.9 %         70-130         0           mg/kg         mg/kg         Ana           ND         25.0         1           ND         50.0         1           108 %         50-200           mg/kg         mg/kg         Ana	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0500         1         06/23/23           ND         0.0250         1         06/23/23           ND         0.0250         1         06/23/23           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         06/23/23           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         06/27/23           ND         50.0         1         06/27/23           ND         50.0         1         06/27/23           Mg/kg         mg/kg         Analyst: KM	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0500         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           ND         0.0250         1         06/23/23         06/23/23           97.1 %         70-130         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         06/23/23         06/23/23           85.9 %         70-130         06/23/23         06/23/23           mg/kg         mg/kg         Analyst: KM           ND         25.0         1         06/27/23         06/27/23           ND         50.0         1         06/27/23         06/27/23           ND         50.0         1         06/27/23         06/27/23           Mg/kg         mg/k



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

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: 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	Ana	lyst: 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	Ana	lyst: 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	Ana	lyst: BA		Batch: 2325081
· · · · · · · · · · · · · · · · · · ·	22.4	20.0		06/23/23	06/28/23	



		<u>QC</u> bi	41111114	ir y Data	<u> </u>				
WPX Energy - Carlsbad 5315 Buena Vista Dr		Project Name: Project Number:		olly A Federal	#006	_			Reported:
		·		01058-0007				6/0	2/2022 11 12 24 11
Carlsbad NM, 88220		Project Manager:	Gi	ilbert Moreno				6/2	9/2023 11:13:24AM
		Volatile O	rganics b	y EPA 802	21B				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2325072-BLK1)							Prepared: 0	6/23/23 Anal	yzed: 06/23/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
p-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: 0	6/23/23 Anal	yzed: 06/23/23
Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Coluene	5.02	0.0250	5.00		100	70-130			
-Xylene	4.97	0.0250	5.00		99.5	70-130			
o,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: 0	6/23/23 Anal	yzed: 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			
o,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: 0	6/23/23 Anal	yzed: 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	
p-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	1.80	20	
o,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	



70-130

Surrogate: 4-Bromochlorobenzene-PID

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

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				6/	29/2023 11:13:24AM	
	Nonhalogenated Organics by EPA 8015D - GRO							Analyst: IY		
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes	
	mg/kg	mg/Kg	mg/kg	mg/kg	70	70				
Blank (2325072-BLK1)							Prepared: 0	6/23/23 Ana	alyzed: 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: 0	6/23/23 Ana	alyzed: 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: 0	repared: 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: 0	pared: 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				



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

Carisbad Nivi, 88220		Project Manage	r. Gi	ibert Moreno				,	3/29/2023 11.13.24A1	
	Nonha	logenated Or	ganics by	EPA 8015I	) - DRO	/ORO			Analyst: KM	
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes	
Blank (2326023-BLK1)							Prepared: 0	6/27/23 Ar	nalyzed: 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: 0	6/27/23 Ar	nalyzed: 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: 0	pared: 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 5315 Buena Vista Dr		Project Name:		olly A Federal	#006				Reported:
Carlsbad NM, 88220		Project Number: Project Manager		1058-0007 ilbert Moreno					6/29/2023 11:13:24AM
		Anions	by EPA 3	300.0/9056 <i>A</i>	4				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2325081-BLK1)							Prepared: 0	6/23/23 A	nalyzed: 06/28/23
Chloride	ND	20.0							
LCS (2325081-BS1)							Prepared: 0	6/23/23 A	nalyzed: 06/28/23
Chloride	267	20.0	250		107	90-110			
Matrix Spike (2325081-MS1)				Source:	E306183-	01	Prepared: 0	6/23/23 A	nalyzed: 06/28/23
Chloride	540	20.0	250	242	119	80-120			
Matrix Spike Dup (2325081-MSD1)				Source:	E306183-	01	Prepared: 0	6/23/23 A	nalyzed: 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.



lient: W	PX Energy Pe	rmian LLO	С.			Bill To				La	b Use	On	lv			TA	Т	EPA P	rogram
	Holly A Federa				Attention:			Lab	WO#		J	lob	Number	1D	2D	3D	Standard	CWA	SDWA
	/lanager: Gilb		no		Address: 5	315 Buena Vista Dr.		Fa	306	183	3 1	DIAS	8-0007	10 2.			5 day TAT		
ddress:	13000 W Cou	inty Rd 1	00		City, State	, Zip: Carlsbad, NM, 88	3220	-					sis and Metho	1					RCRA
ity, Stat	e, Zip_Odessa	a,TX, 797	65		Phone: 57	5-885-7502			þý										4
hone: 8	32-541-7719				Email: jim.	raley@dvn.com		1	ORO									State	
mail: D	evon-team@e	techenv.	com		WBS/WO:	21181923			RO/0	21	0		0.0	N		_	NM CO	UT AZ	TX
ollected	by: Edyte Ko	nan			Incident ID	: nAPP2116548791		TT	g/o	802	826	6010	e 300.0	1		X			
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	верос		СБОС		Remarks	Page rogram SDW/
10:10	6/21/2023	S	1		PH0	1	1	0.5						х					
10:20	6/21/2023	S	1		PH0	1	2	1'						х					
10:30	6/21/2023	S	1		PH0	2	3	0.5'						х					
10:40	6/21/2023	S	1		PHO	2	4	1'						х					
10:50	6/21/2023	S	1	li ea	PH0	3	5	0.5					Die E	х					
11:00	6/21/2023	S	1		PHO	3	6	1'						х					
11:10	6/21/2023	S	1		PH0	4	7	0.5						х					
11:20	6/21/2023	S	1		PHO	4	8	1'						х					
	n la	<u>46</u>	_																
_	(3)	36												l l					
ddition	al Instruction	s:																	
				of this sample. I am be grounds for legal		ng with or intentionally mislab Sampled by:		locatio	n,				es requiring thermal ed packed in ice at an						pled or
al	d by: (Signature			22.23 13	00 m	ed by: (Signature)	Date	9	Time	00		Lab Use Only Received on ice: (Y)/ N			У				
elinquisb	ed by: (Signature		Date	2223 Time		ed by (Signature)	6.12	-73	Time	84	5	Т1		T2			<u></u>		



ent or disposed of at the client expense. The report for the analysis of the above environment of the client expense. The report for the analysis of the above environment of the client expense.

envirotech Inc.

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

#### **Envirotech Analytical Laboratory**

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)					
	ne sample ID match the COC?		Yes			
	ne number of samples per sampling site location ma	tch the COC	Yes			
	amples dropped off by client or carrier?		Yes	Carrier: Cour	<u>rier</u>	
	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes			
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes		Comment	ts/Resolution
Sample T	<u> Curn Around Time (TAT)</u>					
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample C	<u>Cooler</u>					
	sample cooler received?		Yes			
8. If yes,	was cooler received in good condition?		Yes			
9. Was the	e 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			
	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	re received w/i 15	Yes C			
	Container .					
	queous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
	trip blank (TB) included for VOC analyses?		NA			
	on-VOC samples collected in the correct containers	?	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field Lal	•					
	field sample labels filled out with the minimum info	ormation:				
S	ample ID?		Yes			
	ate/Time Collected?		Yes			
	ollectors name?		Yes			
	Preservation	10				
	the COC or field labels indicate the samples were p	reserved?	No			
	ample(s) correctly preserved?	. 1.0	NA			
	filteration required and/or requested for dissolved n	netais?	No			
	se Sample Matrix	_				
	the sample have more than one phase, i.e., multipha		No			
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA			
Subcontr	act Laboratory					
28. Are sa	amples required to get sent to a subcontract laborato	ry?	No			
29. Was a	subcontract laboratory specified by the client and i	f so who?	NA	Subcontract Lab: Na	A	
Client In	<u>ıstruction</u>					

Date

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

## **APPENDIX G**

# NMOCD Correspondence

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



#### **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

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)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

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

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



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**

D '11	D . M/DX/	T. D.	110		OCDID	246200			
Responsible Party: WPX Energy Permian, LLC				OGRID:					
Contact Name: Jim Raley				Contact Telephone: 575-689-7597					
Contact ema	il: jim.raley	@dvn.com			Incident #	(assigned by OCD)	nAPP2116548791		
Contact mail 88220	ing address:	5315 Buena Vista	a Dr., Carlsbad N	M					
			Location	n of R	Release S	Source			
Latitude 32.0	175972				Longitude	-103.9520569			
			(NAD 83 in d	lecimal de	egrees to 5 deci				
Site Name: H	OLLY A FI	EDERAL #006			Site Type	: Oil Production	Facility		
Date Release	Discovered:	: June 13 <sup>th</sup> , 2021			API# (if ap	pplicable) 30-015-253	331		
** ** * · ·	I a .								
Unit Letter	Section	Township	Range	F 1 1	Cou	inty	-		
В	26	26S	29E	Edd	У				
	Materia		Nature an	d Vo	lume of	c justification for the	volumes provided below)		
Crude Oil	l	Volume Release	ed (bbls) 1			overed (bbls) 0			
Produced	Water	Volume Release	ed (bbls) 29			Volume Recovered (bbls) 20			
		Is the concentra produced water	tion of dissolved >10,000 mg/l?	chlorid	e in the	Го			
Condensa	ite	Volume Release				Volume Reco	vered (bbls)		
Natural G	as	Volume Release	ed (Mcf)			Volume Reco	vered (Mcf)		
Other (de	scribe)	Volume/Weight	Released (providence)	de units	)	ght Recovered (provide units)			
Cause of Relable bbl estima		leveloped in botton  ted soil volume (ft <sup>3</sup> 21(ft <sup>3</sup> /bbl equivalent)					condary containment. ids (bbl)		

Received by OCD: 8/2/2023 8:28:57 AM! State of New Mexico
Page 2 Oil Conservation Division

7373	77.6	10	100	0 4 5
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4.40)		-	· / 4	r pr w
				4

Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? Volume exceeded 25 bbls
⊠ Yes □ No	
To the second se	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? It was a considered via email on 6/13/2021 to Robert Hamlet and Emily Hernandez
	Initial Response
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.
The impacted area ha	s been secured to protect human health and the environment.
Released materials ha	we been contained via the use of berms or dikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain why:
Per 19 15 29 8 B (4) NM	AC 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 at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have atteand remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name:James	s Raley Title: Environmental Specialist
fin	Pate: 06/22/2021
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 III

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

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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 33251

#### CONDITIONS

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

#### CONDITIONS

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

	Page 84 of 2	40
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?							
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?							
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?							
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 <b>not</b> 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil						
Characterization Report Checklist: Each of the following items must be included in the report.							
<ul> <li>✓ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wel</li> <li>✓ Field data</li> <li>✓ Data table of soil contaminant concentration data</li> <li>✓ Depth to water determination</li> <li>✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> </ul>	ls.						
Roring or excavation logs							

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.

▼ Topographic/Aerial maps

Photographs including date and GIS information

✓ Laboratory data including chain of custody

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Page 4 Oil Conservation Division

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Incident ID	nAPP2116548791
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Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the Gailed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	fications and perform corrective actions for releases which may endanger DCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Jim Raley	Title: Environmental Professional
Signature: fin Refe	Date: 9-1-2021
email: jim.raley.dvn.com	Telephone: 575-689-7597
OCD Only	
Received by:	Date:

	Page 86 of 26	40
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.								
<ul> <li>✓ Detailed description of proposed remediation technique</li> <li>✓ Scaled sitemap with GPS coordinates showing delineation points</li> <li>✓ Estimated volume of material to be remediated</li> <li>✓ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>✓ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>								
<u>Deferral Requests Only</u> : Each of the following items must be con	nfirmed as part of any request for deferral of remediation.							
Contamination must be in areas immediately under or around predeconstruction.	roduction equipment where remediation could cause a major facility							
Extents of contamination must be fully delineated.								
Contamination does not cause an imminent risk to human health	n, the environment, or groundwater.							
	e and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of							
Printed Name: Jim Raley	Title: Environmental Professional							
Signature: fix R44	Date: 9/1/2021							
email: jim.raley.dvn.com	Telephone: <u>575-689-7597</u>							
OCD Only								
Received by:	Date:							
☐ Approved ☐ Approved with Attached Conditions of	Approval							
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



District II Page 2

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)



District II Page 3

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.



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#### **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

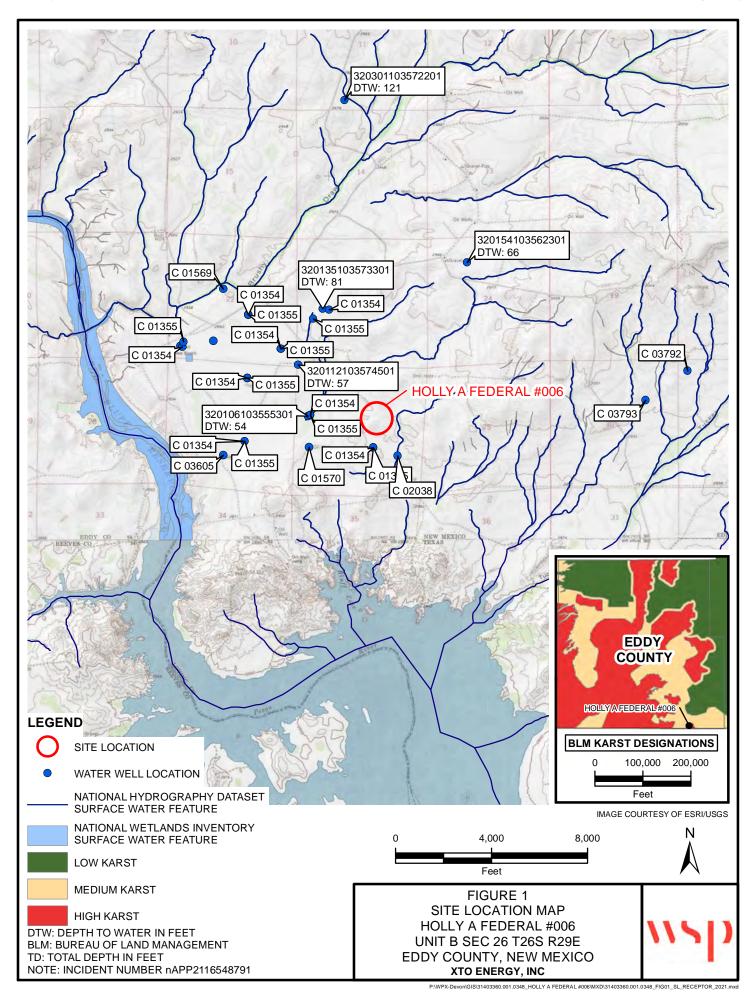
Table 1 Soil Analytical Results

Attachment 1 Referenced Well Record

Attachment 2 Photographic Log

Attachment 3 Lithologic/Soil Sampling Log

Attachment 4 Laboratory Analytical Reports



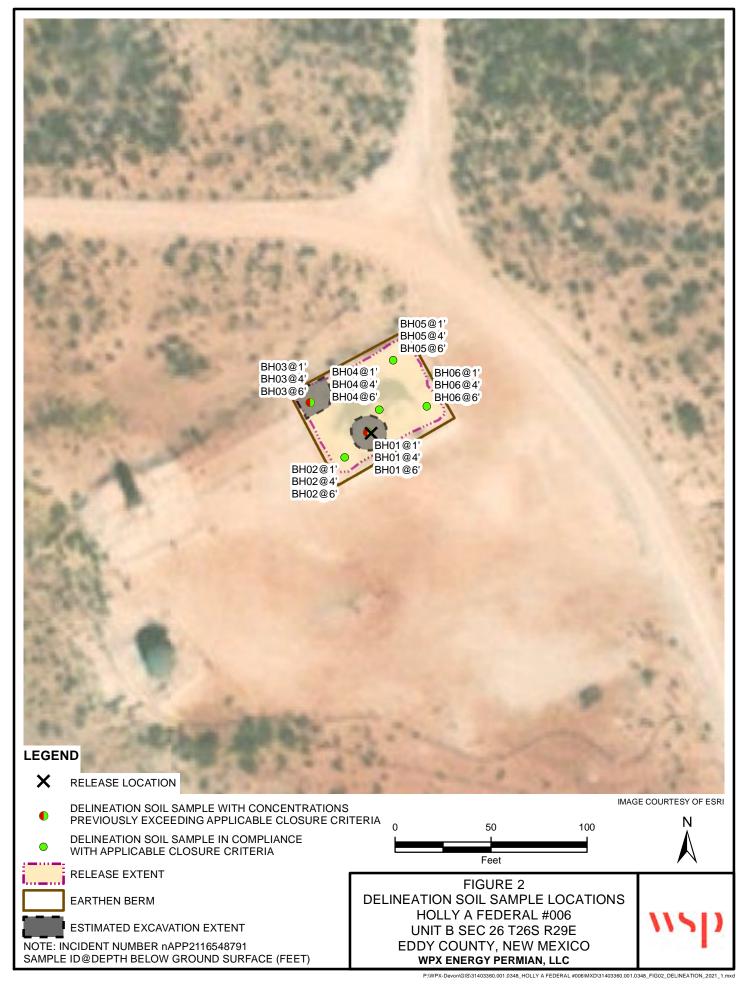


Table 1

#### 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 Clo	NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			50	NE	NE	NE	1,000	2,500	10,000
<b>Delineation Samples</b>										
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 Clo	sure Criteria (NM	AC 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



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**USGS Water Resources** 

Data Category: Geographic Area: Groundwater United States ✓ GO

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#### 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	5	D	62610		2828.70	NGVD29	1	Z			
1983-01-26	;	D	62611		2830.22	NAVD88	1	Z			
1983-01-26	5	D	72019	54.30			1	Z			
1987-10-14	1	D	62610		2847.71	NGVD29	1	Z			
1987-10-14	ŀ	D	62611		2849.23	NAVD88	1	Z			
1987-10-14	ŀ	D	72019	35.29			1	Z			
1992-11-04	ŀ	D	62610		2838.94	NGVD29	1	S			
1992-11-04	ŀ	D	62611		2840.46	NAVD88	1	S			
1992-11-04		D		44.06			1	S			
1998-01-28		D			2829.99	NGVD29	1	S			
1998-01-28		D			2831.51	NAVD88	1	S			
1998-01-28		D		53.01			1	S			
2003-01-27		D			2827.07	NGVD29	1	S			5
2003-01-27		D			2828.59	NAVD88	1	S			5
2003-01-27		D		55.93			1	S			5
	19:00 UTC				2825.19	NGVD29	1	S			5
	19:00 UTC			== 0.	2826.71	NAVD88	1				5
	19:00 UTC			57.81	2020 = :	1101/200	1	S			5
	21:10 UTC				2829.54	NGVD29	1	S	USGS		5
	21:10 UTC			53.46	2831.06	NAVD88	1	S S	USGS		5

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	Α	Approved for publication Processing and review completed.

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

Accessibility FOIA Policies and Notices Privacy 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: <u>USGS Water Data Support Team</u> Page Last Modified: 2021-08-18 10:04:41 EDT

0.34 0.29 nadww01

USA.gov

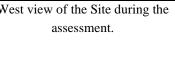


	PHOTOGRAPHIC LOG	
WPX Energy Permian,	HOLLY A FEDERAL #006	31403360.000.0348
LLC.	Eddy County, NM	

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							







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

 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.



									BH Name:		Date:	
7			7		WS	P USA			BH01		6/18/2021	
				-			2 HOOO					
				Carl	08 West S sbad, Ne	Stevens S w Mexico	street 1. 88220		Site Name: Holly A Federal #006			
				- Odi	Joan, NC	T WONIGC	, 00220		Incident Number: nAPP2116548791 WSP Job Number: 31403306.001.0348			
		LITH	OLOG	IC / SOIL	SAMPI	ING LO	Logged By: Anna Byers	,5555.00	Method: Hand Auger			
Lat/Lo					Field Scre				Hole Diameter:		Total Depth:	
32.014	4105, -103	.952305			Chloride,				2.5 inches		6 feet	
Comm		t "M" - Mo	oist; Sta	iining "Y" - Y	es; Vapor "	'MAX" - PI		g >15,000 pp	om; Chloride values do no	include	correction factor	
ъ +	Φ		D	#	Commi-		USCS/Rock Symbol					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth	Deptin	3/Rc nbo		l ith	ology/F	Remarks	
Mois	Shic pg	Va (pp	Stai	am	(ft bgs)	(ft bgs)	Syn		Litti	J.Jgy/1		
2			0)	<u></u> σ			SO.	<u> </u>				
					1	0						
					-	<u> </u>						
					_	<u> </u>						
М	6,896	MAX	Υ	BH01	1	1	SW-SI	√brown w	ell-graded sand (f. to	o c.) wi	th gravel, odor	
						Γ			5 ( )	,	<u>.</u>	
					_	<u> </u>						
М	376	MAX	Υ	-	2	2	SD-SI	A brown w	vell-graded sand (f. to	0 C ) Wi	th gravel odor	
IVI	3/0	IVIAA	'	-	_		01 301	DIOWII W	on-graucu sanu (i. li	O O., WI	in graver, odor	
					-	Ĺ						
						_						
					_	3						
					-	}						
					-	H						
М	132	310.6	Ν	BH01	4	4	SC	red clay	red clayey-sand (m.), low plasticity, odor			
						<u> </u>			•			
					_	<u> </u>						
					-	5						
					_	† Š						
					_	<u> </u>						
N 4	150	MAN	N.I	DU04	6	G	00	rod class	ov cond (m ) made	oto ole	atioity compacted ada-	
M	156	MAX	N	BH01	6	6		red clay otal Deptl		ate pia	sticity, compacted, odor	
`							'	otai Depti	1			
	_											
					_							

									BH Name:		Date:	
7	WSP USA										6/18/2021	
				5	08 West S	Stevens S	BH02 Site Name: Holly	A Federal #006				
				Car	lsbad, Ne	w Mexico	88220		Incident Number: nAPP2116548791			
							WSP Job Number: 31403306.001.0348					
		LITH	OLOG	IC / SOIL	SAMPL	ING LO	Logged By: Anna	a Byers	Method: Hand Auger			
Lat/Lo					Field Scre				Hole Diameter:		Total Depth:	
	4068, -103	.952343			Chloride,	PID			2.5 inches		6 feet	
	ments: ture Conten	t "M" - Mo	oist; BD	L - Below De	tection Lin	nit of HACI	H Low Rai	nge Chloride	e Test Strips; Chlo	oride values do r	no include correction factor	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol			Lithology/R	Remarks	
М	588	111	No	BH02	1 1	0		red poor	ly-graded san	d with gravel,	, poorly consolidated, no odor	
M	5,464	23.9	No	-	2	2	SP-SM	red poor	ly-graded san	d with gravel,	poorly consolidated, no odor	
М	BDL	1.4	No	BH02	4 _	3 - - - 4 - - 5	SP-SM	red poor	ly-graded san	d with gravel,	poorly consolidated, no odor	
М	BDL	0	No	BH02	6	6				d with gravel,	poorly consolidated, no odor	
	M BDL 0 No BH02 6 6 SP-SM red poorly-graded sand with gravel, poorly consolidated, no odor  Total Depth											

					Me	BH Name:		Date:				
						SP USA	BH03		6/18/2021			
	V V			5	08 West 9	Stevens S	Street		Site Name: Holly A Federal #006			
				Car	Isbad, Ne	w Mexico	88220		Incident Number: nAPP2116548791			
									WSP Job Number	r: 31403306.001		
		LITH	OLOG	SIC / SOIL			Logged By: Anna	Byers	Method: Hand Auger			
Lat/Lo	ong: 4147, -103	952401			Field Scre				Hole Diameter: 2.5 inches		Total Depth:	
	nents:	.502701			Chloride,	FID			2.0 11101165		6 feet	
		t "M" - Mo	oist/"D"	- Dry; Stainir	ng "Y" - Ye	s; Vapor "N		D reading >	15,000 ppm; Chlori	de values do no	include correction factor	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgs)	USCS/Rock Symbol			Lithology/R	demarks	
М	3,976	MAX	Υ	BH03	1 - 1 _	0		1 dark bro	wn poorly-grad	led sand with	n gravel, poorly consolidated,	
M	5,464	MAX	No	-	2 -	2	SP-SN	dark bro	wn poorly-grad	led sand with	n gravel, poorly consolidated,	
D	1,988	156.4	No	BH03	4 _	3 4 5	SP-SN	1 light bro no odor	wn poorly-grad	ed sand with	gravel, poorly consolidated,	
	8,052	112.2	No	BH03	6	6		1 no odor		ed sand with	gravel, poorly consolidated,	
	D 8,052 112.2 No BH03 6 6 SP-SM no odor  Total Depth											

									BH Name:		Date:	
WSP USA									BH04		6/18/2021	ļ
				г	18 Most 6	itevene C		leral #nne				
				Carl	sbad, Nei	Stevens S w Mexico	88220		Site Name: Holly A Federal #006 Incident Number: nAPP2116548791			
									WSP Job Number: 31403306.001.0348			
		LITH	OLOG	IC / SOIL	SAMPL	ING LO		Logged By: Anna Byers		Method: Hand Auger		
Lat/Loi					Field Scre	ening:			Hole Diameter:		Total Depth:	
32.014 Comm	1137, -103.	.952285			Chloride, I	PID			2.5 inches		6 feet	
		t "M" - Mo	oist; BD	L - Below De	tection Lim	nit of HAC		nge Chloride	Test Strips; Chloride v	alues do n	no include correction factor	
ė +	e	<u>-</u>	9	#	Same	_	USCS/Rock Symbol	_		_ <b></b>		
stur	orid m,	Vapor (ppm)	nin	ple	Sample Depth	Depth	3/Rt nbo		1 :+1	hology/R	emarks	
Moisture Content	Chloride (ppm)	Va (pp	Staining	Sample #	(ft bgs)	(ft bgs)	SCE Syn		LIU	gy/™		
	<u> </u>		37	S S	30/	<u> </u>	ă N					
		-				0						
					4	<u> </u>	<b>(</b> )					
						t 1	<b>(</b> )					
М	BDL	40.9	No	BH04	1	1	SP-SM	red poor	ly-graded sand with	n gravel,	poorly consolidated, no oc	lor
					]	L l	<b>(</b> )			,		
					-	<b>⊢</b> \	<b>(</b> )					
М	240	10.6	No	-	2	2	SP-SM	red poor	ly-graded sand with	n gravel	poorly consolidated, no oc	lor
		5.0			-	Ĺ _	J1VI	الانجام .	, Janua Will	وات بدنی	,	. ]
					]	<u> </u>	<b>(</b> )					
					-		1					
					-	3	<b>(</b> )					
						<u>†</u>	1					
					7	Ĺ !	<u> </u>					
М	456	3.6	No	BH04	4	4	SP-SM	red poor	ly-graded sand with	n gravel,	poorly consolidated, no oc	dor
					1 -	<b>L</b> I	<b>(</b> )					
						<b>⊢</b> \	1					
						5	1					
					]	L l	1					
					-	<b>⊢</b>	<b>(</b> )					
М	456	2.8	No	BH04	6	6	SP-SM	red poor	ly-graded sand with	<u>ı gravel</u>	poorly consolidated, no oc	lor
				f				tal Depth		رات بحر ن	,	
]								•				
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												1
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												1
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		, _	_		MC	BH Name:	Date:				
					WS	BH05	6/18/2021				
'				5	08 West S	Stevens S	Street		Site Name: Holly A Federal #006		
				Car	Isbad, Ne	w Mexico	88220		Incident Number: nAPP2116548791		
		_							WSP Job Number: 31403306.001.0348		
		LITH	OLOG	SIC / SOII			Logged By: Anna Byers	Method: Hand Auger			
Lat/Lo	ng: 4207, -103	052261			Field Scre Chloride,				Hole Diameter: 2.5 inches	Total Depth: 6 feet	
Comm		0.332201			Chloride,	PID			2.3 ITICITES	o reet	
Moisture Content "M" - Moist; Moisture Content "D" - Dry; Chloride values do no include correction factor											
a +	(D)		D	#	0 1 .		USCS/Rock Symbol				
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth	Depth	/Rc		Litholog	y/Remarks	
lois Son	olh:	Va <sub>l</sub>	tai	am	(ft bgs)	(ft bgs)	CS		Littlolog	y/itemarks	
20	O		0)	Ö	(it bgs)		SN				
						0					
					_	-					
					-	<b>-</b>					
M	272	278.6	No	BH05	1	1	SP-SM	brown po	orly-graded sand (m.) v	vith silt and gravel.	
					_	Ė		poorly co	nsolidated, odor	granten,	
					_	L					
N 4	000	1757	NI.a		2	2	COLIE	ton man	ly composted calleter 19	a grouply ador	
М	928	175.7	No	-			CCHE	tan, poor	ly cemented caliche with	i gravei, odor	
					-	_					
					_	Ė					
					_	3					
					-	  -					
					-	_					
D	500	20.8	No	BH05	4	4	SM	light brov	vn silty sand (m.), well c	onsolidated no odor	
	000	20.0	110	Brioo	' -	<u> </u>	Civi	light brov	vir only daria (iii.), won o	oneonation, no out	
					<u> </u>						
						_					
					-	5					
					-	-					
					_	<u> </u>					
D	928	16.2	No	BH05	6	6			vn silty sand (m.), well c	onsolidated, no odor	
							To	tal Depth			
			\								
							_				
										_	

						D HO.			BH Name:		Date:		
					SP USA			ВН06		6/18/2021			
				5	08 West S	Stevens S	Street		Site Name: Holly A Federal #006				
				Car	Isbad, Ne	w Mexico	88220		Incident Number: nAPP2116548791				
									WSP Job Number	: 31403306.001	1.0348		
		LITH	OLOG	SIC / SOIL			G		Logged By: Anna	Byers	Method: Hand Auger		
								Hole Diameter:		Total Depth:			
		.ჟა∠∠05			Chloride,	אוט			2.5 inches		6 feet		
Comments:  Moisture Content "M" - Moist/"D" - Dry; Chloride values do no include correction factor; BD									BDL - Below Detect	ion Limit of HA	CH Low Range Chloride Test Strips		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bac)	USCS/Rock Symbol			Lithology/R	Remarks		
20	C		(I)	Ö	(it bgs)		SN S						
						0							
М	BDL	24.7	No	BH06	1 _	1	SP-SM	red poor	ly-graded sand	with gravel,	poorly consolidated, no odor		
М	BDL	10.8	No	-	2	2	SP-SM	red poor	ly-graded sand	with gravel,	poorly consolidated, no odor		
					- - -	3							
D	BDL	7.8	No	BH06	4	4	SP-SM	red poor poorly co	ly-graded sand onsolidated, no	with gravel odor	and capsules of white caliche,		
D	BDL	6.2	No	BH06	6	5		poorly co	onsolidated, no		and capsules of white caliche,		
`							To	tal Depth	1				
		\	_										

# **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

J. KRAMER

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

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

-----LINKS

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Released to Imaging: 1/17/2024 10:24:54 AM

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

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

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Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Laboratory Job ID: 890-844-1

SDG: Eddy County

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# **Definitions/Glossary**

Client: WSP USA Inc. Job ID: 890-844-1 Project/Site: Holly A Federal #006 SDG: Eddy County

### **Qualifiers**

CC	$V \cap A$
u	VUA

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.

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

### **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	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

Eurofins Xenco, Carlsbad

RER

RPD

TEF

TEQ TNTC

RL

### **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 (890-844-10), 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.

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Client: WSP USA Inc.

Job ID: 890-844-1 Project/Site: Holly A Federal #006 SDG: Eddy County

Lab Sample ID: 890-844-1

**Client Sample ID: BH01** Date Collected: 06/18/21 09:15

Date Received: 06/22/21 11:41

Matrix: Solid

Sample Depth: - 1

Method: 8021B - Volatile Orga	inic Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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 Ra	ange Organics (D	RO) (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

Oll 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

249

mg/Kg

06/23/21 14:00

1730

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** Lab Sample ID: 890-844-2 Date Collected: 06/18/21 09:25

**Matrix: Solid** 

06/23/21 23:02

Date Received: 06/22/21 11:41

**Diesel Range Organics (Over** 

Sample Depth: - 4

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: 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 09:25

Date Received: 06/22/21 11:41

Lab Sample ID: 890-844-2

Matrix: Solid

Sample Depth: - 4

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
Oll 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 Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	158		5.03		mg/Kg			06/24/21 17:07	

**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

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

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
Oll 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 Chror	natograpny - So	olubie						
Analyte	Result C	Qualifier	RL MD	L Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4730	1	00	mg/Kg			06/24/21 17:12	20

# **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-844-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH02** 

Date Collected: 06/18/21 11:30 Date Received: 06/22/21 11:41

Sample Depth: - 4

Lab Sample ID: 890-844-4

06/23/21 14:00 06/23/21 20:56

Lab Sample ID: 890-844-5

**Matrix: Solid** 

Matrix: Solid

5

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)			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

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
Oll 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

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			

70 - 130

126

**Client Sample ID: BH03** Date Collected: 06/18/21 12:10

Date Received: 06/22/21 11:41

Sample Depth: - 1

o-Terphenyl

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 <sub>-</sub> 130				06/23/21 09:59	06/23/21 17:49	1

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

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
Oll 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 Ch	romatography -	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** Lab Sample ID: 890-844-6 **Matrix: Solid** 

Date Collected: 06/18/21 12:30

Date Received: 06/22/21 11:41

Sample Depth: - 4

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	
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	
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	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130				06/23/21 09:59	06/23/21 18:09	-
1,4-Difluorobenzene (Surr)	88		70 - 130				06/23/21 09:59	06/23/21 18:09	
Method: 8015B NM - Diesel Ran Analyte	• • •	, , ,	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Method: 8015B NM - Diesel Ran	ne Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared 000000000000000000000000000000000000	Analyzed	
Analyte Gasoline Range Organics	• • •	Qualifier	RL 49.7	MDL	Unit mg/Kg	<u>D</u>	Prepared 06/23/21 14:00	Analyzed 06/23/21 21:17	
Analyte Gasoline Range Organics (GRO)-C6-C10	Result	Qualifier U		MDL	mg/Kg	<u>D</u>	06/23/21 14:00	06/23/21 21:17	
Analyte Gasoline Range Organics	Result   <49.7	Qualifier U	49.7	MDL		<u>D</u>	<u>.</u>		
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result   <49.7	Qualifier U	49.7	MDL	mg/Kg	<u> </u>	06/23/21 14:00	06/23/21 21:17	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.7	Qualifier U U U	49.7	MDL	mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00	06/23/21 21:17	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.7   <49.7   <49.7   <49.7	Qualifier U U U U	49.7 49.7 49.7	MDL	mg/Kg mg/Kg mg/Kg	<u> </u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00	06/23/21 21:17 06/23/21 21:17 06/23/21 21:17	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH	Result   <49.7   <49.7   <49.7   <49.7   <49.7   <49.7	Qualifier U U U U	49.7 49.7 49.7 49.7	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00	06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 06/23/21 21:17	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate	Result	Qualifier U U U U	49.7 49.7 49.7 49.7 <b>Limits</b>	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared	06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U U Qualifier	49.7 49.7 49.7 49.7 49.7  Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared 06/23/21 14:00	06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 Analyzed 06/23/21 21:17	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier U U U Qualifier	49.7 49.7 49.7 49.7 49.7  Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared 06/23/21 14:00	06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 06/23/21 21:17 Analyzed 06/23/21 21:17	Dil Fac

Matrix: Solid

Lab Sample ID: 890-844-7

# **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-844-1

Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH04** 

Date Collected: 06/18/21 10:45 Date Received: 06/22/21 11:41

Sample Depth: - 1

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 Rang	ge Organics (D	RO) (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
Oll 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 Chron	natography -	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 Date Collected: 06/18/21 11:05

Date Received: 06/22/21 11:41

Sample Depth: - 4

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	
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)			70 - 130				06/23/21 09:59	06/23/21 18:50	1
1,4-Difluorobenzene (Surr)	100		70 <sub>-</sub> 130				06/23/21 09:59	06/23/21 18:50	1

**Matrix: Solid** 

# **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-844-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH04** 

Lab Sample ID: 890-844-8

Date Collected: 06/18/21 11:05 Date Received: 06/22/21 11:41

Matrix: Solid

Sample Depth: - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:59	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		06/23/21 14:00	06/23/21 21:59	1
C10-C28)									
OII 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 Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	334		5.04		mg/Kg			06/25/21 11:28	

**Client Sample ID: BH05** Lab Sample ID: 890-844-9

Date Collected: 06/18/21 12:50 Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

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 Rang Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
-									
Analyte Gasoline Range Organics		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 06/23/21 14:00	Analyzed 06/23/21 22:20	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	<b>Result</b> <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	06/23/21 14:00	06/23/21 22:20	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	<b>Result</b> <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	06/23/21 14:00	06/23/21 22:20	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9   <49.9	Qualifier U U	49.9	MDL	mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00	06/23/21 22:20 06/23/21 22:20	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9   <49.9   <49.9	Qualifier U U U U	49.9 49.9 49.9	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00	06/23/21 22:20 06/23/21 22:20 06/23/21 22:20	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49	Qualifier U U U U	49.9 49.9 49.9 49.9	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00	06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 06/23/21 22:20	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate	Result	Qualifier U U U U	49.9 49.9 49.9 49.9 <b>Limits</b>	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared	06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 Analyzed	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  U  Qualifier	49.9 49.9 49.9 49.9  Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared 06/23/21 14:00	06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 Analyzed 06/23/21 22:20	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  U  Qualifier	49.9 49.9 49.9 49.9  Limits 70 - 130		mg/Kg mg/Kg mg/Kg	D	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared 06/23/21 14:00	06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 06/23/21 22:20 Analyzed 06/23/21 22:20	1 1

Matrix: Solid

Client: WSP USA Inc.

Job ID: 890-844-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH05** Lab Sample ID: 890-844-10

Date Collected: 06/18/21 13:25 Date Received: 06/22/21 11:41

Sample Depth: - 4

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 <sub>-</sub> 130				06/23/21 09:59	06/23/21 21:01	1

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (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
Oll 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

	natography - S	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 Date Collected: 06/18/21 13:45

Date Received: 06/22/21 11:41

Sample Depth: - 1

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 <sub>-</sub> 130				06/23/21 09:59	06/23/21 21:21	1

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**Matrix: Solid** 

Matrix: Solid

Lab Sample ID: 890-844-11

# **Client Sample Results**

Client: WSP USA Inc.

Job ID: 890-844-1

Project/Site: Holly A Federal #006

SDG: Eddy County

**Client Sample ID: BH06** 

Date Collected: 06/18/21 13:45 Date Received: 06/22/21 11:41

Sample Depth: - 1

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
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	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 Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			5.03					06/24/21 18:18	

Client Sample ID: BH06

Lab Sample ID: 890-844-12

Date Collected: 06/18/21 14:10

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

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
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rand	ge Organics (D	RO) (GC)							
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics		Qualifier	RL 50.0	MDL	Unit mg/Kg	<u>D</u>	Prepared 06/23/21 14:00	Analyzed 06/23/21 23:02	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result < 50.0	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	06/23/21 14:00	06/23/21 23:02	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			1
Analyte	Result < 50.0	Qualifier U	50.0	MDL	mg/Kg	<u> </u>	06/23/21 14:00	06/23/21 23:02	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 <50.0	Qualifier U U	50.0	MDL	mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00	06/23/21 23:02 06/23/21 23:02	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0   <50.0   <50.0	Qualifier U U U U	50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00	06/23/21 23:02 06/23/21 23:02 06/23/21 23:02	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result   <50.0   <50.0   <50.0   <50.0	Qualifier U U U U	50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00	06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 06/23/21 23:02	1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate	Result	Qualifier U U U U	50.0 50.0 50.0 50.0 Limits	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared	06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  U  Qualifier	50.0 50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared 06/23/21 14:00	06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 Analyzed 06/23/21 23:02	1 1 1 <i>Dil Fac</i>
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  U  Qualifier	50.0 50.0 50.0 50.0 <b>Limits</b> 70 - 130		mg/Kg mg/Kg mg/Kg	<u>D</u>	06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 06/23/21 14:00 Prepared 06/23/21 14:00	06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 06/23/21 23:02 Analyzed 06/23/21 23:02	Dil Fac

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# **Surrogate Summary**

Client: WSP USA Inc.

Job ID: 890-844-1

Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

Lab Sample ID 890-844-1 890-844-2 890-844-3	Client Sample ID  BH01  BH01	(70-130) 181 S1+ 140 S1+	<b>DFBZ1</b> (70-130) 95	
890-844-1 890-844-2 890-844-3	BH01 BH01	181 S1+	<u> </u>	
890-844-2 890-844-3	BH01		95	
890-844-3		140 64 1		
		140 51+	82	
390-844-4	BH02	116	98	
	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)

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(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	
390-844-7	BH04	99	121	
390-844-8	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	

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OTPH = o-Terphenyl

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# QC Sample Results

Client: WSP USA Inc. Job ID: 890-844-1 Project/Site: Holly A Federal #006 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

	MB	MB							
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 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

MB MB

Surrogate	%Recovery	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 **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

**Analysis Batch: 4515** 

Prep Type: Total/NA

Prep Batch: 4500

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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	

LCS LCS

Surrogate	%Recovery 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

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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	

LCSD LCSD

Surrogate	%Recovery 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 Result Qualifier MDL Unit Prepared Analyzed Benzene <0.00200 U 0.00200 mg/Kg 06/24/21 13:20 06/25/21 12:41

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Client: WSP USA Inc.

Job ID: 890-844-1

SDG: Eddy County

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

Lab Sample ID: MB 880-4592/5-A

Project/Site: Holly A Federal #006

**Matrix: Solid** 

**Analysis Batch: 4608** 

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 4592

	11.10	IVID							
Analyte	Result	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

MB MB

MR MR

Surrogate	%Recovery	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

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%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

LCS LCS

Surrogate	%Recovery 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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

LCSD LCSD

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

# QC Sample Results

Client: WSP USA Inc. Job ID: 890-844-1 Project/Site: Holly A Federal #006 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

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

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Surrogate	%Recovery	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

**Analysis Batch: 4496** 

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

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

C10-C28)

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

Lab Sample ID: LCSD 880-4520/3-A

**Matrix: Solid** 

Analysis Batch: 4496

Client Sample ID: Lat	Control Sample Dup
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Prep Type: Total/NA

Prep Batch: 4520

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

	LCSD	LCSD	
Surrogate	%Recovery	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

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

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)

MS MS

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

Analysis Batch: 4496

Client Sample ID: BH02 Prep Type: Total/NA

Prep Batch: 4520

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

**Client Sample ID: BH02** 

Prep Type: Total/NA

Prep Batch: 4520

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

Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <50.0 U \*1 F2 997 999 9 F2 100 70 - 13025 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 103 1040 mg/Kg 70 - 13017 20

C10-C28)

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4512/1-A Client Sample ID: Method Blank

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4595** 

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

Lab Sample ID: LCS 880-4512/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4595** 

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

Lab Sample ID: LCSD 880-4512/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** 

**Analysis Batch: 4595** 

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

Client Sample ID: BH03 Lab Sample ID: 890-844-5 MS

**Matrix: Solid Analysis Batch: 4595** 

Spike MS MS %Rec. Sample Sample Result Qualifier Added Result Qualifier Unit %Rec

Analyte Limits 2480 Chloride 4350 6955 mg/Kg 105 90 - 110

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**Prep Type: Soluble** 

RPD

**Prep Type: Soluble** 

# **QC Sample Results**

Job ID: 890-844-1 Client: WSP USA Inc. Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-844-5 MSD **Client Sample ID: BH03 Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 4595

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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 MB 880-4592/5-A	Client Sample ID  Method Blank	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
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

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# **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 Batc
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 890-844-1	Client Sample ID BH01	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
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	

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# **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

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# **Lab Chronicle**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Client Sample ID: BH01

Date Collected: 06/18/21 09:15

Date Received: 06/22/21 11:41

SDG: Eddy County

Lab Sample ID: 890-844-1

Matrix: Solid

**Matrix: Solid** 

Job ID: 890-844-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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	СН	XEN MID
Soluble	Analysis	300.0		10			4595	06/24/21 17:01	CH	XEN MID

**Client Sample ID: BH01** Lab Sample ID: 890-844-2

Date Collected: 06/18/21 09:25

Date Received: 06/22/21 11:41

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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** Lab Sample ID: 890-844-3

Date Collected: 06/18/21 11:10 Date Received: 06/22/21 11:41

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

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Lab Sample ID: 890-844-4

**Matrix: Solid** 

**Matrix: Solid** 

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Date Collected: 06/18/21 12:10

Date Received: 06/22/21 11:41

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

**Client Sample ID: BH03** Lab Sample ID: 890-844-5

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number 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 ΑJ XEN MID Soluble Leach DI Leach 5.05 g 50 mL 4512 06/23/21 12:35 СН XEN MID Soluble Analysis 300.0 10 4595 06/24/21 17:29 CH XEN MID

Client Sample ID: BH03 Lab Sample ID: 890-844-6 Date Collected: 06/18/21 12:30 Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH04 Lab Sample ID: 890-844-7

Date Collected: 06/18/21 10:45 **Matrix: Solid** Date Received: 06/22/21 11:41

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Lab Sample ID: 890-844-8 Date Collected: 06/18/21 11:05 Matrix: Solid

Date Received: 06/22/21 11:41

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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

**Matrix: Solid** 

XEN MID

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Lab Sample ID: 890-844-11

Date Collected: 06/18/21 13:45 Date Received: 06/22/21 11:41

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

Client Sample ID: BH06 Lab Sample ID: 890-844-12

4595

06/24/21 18:18 CH

Date Collected: 06/18/21 14:10 Date Received: 06/22/21 11:41

Analysis

300.0

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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. Job ID: 890-844-1 Project/Site: Holly A Federal #006

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
390-844-7	BH04	Solid	06/18/21 10:45	06/22/21 11:41	- 1
390-844-8	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
390-844-11	BH06	Solid	06/18/21 13:45	06/22/21 11:41	- 1
390-844-12	BH06	Solid	06/18/21 14:10	06/22/21 11:41	- 4

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eurofins

Xenco

Environment Testing

Project Manager: Company Name:

JOSEPH HERNANDEZ

3300 N A STREET

WSP USA

Company Name: Bill to: (if different)

MAX

5315 BUENT

VISTA DR

JIM PALES

# Chain of Custody

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 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Work Order No:

	www.xenco.com Page 1 of 2
	Work Order Comments
L1	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
	State of Project:
	Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV☐
	Deliverables: EDD ☐ ADaPT ☐ Other:

				-				
			4				0	
			6.22.21 1138 2	6.	7	( Jee ( Ju	buero	anne 1
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		Received by: (Signature)	Received	y: (Signature)	Relinquished by: (Signature)
	s. It assigns standard terms and conditions are due to circumstances beyond the control ms will be enforced unless previously negotiated.	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.	ompany to Eurofins Xen ny losses or expenses in submitted to Eurofins	from client c sibility for a each sample	titutes a valid purchase order f I shall not assume any respon- project and a charge of \$5 for v	hment of samples cons the cost of samples an will be applied to each	document and relinquis co will be liable only for nimum charge of \$85.00	ce: Signature of this ervice. Eurofins Xen urofins Xenco. A mi
7470 / 7471	Ni Se Ag Ti U Hg: 1631/245.1/7470 /7471	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	Sb As Ba Be Co	SRCRA	TCLP/SPLP 6010: 8	analyzed	Circle Method(s) and Metal(s) to be analyzed	ele Method(s) d
II Sn U V Zn	Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Ti	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mr	b As Ba Be B	11 AI S	CRA 13PPM Texas		010 200.8 / 6020:	Total 200.7 / 6010
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			XXX	_	1116			BHD2
			XXX	-	6925 4			BHOI
UB4845911 200840	nApp2		×	b -	05915 1, Grab	S 6/8/21		BHOI
Sample Comments	Sai		TPI- BIE Chi	Grab/ # of Comp Cont	Time Depth Comp	Matrix Date Sampled		Sample Identification
NaOH+Ascorbic Acid: SAPC	Na CH+A		<b>y</b> (		mperature:	Corrected Temperature		Total Containers:
Zn Acetate+NaOH: Zn	Zn Aceta			þ	Reading: 5.2/5	N/A Temperature Reading:	als: Yes No	Sample Custody Seals
; NaSO <sub>3</sub>	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>		A	P	actor: -0.2	N/A Correction Factor:	Is: Yes Atta	Cooler Custody Seals:
NABIS	NaHSO <sub>4</sub> : NABIS	890-844 Chain of Custody	8	arai	ID: NACO	No Thermometer ID:	<b>78</b>	Samples Received Intact:
₽			_	nete	Wet Ice: (es) No	ank: (Yes No	IPT Temp Blank:	SAMPLE RECEIPT
NaOH: Na	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>		В	1	the lab, if received by 4:30pm	Remase		PO#:
HNO <sub>3</sub> : HN	HCL: HC		)	by	TAT starts the day received by	BYERS		Sampler's Name:
ool MeOH: Me	Cool: Cool			7	Due Date: 3 PAYTH	Cevory	EDDY COV	Project Location:
O DI Water: H <sub>2</sub> O	None: NO			Code	Routine Wush	84501.10	314 ×3560, 801. 5348	Project Number:
Preservative Codes	Pre	ANALYSIS REQUEST			Turn Around	HOLLY A FEDERAL TYPER	HOLLY A FE	Project Name:
Other:	Deliverables: EDD ADaP1	Deliver	wsp. com	byers	Email: anna.	2329	(281)702-2329	Phone:
)	<u></u>	C. CLORD OF COSE	C. Krach A.		City, State Zir	TIPES	YAL JAK	City, State ZIF.

III of Oustony	
1) 240-4200, Dallas, TX (214) 902-0300	
704 5440 San Antonio TY (210) 509-3334	Work Order No:

PINCEINC	Cliam of Custous	
Environment Testing	Houston, TX (281) 240-4200, Dalias, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Work Order No:
Xenco EL Paso,	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	
HOODS, N	HODDS, NW (973) 382-7330, Calisbad, NW (973) 800-3188	www.xenco.com Page 2 of 2
Project Manager: JOSEPH HERNANDEZ Bill to: (if different)	Jim PALEY	Work Order Comments
WSP USA	1/12	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund [
3300 N A SPEET	5315 BUENA' VISTADE.	
eZIP: MIDIAND, TX 79765	CARLSBAD, NM 88228	Reporting: Level III Level III PST/UST TRRP Level IV
(28, ) 702-23	ers @ wsp. com	Deliverables: EDD
Name: HOLLY A FEDERAL FOOL Turn Around		EQUEST Preservative Codes
er: 3403360,001,0348   Routine Walsh	Pres.	None: NO DI Water: H <sub>2</sub> O
EDDY COUNTY Due Date: 30AUTAT	d)	Cool: Cool MeOH: Me
ler's Name: ANNA 6		HCF: HC HNO; HN
	92	U
Yes No Thermometer ID:	8	NaHSO <sub>4</sub> : NABIS
Yes No N/A Correction Factor: 10	PA	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> . NaSO <sub>3</sub>
Seals: Yes No N/A	(€	NaOH+Assorbis Asid: SAPO
Total Containers:   Corrected Temperature:	X	NACCITY NACCOUNTY OF THE COMMENT OF
Sample Identification Matrix Sampled Depth Comp Cc	Cont TP BTE Chi	Sample Comments
BHP6 5 6/8/21 1345 1' Gab	· × ×	15-48 h5-911/2484 w
131786 S 6/18/21 14/18 4' Bab	X	
	A -	
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 A	13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb	b Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Wetal(s) to be analyzed TCLP	A Sb As Ba Be Cd Cr Co Cu Pb Mn Mo N	o Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471
nples constit	ent company to Eurofins Xenco, its affiliates and subcontracto for any losses or expenses incurred by the cilent if such losses to the contract These to	ors. It assigns standard terms and conditions is are due to circumstances beyond the control
Relinquished by: (Signature) Received by: (Signature)	Date/Time Relinquished by: (Signature)	ature) Received by: (Signature) Date/Time
Cope Chart	20	
	0 1	

# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-844-1

SDG Number: Eddy County

List Source: Eurofins Xenco, Carlsbad

Login Number: 844

List Number: 1 Creator: Clifton, Cloe

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

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# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

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

Login Number: 844
List Source: Eurofins Xenco, Midland
List Number: 2
List Creation: 06/23/21 11:31 AM

Creator: Copeland, Tatiana

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	True	

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<6mm (1/4").

# **Environment Testing America**

# **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

MRAMER

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

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

Review your project results through



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/17/2024 10:24:54 AM

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

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

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Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Laboratory Job ID: 890-845-1

SDG: Eddy County

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# **Definitions/Glossary**

Client: WSP USA Inc.

Job ID: 890-845-1

Project/Site: Holly A Federal #006

SDG: Eddy County

- - -

**Qualifiers** 

GC VOA

Qualifier Description

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

**GC Semi VOA** 

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

Eurofins Xenco, Carlsbad

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#### **Case Narrative**

Client: WSP USA Inc.

Job ID: 890-845-1 Project/Site: Holly A Federal #006

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.

Matrix: Solid

Lab Sample ID: 890-845-1

# **Client Sample Results**

Client: WSP USA Inc.

Job ID: 890-845-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH01** 

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

Chloride

rtoouit	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
<0.00202	$\overline{U}$	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	
<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
<0.00403	U	0.00403		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
<0.00202	U	0.00202		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
< 0.00403	U	0.00403		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
<0.00403	U	0.00403		mg/Kg		06/29/21 14:37	06/29/21 17:48	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
103		70 - 130				06/29/21 14:37	06/29/21 17:48	1
99		70 - 130				06/29/21 14:37	06/29/21 17:48	1
		RL	MDL	Unit	D	Prepared	Analyzed	
							,u.,u	Dil Fac
<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 13:19	Dil Fac
<49.7 <49.7		49.7		mg/Kg		06/29/21 09:38 06/29/21 09:38		Dil Fac
	U						06/29/21 13:19	1
<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 13:19	1
<49.7 <49.7 <49.7	U	49.7 49.7		mg/Kg		06/29/21 09:38 06/29/21 09:38	06/29/21 13:19 06/29/21 13:19 06/29/21 13:19	1
<49.7 <49.7 <49.7	U U	49.7 49.7 49.7		mg/Kg		06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 13:19 06/29/21 13:19 06/29/21 13:19 06/29/21 13:19	1
	<0.00202 <0.00403 <0.00202 <0.00403 <0.00403  **Recovery 103 99  **Organics (Di		<pre>&lt;0.00202 U</pre>	<0.00202 U 0.00202 <0.00403 U 0.00403 <0.00202 U 0.00202 <0.00403 U 0.00403 <0.00403 U 0.00403  <0.00403 U 0.00403   **Recovery Qualifier Limits	<0.00202 U 0.00202 mg/Kg <0.00403 U 0.00403 mg/Kg <0.00202 U 0.00202 mg/Kg <0.00403 U 0.00403 mg/Kg <td>&lt;0.00202</td> U       0.00202       mg/Kg         <0.00403	<0.00202	<0.00202	<0.00202

25.2

mg/Kg

153

Eurofins Xenco, Carlsbad

07/01/21 19:53

DFBZ = 1,4-Difluorobenzene (Surr)

# **Surrogate Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Reco
		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-Bromofluorobe	nzene (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

Client: WSP USA Inc. Job ID: 890-845-1 Project/Site: Holly A Federal #006 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

Pren Type: Total/NA

	Prep Bat	
Prepared	Analyzed	Dil Fac

	МВ	MB							
Analyte	Result	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
l .									

MB MB

Surrogate	%Recovery	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

Chefft Sample ID.	Lab Control Sample
	Prep Type: Total/NA

Prep Batch: 4724

Spike	LCS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
0.100	0.08480		mg/Kg		85	70 - 130	
0.100	0.08425		mg/Kg		84	70 - 130	
0.100	0.08202		mg/Kg		82	70 - 130	
0.200	0.1733		mg/Kg		87	70 - 130	
0.100	0.08872		mg/Kg		89	70 - 130	
	0.100 0.100 0.100 0.100 0.200	Added         Result           0.100         0.08480           0.100         0.08425           0.100         0.08202           0.200         0.1733	Added         Result         Qualifier           0.100         0.08480           0.100         0.08425           0.100         0.08202           0.200         0.1733	Added         Result         Qualifier         Unit           0.100         0.08480         mg/Kg           0.100         0.08425         mg/Kg           0.100         0.08202         mg/Kg           0.200         0.1733         mg/Kg	Added         Result         Qualifier         Unit         D           0.100         0.08480         mg/Kg           0.100         0.08425         mg/Kg           0.100         0.08202         mg/Kg           0.200         0.1733         mg/Kg	Added         Result         Qualifier         Unit         D         %Rec           0.100         0.08480         mg/Kg         85           0.100         0.08425         mg/Kg         84           0.100         0.08202         mg/Kg         82           0.200         0.1733         mg/Kg         87	Added         Result         Qualifier         Unit         D         %Rec         Limits           0.100         0.08480         mg/Kg         85         70 - 130           0.100         0.08425         mg/Kg         84         70 - 130           0.100         0.08202         mg/Kg         82         70 - 130           0.200         0.1733         mg/Kg         87         70 - 130

LCS LCS

Surrogate	%Recovery 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	<b>Control</b>	<b>Sample Dup</b>
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**Prep Type: Total/NA** 

Prep Batch: 4724

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1.4-Difluorobenzene (Surr)	102		70 - 130

Client: WSP USA Inc. Job ID: 890-845-1 Project/Site: Holly A Federal #006 SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A

Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 4722

**Analysis Batch: 4728** 

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

мв мв

Surrogate	%Recovery	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 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 4728** Prep Batch: 4722 LCS LCS Spike %Rec.

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

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

**Analysis Batch: 4728** 

Lab Sample ID: LCSD 880-4722/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** 

Prep Type: Total/NA Prep Batch: 4722

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

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

Lab Sample ID: 890-845-1 MS

**Matrix: Solid** 

**Analysis Batch: 4728** 

**Client Sample ID: BH01** Prep Type: Total/NA

Prep Batch: 4722

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

Client: WSP USA Inc.

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** 

Project/Site: Holly A Federal #006

**Analysis Batch: 4728** 

**Client Sample ID: BH01** Prep Type: Total/NA

Prep Batch: 4722

1-Chlorooctane 90 70 - 130 o-Terphenyl 89 70 - 130

Lab Sample ID: 890-845-1 MSD **Client Sample ID: BH01** 

Limits

**Matrix: Solid** 

Surrogate

**Analysis Batch: 4728** 

Prep Type: Total/NA Prep Batch: 4722

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <49.7 892.7 U 997 90 70 - 13013 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 997 1000 mg/Kg 98 <49.7 U 70 - 13020 14 C10-C28)

MSD MSD

MS MS %Recovery Qualifier

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 4825** 

мв мв

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

Lab Sample ID: LCS 880-4824/2-A

**Matrix: Solid** 

**Analysis Batch: 4825** 

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

Lab Sample ID: LCSD 880-4824/3-A

Released to Imaging: 1/17/2024 10:24:54PAM

Matrix: Solid

Analysis Batch: 4825

Analysis Baton. 4020								
	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	232.2	ma/Ko		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	
L	LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

#### Analysis Batch: 4740

Lab Sam	ple ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-845-	1	BH01	Total/NA	Solid	8021B	4724
MB 880-4	1724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880	-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 88	0-4724/2-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**

<b>Lab Sample ID</b> 890-845-1	Client Sample ID BH01	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 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** 

Lab Sample ID: 890-845-1

Matrix: Solid

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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

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# **Accreditation/Certification Summary**

Client: WSP USA Inc. Job ID: 890-845-1 Project/Site: Holly A Federal #006

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

Eurofins Xenco, Carlsbad

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# 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

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lotice: Signature of this documer

<del>role Method(s) and Me</del>r Total 200.7 / 6010

service. Eurofins Xenco will be

Relinquished by: (Signature)

Received by: (Signature)

1.7221 1133 Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020 2

MINE

13 14

eurofins Xenco Environment Testing

Project Manager:

JOSEPH HERNANDER

Bill to: (if different)

Company Name:

Company Name:

City, State ZIP:

Address:

3380 N A

STREET

WSP WA

(281) 702 - 2329 SOFTE XI CLOWETOWN

Email: anna, byes (o wsp. com

City, State ZIP:

CARLSBAD, WAS

5315 BUENAVISTA DR

MAX BURDER Jim PALEY

Turn Around

Bush

Code

ANALYSIS REQUEST

Cool: Coo None: NO

HNO3: HN MeOH: Me DI Water: H<sub>2</sub>O Preservative Codes

SAMPLE RECEIPT

Samples Received Intact:

otal Containers: ample Custody Seals: ooler Custody Seals:

Sample Identificat

1240

Sampler's Name:

roject Location:

Due Date: Routine

301YTAT

Project Number: Project Name:

31403360, pp1. 0348 HOLLY A FEDERAL # DOLO

# Chain of Custody

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 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Work Order No:

	www.xenco.com Page of f
	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:

EDDY COUNTY Due Date: SON YTHY	_		<u>u</u>
TAT starts the day received by	_		
the lab, if received by 4:30pm			H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na
_	82 3		H₃PO₄; HP
Thermometer ID: 700 M 637			NaHSO <sub>4</sub> : NABIS
N/A Correction Factor: -03		890-845 Chain of Custody	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>
N/A Temperature Reading:			Zn Acetate+NaOH: Zn
Corrected Temperature:	_		NaOH+Ascorbic Acid: SAPC
ification Matrix Sampled Sampled Depth Comp Cont	BIE		Sample Comments
5 6/8/21 1000 6, Bas 1 X	X		1970
			DAPP21116548791
>			
2	}		
10 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As	Ba Be B Cd	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se	Se Ag SiO, Na Sr Tl Sn U V Zn
d Metat(s) to be analyzed ICLP / SPLP 6010: 8RCRA Sb As	Ba Be Cd C	ICLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631/245.1/7470/7471
ocument 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 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	to Eurofins Xenco, i s or expenses incurr	s affiliates and subcontractors. It assigns standard terms an ad by the client if such losses are due to circumstances beyon	and conditions
num charge of \$8,00 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.	ed to Eurofins Xenc	), but not analyzed. These terms will be enforced unless previ	viously negotiated.

# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-845-1

SDG Number: Eddy County

Login Number: 845 List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

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	

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# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

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

List Source: Eurofins Xenco, Midland Login Number: 845 List Number: 2

List Creation: 06/23/21 11:29 AM

Creator: Copeland, Tatiana

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	True	

<6mm (1/4").

# **Environment Testing America**

# **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

SCRAMER

Authorized for release by: 7/2/2021 9:29:45 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

Review your project

results through

Have a Question?



Visit us at:

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Released to Imaging: 1/17/2024 10:24:54 AM

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

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

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Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Laboratory Job ID: 890-847-1

SDG: Eddy County

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# **Definitions/Glossary**

Client: WSP USA Inc. Job ID: 890-847-1 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** 

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac Dilution Factor

Detection Limit (DoD/DOE) DL

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)

Method Quantitation Limit

MDL Method Detection Limit ML Minimum Level (Dioxin) Most Probable Number MPN

NC Not Calculated

MQL

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

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.

Matrix: Solid

Lab Sample ID: 890-847-1

# **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-847-1

Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH02** 

Date Collected: 06/18/21 15:35 Date Received: 06/22/21 11:39

Sample Depth: - 6

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 Rang	ge Organics (DI	RO) (GC)							
Method: 8015B NM - Diesel Rang	ge Organics (DI	RO) (GC)							
Analyte	Result	Qualifier	RL 	MDL	Unit ma/Ka	<u>D</u>	Prepared 06/29/21 09:38	Analyzed 06/29/21 14:22	
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 14:22	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u> </u>	<u>·</u>		1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 14:22	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U U	49.9	MDL	mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38	06/29/21 14:22 06/29/21 14:22	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result   <49.9   <49.9   <49.9	Qualifier  U  U  U	49.9 49.9 49.9	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 14:22 06/29/21 14:22 06/29/21 14:22	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH	Result	Qualifier  U  U  U	49.9 49.9 49.9 49.9	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 06/29/21 14:22	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   <49.9   %Recovery	Qualifier  U  U  U	49.9 49.9 49.9 49.9 <b>Limits</b>	MDL	mg/Kg mg/Kg mg/Kg	<u> </u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared	06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  U  Qualifier	49.9 49.9 49.9 49.9  Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u> </u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 Analyzed 06/29/21 14:22	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl  Method: 300.0 - Anions, Ion Chro	Result	Qualifier  U  U  U  Qualifier	49.9 49.9 49.9 49.9  Limits 70 - 130		mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 06/29/21 14:22 Analyzed 06/29/21 14:22	Dil Fac

# **Surrogate Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		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-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
	1001	OTPH1	
Client Sample ID	(70-130)	(70-130)	
BH02	102	107	
Lab Control Sample	97	98	
Lab Control Sample Dup	112	107	
Method Blank	90	101	
	BH02 Lab Control Sample Lab Control Sample Dup	Client Sample ID         (70-130)           BH02         102           Lab Control Sample         97           Lab Control Sample Dup         112	Client Sample ID         (70-130)         (70-130)           BH02         102         107           Lab Control Sample         97         98           Lab Control Sample Dup         112         107

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: WSP USA Inc. Job ID: 890-847-1 Project/Site: Holly A Federal #006 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

	MB	MB							
Analyte	Result	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	•
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	•
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

MB MB

Surrogate	%Recovery	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

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 0.08480 Benzene 0.100 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 87 70 - 130 mg/Kg o-Xylene 0.100 0.08872 mg/Kg 89 70 - 130

LCS LCS

Surrogate	%Recovery 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

Spike	LCSD	LCSD				%Rec.		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.100	0.09235		mg/Kg		92	70 - 130	9	35
0.100	0.1077		mg/Kg		108	70 - 130	24	35
0.100	0.09178		mg/Kg		92	70 - 130	11	35
0.200	0.1939		mg/Kg		97	70 - 130	11	35
0.100	0.09922		mg/Kg		99	70 - 130	11	35
	0.100 0.100 0.100 0.100 0.200	Added         Result           0.100         0.09235           0.100         0.1077           0.100         0.09178           0.200         0.1939	Added         Result         Qualifier           0.100         0.09235           0.100         0.1077           0.100         0.09178           0.200         0.1939	Added         Result         Qualifier         Unit           0.100         0.09235         mg/Kg           0.100         0.1077         mg/Kg           0.100         0.09178         mg/Kg           0.200         0.1939         mg/Kg	Added         Result         Qualifier         Unit         D           0.100         0.09235         mg/Kg           0.100         0.1077         mg/Kg           0.100         0.09178         mg/Kg           0.200         0.1939         mg/Kg	Added         Result         Qualifier         Unit         D         %Rec           0.100         0.09235         mg/Kg         92           0.100         0.1077         mg/Kg         108           0.100         0.09178         mg/Kg         92           0.200         0.1939         mg/Kg         97	Added         Result         Qualifier         Unit         D         %Rec         Limits           0.100         0.09235         mg/Kg         92         70 - 130           0.100         0.1077         mg/Kg         108         70 - 130           0.100         0.09178         mg/Kg         92         70 - 130           0.200         0.1939         mg/Kg         97         70 - 130	Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           0.100         0.09235         mg/Kg         92         70 - 130         9           0.100         0.1077         mg/Kg         108         70 - 130         24           0.100         0.09178         mg/Kg         92         70 - 130         11           0.200         0.1939         mg/Kg         97         70 - 130         11

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Eurofins Xenco, Carlsbad

Client: WSP USA Inc. Job ID: 890-847-1 Project/Site: Holly A Federal #006 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

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

мв мв

MD MD

Surrogate	%Recovery	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 **Client Sample ID: Lab Control Sample Matrix: Solid** 

**Analysis Batch: 4728** 

Prep Type: Total/NA Prep Batch: 4722

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

LCS LCS

Surrogate	%Recovery	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** 

<b>Client Sam</b>	nla ID: La	h Contro	Sample	Dun
Chent Sam	pie ID. La		i Sample	Dup

Prep Type: Total/NA Prep Batch: 4722

LCSD LCSD %Rec. RPD Spike Added Result Qualifier Analyte Unit %Rec Limits **RPD** Limit 1032 1000 Gasoline Range Organics 103 70 - 13013 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1062 mg/Kg 106 70 - 13010 20 C10-C28)

	LCSD	LCSD	
Surrogate	%Recovery	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** 

Dil Fac

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

Client: WSP USA Inc. Job ID: 890-847-1 Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid Analysis Batch: 4825** 

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

Lab Sample ID: LCSD 880-4824/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4825** 

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

<b>Lab Sample ID</b> 890-847-1	Client Sample ID BH02	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 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 Batc	h
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

Eurofins Xenco, Carlsbad

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#### Lab Chronicle

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

Client Sample ID: BH02 Lab Sample ID: 890-847-1

Date Collected: 06/18/21 15:35

Date Received: 06/22/21 11:39

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

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8015B NM

8021B

# **Accreditation/Certification Summary**

Total TPH

Total BTEX

Job ID: 890-847-1 Client: WSP USA Inc. Project/Site: Holly A Federal #006

SDG: Eddy County

#### Laboratory: Eurofins Xenco, Midland

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

8015NM Prep

5035

Texas NELAP T104704400-20-21 06-30-22

Solid

Solid

# **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

Eurofins Xenco, Carlsbad

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# **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

eurofins

Kenco

Environment Testing

JOSEPH HERMANDEZ

Company Name: Bill to: (if different)

MPX ENERGY JIM PAREY **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

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State of Project:	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐	Work Order Comments	www.xenco.com Page of
	Superfund [		of

Work Order No: 800

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(Signature) Date/Time	ature) Received by: (Signature)	Relinquished by: (Signature)	Date/Time	D	gnature)	Received by: (Signature)	ture)	by: (Signat	Relinquished by: (Signature)
nditions e control y negotiated.	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.	nco, its affiliates and subcontractor ncurred by the client if such losses Xenco, but not analyzed. These ter	pany to Eurofins Xer osses or expenses i bmitted to Eurofins	client com lity for any l h sample su	alid purchase order fron assume any responsibi d a charge of \$5 for eac	amples constitutes a vi I samples and shall not blied to each project an	nd relinquishment of s ble only for the cost of ge of \$85.00 will be app	is document a enco will be lia ninimum charg	e: Signature of th vice. Eurofins X ofins Xenco. A
Hg: 1631/245.1/7470/7471		TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	As Ba Be C	CRA St	SPLP 6010: 8R		Circle Method(e) and Metal(s) to be analyzed	and Metal	le Method(e)
SiO, Na Sr TI Sn U V Zn	Pb Mg Mn Mo Ni K Se Ag	Cd Ca Cr Co Cu Fe Pl	B	Al Sb	8RCRA 13PPM Texas 11 Al Sb As Ba Be	8RCRA 1	200.8 / 6020:		Total 200.7 / 6010
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Sample Comments			BTE	# of Cont	Depth Grab/	Date Time Sampled Sampled	Matrix	Sample Identification	Sample Ic
NaUH+Ascorbic Acid: SAFC			X		Ire: 5,0	Corrected Temperature:	Co		Total Containers:
Zn Acetate+NaOH: Zn			CE		5,2	Temperature Reading:	No N/A		Sample Custody Seals:
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	of custody	oso-ot/ Cham of custody	PA		2.0-2	Correction Factor:	NA S	-	Cooler Custody Seals:
NaHSO <sub>4</sub> : NABIS				amet	e Kes No	Yes No Wet Ice:	10	EIPT	SAMPLE RECEIPT
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na			4		the lab, if received by 4:30pm			nARC	PO#:
HCL: HC HNO <sub>3</sub> : HN			3)		TAT starts the day received by	TAT star	A RYERS	ALAS A	Sampler's Name:
<u>u</u>				3	te: 30AY TAX	Due Date:	EDDY COUNTY	Z403	Project Location:
None: NO DI Water: H <sub>2</sub> O				Code	ne Wush	8248 □Routine	31483360,001.0048	3146	Project Number:
ervativ	QUEST	ANALYSIS REQUEST			Turn Around		HOLLY A FEDERAL FORE	HOLLY	Project Name:
ADari Di Oilei.	Deliverables: EDD L	Sin-	byers @ wsp. com	oyers	Email: anna.		(281) 702 - 2329	(28)	Phone:
II PSI/USI   IRRF   Level of L	Reporting: Level III   PSI/USI   IRRF	CARLSBAD, NM 88226	ARLSBAT		City, State ZIP:	SOFFEE	2	MID	City, State ZIP:
	State of Project:	5315 BUENA VISTA DR	315 13060	10	Address:	STREET	A	3300	Address:
Program: UST/PST   PRP   Brownfields   KRC   Superiorio	Program: UST/PST   PKF	ecy	WPX ENERGY	L	Company Name:		WSP USA	MSP	Company Name:

# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-847-1

SDG Number: Eddy County

Login Number: 847 List Source: Eurofins Xenco, Carlsbad

List Number: 1

<6mm (1/4").

Creator: Olivas, Nathaniel

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	N/A	

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# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-847-1 SDG Number: Eddy County

List Source: Eurofins Xenco, Midland Login Number: 847 List Number: 2

List Creation: 06/23/21 11:27 AM

Creator: Copeland, Tatiana

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	True	

Released to Imaging: 1/17/2024 10:24:54PAM

<6mm (1/4").

# **Environment Testing America**

# **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

MRAMER

Authorized for release by: 7/2/2021 9:30:57 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

Review your project

results through
Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/17/2024 10:24:54/AM

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

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

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Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Laboratory Job ID: 890-848-1

SDG: Eddy County

# **Table of Contents**

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Sample Summary	14
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# **Definitions/Glossary**

Client: WSP USA Inc. Job ID: 890-848-1 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** 

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac Dilution Factor

Detection Limit (DoD/DOE) DL

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) Most Probable Number MPN Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

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.

Matrix: Solid

Lab Sample ID: 890-848-1

# **Client Sample Results**

Client: WSP USA Inc.

Job ID: 890-848-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH03** 

Date Collected: 06/18/21 15:25 Date Received: 06/22/21 11:39

Sample Depth: - 6

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 Rang	ge Organics (DI	RO) (GC)							
Mathed 0045D NM Discal Dans	O	DO) (OO)							
Analyte	Result	Qualifier	RL	MDL	Unit ma/Ka	<u>D</u>	Prepared 06/29/21 09:38	Analyzed 06/29/21 14:42	
Analyte Gasoline Range Organics (GRO)-C6-C10	Result   <50.0	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 14:42	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 14:42	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	Result   <50.0   <50.0	Qualifier U U	50.0	MDL	mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38	06/29/21 14:42 06/29/21 14:42	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH	Result   <50.0   <50.0   <50.0	Qualifier  U  U  U	50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 14:42 06/29/21 14:42 06/29/21 14:42	1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result	Qualifier  U  U  U	50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 06/29/21 14:42	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  U	50.0 50.0 50.0 50.0 Limits	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared	06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  U  Qualifier	50.0 50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 Analyzed 06/29/21 14:42	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  U  Qualifier	50.0 50.0 50.0 50.0 <b>Limits</b> 70 - 130		mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 06/29/21 14:42 Analyzed 06/29/21 14:42	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

#### **Surrogate Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Re
		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-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (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)	
390-848-1	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	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

	ME	B MB							
Analyte	Result	t 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

MB MB

Surrogate	%Recovery	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

	<b>Spike</b>	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier I	Unit D	%Rec	Limits	
Benzene	0.100	0.08480		mg/Kg	85	70 - 130	
Toluene	0.100	0.08425	ı	mg/Kg	84	70 - 130	
Ethylbenzene	0.100	0.08202	ı	mg/Kg	82	70 - 130	
m-Xylene & p-Xylene	0.200	0.1733	1	mg/Kg	87	70 - 130	
o-Xylene	0.100	0.08872	ı	mg/Kg	89	70 - 130	

LCS LCS

Surrogate	%Recovery 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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1.4-Difluorobenzene (Surr)	102		70 - 130

Client: WSP USA Inc. Job ID: 890-848-1 Project/Site: Holly A Federal #006 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

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

мв мв

Surrogate	%Recovery	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 **Client Sample ID: Lab Control Sample** Matrix: Solid Prep Type: Total/NA

**Analysis Batch: 4728** 

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

Spike Added

1000

1000

LCSD LCSD

1032

1062

Result Qualifier

Unit

mg/Kg

mg/Kg

LCS LCS %Recovery Qualifier

Surroyate	Mecovery	Qualifier	Lillits
1-Chlorooctane	97		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-4722/3-A

**Matrix: Solid** 

**Analysis Batch: 4728** 

Gasoline Range Organics

Diesel Range Organics (Over

<b>Client San</b>	nnie ID: I al	Control	Sample	Dun
Olielit Gali	IDIC ID. Lai	<i>-</i>	Jailible	Dub

106

Prep Type: Total/NA

%Rec. %Rec Limits **RPD** Limit 20 103 70 - 13013

70 - 130

C10-C28)

(GRO)-C6-C10

Analyte

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

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** 

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

Eurofins Xenco, Carlsbad

Prep Batch: 4722

10

20

Client: WSP USA Inc. Job ID: 890-848-1 Project/Site: Holly A Federal #006 SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 4825** Spike LCS LCS

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

Lab Sample ID: LCSD 880-4824/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4825** 

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

#### **QC Association Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Job ID: 890-848-1 SDG: Eddy County

2

#### **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

<b>Lab Sample ID</b> 890-848-1	Client Sample ID BH03	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 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	<del></del>
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. Job ID: 890-848-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH03** 

Lab Sample ID: 890-848-1

Matrix: Solid

Date Collected: 06/18/21 15:25 Date Received: 06/22/21 11:39

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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. Job ID: 890-848-1 Project/Site: Holly A Federal #006

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	<b>Expiration Date</b>
Texas	NELAP	T104704400-20-21	06-30-22
The following analytes are inclu	uded in this report, but the laboratory is not cer	tified by the governing authority. This list ma	ay include analytes for which
the agency does not offer certif	ication.		

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

#### **Method Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Job ID: 890-848-1

SDG: Eddy County

dy 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

## **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

Xenco

Environment Testing

	Hobbs,	NM (575)	392-755	0, Carlsb	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199		www.xenco.co <u>m</u>	o.com Page_	of
roject Manager: TOSE PH HERNANDE Z	Bill to: (if different)	13	7	Jm RALEY	Ey		Work O	ğ	,
	Company Name:		X Q X	Wex ENERGY	26-4	Pro	Program: UST/PST 🗌 PRP 🗎 Brownfields 🗌 RRC 🗌	Brownfields [] R	≀RC ☐ Superfund ☐
	Address:	(2)	3	BUE	5315 BUENA VISTA DE	Stat	State of Project:	i I	
LE ZIP: MIDLANK	City, State ZIP:	C	ARLS	BAD	CARLSBAD, NM BELLE	Rep	Reporting: Level II 🗍 Level III 🗍 PST/UST 📗 TRRP 📗	☐ PST/UST ∐ TI	RRP Level IV
(281) 702-132	anna.	byes	2	@wsp.	com	Deli	Deliverables: EDD	ADaPT LJ O	Other:
roject Name: HOLLY A FEDERAL FORG Turn	Turn Around	-			ANALYSIS REQU	REQUEST	31	Prese	Preservative Codes
er:		Pres.						None: NO	DI Water: H <sub>2</sub> O
roject Location: FDDY COMN'N Due Date:	JAY TAT	一		_				Cool: Cool	меон: ме
S	TAT starts the day received by			_		-	-	HCL: HC	HNO <sub>3</sub> : HN
	the lab, if received by 4:30pm		_					H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaCH: Na
SAMPLE RECEIPT Temp Blank: Yes No Wet ice:	Yes No	nete	_					H₃PO₄: HP	
samples Received Intact: Yes No Thermometer ID:	7-Mn-002	_						NaHSO <sub>4</sub> : NABIS	VABIS
Sooler Custody Seals: Yes No N/A Temperature Reading:	-0.2		EPA EPA		890-848 Chain of C	of Custody	ody Y	Zn Acetate+NaO	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub> Zn Acetate+NaOH: Zn
	5.0					_		NaOH+Asc	NaOH+Ascorbic Acid: SAPC
Sample Identification Matrix Sampled Sampled	Depth Grab/	Cont C	TPH	Chic				Sam	Sample Comments
BHØ3 6 6/18/21 15:25	6' frato	- ×	×	×		-		THE CO	
		+	+	1		+			
		+	+			+			
		$\dashv$	7			1			
		$\parallel$							
				7		-			
		-	+	1		+	/- -		
		+	+			+	1		
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM	Texas 11	Al Sb	As Ba	ВеВ	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb N	Pb Mg	Mg Min Mo Ni K Se Ag S	SiO, Na Sr TI	Sn U V Zn
ircle Method(s) and Metal(s) to be analyzed TCLP / SI	EP 8010. SRC	A SB	AS BE	Be C	d TCLP / SPLP 8010. SRCRA SD AS Ba Be Cd Cr Co Cu Pb Mn Mo Ni		Se Ag TI U Hg:	Hg: 1631 / 245.1 / 7470	470 / 7471
stice: 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 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 contro 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 negoti	ourchase order from c ume any responsibility harge of \$5 for each s	lient comp for any ic ample sul	any to Eusses or e	rofins Xe xpenses i Eurofins	nco, its affiliates and subcontra incurred by the client if such los Xenco, but not analyzed. These	ctors. It ass ses are due terms will i	It assigns standard terms and conditions the tocircumstances beyond the control will be enforced unless previously negotiated.	tions ontrol egotiated.	
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appear 11. 8th		6/21	121/1	11:392	2				
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	_				6			-	

#### **Login Sample Receipt Checklist**

Client: WSP USA Inc. Job N

Job Number: 890-848-1 SDG Number: Eddy County

Login Number: 848 List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

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	

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#### **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-848-1 SDG Number: Eddy County

Login Number: 848
List Source: Eurofins Xenco, Midland
List Number: 2
List Creation: 06/23/21 11:28 AM

Creator: Copeland, Tatiana

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	True	

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<6mm (1/4").

### **Environment Testing America**

#### **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

MAMER

Authorized for release by: 7/2/2021 9:32:17 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

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www.eurofinsus.com/Env

Released to Imaging: 1/17/2024 10:24:54 AM

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

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

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1.4

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Laboratory Job ID: 890-849-1

SDG: Eddy County

#### **Table of Contents**

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#### **Definitions/Glossary**

Client: WSP USA Inc.

Job ID: 890-849-1

Project/Site: Holly A Federal #006

SDG: Eddy County

#### **Qualifiers**

**GC VOA** 

Qualifier Description

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

**GC Semi VOA** 

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

#### Glossary

EDL

LOD

**TEQ** 

 LOQ
 Limit of Quantitation (DoD/DOE)

 MCL
 EPA recommended "Maximum Contaminant Level"

 MDA
 Minimum Detectable Activity (Radiochemistry)

 MDC
 Minimum Detectable Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

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)

NEGNegative / AbsentPOSPositive / PresentPQLPractical Quantitation LimitPRESPresumptive

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)

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.

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4.0

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Matrix: Solid

Lab Sample ID: 890-849-1

#### **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-849-1

Project/Site: Holly A Federal #006 SDG: Eddy County

Client Sample ID: BH04 Date Collected: 06/18/21 14:58

Date Received: 06/22/21 11:39

Sample Depth: - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	
Xylenes, Total	< 0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	91		70 - 130				06/29/21 14:37	06/29/21 22:54	
1,4-Difluorobenzene (Surr)	88		70 - 130				06/29/21 14:37	06/29/21 22:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Method: 8015B NM - Diesel Rand	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared 06/29/21 09:38	Analyzed 06/29/21 15:03	
Analyte Gasoline Range Organics (GRO)-C6-C10	Result   <49.8	Qualifier U	49.8	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 15:03	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.8	Qualifier U	49.8	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 15:03	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.8   <49.8	Qualifier U U	49.8	MDL	mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38	06/29/21 15:03 06/29/21 15:03	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result   <49.8   <49.8   <49.8	Qualifier U U U U	49.8 49.8 49.8	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 15:03 06/29/21 15:03 06/29/21 15:03	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49	Qualifier U U U U	49.8 49.8 49.8 49.8	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 06/29/21 15:03	Dil Fa
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49.8   <49	Qualifier U U U U	49.8 49.8 49.8 49.8 Limits	MDL	mg/Kg mg/Kg mg/Kg	<u> </u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared	06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  U  Qualifier	49.8 49.8 49.8 49.8  Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 Analyzed 06/29/21 15:03	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  U  Qualifier	49.8 49.8 49.8 49.8  Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg mg/Kg	D_	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 06/29/21 15:03 Analyzed 06/29/21 15:03	Dil Fac

#### **Surrogate Summary**

Client: WSP USA Inc. Job ID: 890-849-1 Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Re
		BFB1	DFBZ1	r ercent ourrogate Re
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-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		1001	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

Client: WSP USA Inc. Job ID: 890-849-1 Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4724/5-A

Analysis Batch: 4740

**Matrix: Solid** 

Surrogate

Client Sample ID: Method Blank

06/29/21 16:33

06/29/21 16:33

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 4724

МВ	MB						-	
ult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
200	U	0.00200		mg/Kg		06/29/21 10:28	06/29/21 16:33	

Analyte	Result	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

MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac

06/29/21 10:28

06/29/21 10:28

Lab Sample ID: LCS 880-4724/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 4724

70 - 130

70 - 130

60 S1-

82

**Analysis Batch: 4740** 

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

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

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

**Matrix: Solid Analysis Batch: 4740** 

Lab Sample ID: LCSD 880-4724/2-A

Prep Batch: 4724 Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.09235 mg/Kg 92 70 - 130 9 35 Toluene 0.100 0.1077 mg/Kg 108 70 - 130 35 24 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 70 - 130 0.100 0.09922 o-Xylene mg/Kg 99 11 35

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

Client: WSP USA Inc. Job ID: 890-849-1 Project/Site: Holly A Federal #006 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

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

мв мв

Surrogate	%Recovery	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

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

LCS LCS Surrogate %Recovery 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** 

<b>Client San</b>	nnie ID: I al	Control	Sample	Dun
Olielit Gali	IDIC ID. Lai	<i>-</i>	Jailible	Dub

Prep Type: Total/NA

Prep Batch: 4722

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

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

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** 

MB MB

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

Client: WSP USA Inc. Job ID: 890-849-1 Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 4825

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

Lab Sample ID: LCSD 880-4824/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 4825

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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	<del></del>
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

SDG: Eddy County

Client Sample ID: BH04

Lab Sample ID: 890-849-1

Matrix: Solid

Date Collected: 06/18/21 14:58 Date Received: 06/22/21 11:39

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

Eurofins Xenco, Carlsbad

Released to Imaging: 1/17/2024 10:24:54PAM

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#### **Accreditation/Certification Summary**

Client: WSP USA Inc. Job ID: 890-849-1 Project/Site: Holly A Federal #006

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

Laboratory	
XEN MID	
VENIMID	

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

## **Chain of Custody**

* eurofins	Houston, T	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300	Wat Calania Cua
	Midtand, TX (	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Work Order No:
Xenco	EL Paso, T)	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199	-
	110000,	(Vi o) Oct. 1 Oct. Carbonal I (** *) ***************************	www.xenco.com Page of
Project Manager: TOSEPH HERVANDEZ	Bill to: (if different)	Jim RALEY	Work Order Comments
WSP US	Company Name:		Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
	Address:	5315 BUENA VISTA DE	
te ZIP: MIDLAND	City, State ZIP:	CARLSBAD, NM 88128	Reporting: Level III Level III L PST/UST TRRP L Level IVL
(281) 702-2329	-	byes a wsp.com	Deliverables: EDD
Name: HAVIVA CEDED AL #OBO	Around		QUEST Preservative Codes
ä	tine Wush Code		None: NO DI Water: H <sub>2</sub> O
	3DAY TAT	(d)	Cool: Cool MeOH: Me
AUTA BYERS		3)	HCL: HC HNO3: HN
~APP2116548791	۰	216	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na
SAMPLE RECEIPT Temp Blank: (Yes) No Wet Ice:	ves No	398	H₃PO₄; HP
Samples Received Intact: (Yes) No Thermometer ID:	رد	Α δ	of Custody
Yes No N/A	1000	EP 41	Zn Acetate+NaOH: Zn
Total Containers: Corrected Temperature:	N.C.	x (	NaOH+Ascorbic Acid: SAPC
dentification Matrix	Depth	TPI BTE Chi	Sample Comments
BHPH 5 6/18/21 1458	8 6' and 1	X X X	Hach
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
Metal(s) to be analyzed	6040: BRORA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	o Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471
nples const	valid purchase order from client ot assume any responsibility for	company to Eurofins Xenco, its affiliates and subcontracto any losses or expenses incurred by the client if such losses	ore. It assigns standard terms and conditions are due to circumstances beyond the control
or caronico communicación de la companya de la comp	Cionatura)	Date Time Relinquished by: (Signature)	ature) Received by: (Signature) Date/Time
(Veilinduration by Caldinatary)		/ / 3	1
Chin byens /". Cus	6/	6/22/2/ 1:39	
		6	

Revised Date: 08/25/2020 Rev. 2020 2

Carlsbad NM 88220

1089 N Canal St.

**Eurofins Xenco, Carlsbad** 

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# Chain of Custody Record

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**Environment Testing** 

State Zip TX, 79701 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. Sample Identification - Client ID (Lab ID) Deliverable Requested I II III IV Other (specify) Possible Hazard Identification BH04 (890-849-1) Holly A Federal #006 432-704-5440(Tel) Midland Shipping/Receiving Client Information Phone 575-988-3199 Fax 575-988-3199 1211 W Florida Ave mpty Kit Relinquished by elinquished by: elinquished by: Custody Seals Intact urofins Xenco inquished by Yes S B (Sub Contract Lab) Custody Seal No 8 Project #: 88000203 Date/Time Phone: Date/Ime Primary Deliverable Rank. 2 PO# 6/25/2021 Due Date Requested Sampler Date/Time FAT Requested (days) SOW# Sample Date 6/18/21 Date Mountain Sample 14 58 (C=comp, G=grab) Sample Preservation Code: Type Company Company Company 0≍waste/oil Matrix Solid Kramer Jessica E-Mail essica kramer@eurofinset.com Time Field Filtered Sample (Yes or No) Accreditations Required (See note)
NELAP - Texas Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Perform MS/MSD (Yes or No) Special Instructions/QC Requirements 300\_ORGFM\_28D/DI\_LEACH Chloride Cooler Temperature(s) °C and Other Remarks Received by × Return To Client × 8015MOD\_NM/8015NM\_S\_Prep Full TPH × 8021B/5035FP\_Calc BTEX **Analysis Requested** Disposal By Lab State of Origin: New Mexico Carrier Tracking No(s) Method of Shipment Date/Time Archive For Total Number of containers C Zn Acetate
D Nitric Acid
E NaHSO4
F MeOH
G Amchlor
H Ascorbic Acid Page. Page 1 of 1 COC No: 890-271 1 Preservation Codes 890-849-1 lce DI Water ( EDTA EDA NaOH 든 Special Instructions/Note \$ DOZZ N ≷ < ⊂ M Hexane
N None
N Nano2
Na204S
Na2S03
Na2S203 Company Company Company H2SO4
TSP Dodecahydrate
J Acetone
J MCAA v pH 4-5 other (specify) **Months** 

Ver: 11/01/2020

#### **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-849-1 SDG Number: Eddy County

List Source: Eurofins Xenco, Carlsbad

List Number: 1

Login Number: 849

Creator: Olivas, Nathaniel

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	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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#### **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-849-1 SDG Number: Eddy County

Login Number: 849 List Source: Eurofins Xenco, Midland List Number: 2

List Creation: 06/23/21 11:31 AM

Creator: Copeland, Tatiana

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	True	

<6mm (1/4").

#### **Environment Testing America**

#### **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

RAMER

Authorized for release by: 7/2/2021 9:33:23 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS .....

results through

**Review your project** 

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/17/2024 10:24:54 AM

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

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#### **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** 

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac Dilution Factor

Detection Limit (DoD/DOE) DL

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) Most Probable Number MPN Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

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.

Matrix: Solid

Lab Sample ID: 890-850-1

#### **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-850-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH05** 

Date Collected: 06/18/21 14:25 Date Received: 06/22/21 11:39

Analyte

Chloride

Metriou. Our ib . Volatile Organit	c 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
- i -		RO) (GC)	70 - 130				06/29/21 14:37	06/29/21 23:20	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC) Qualifier	70 <sub>-</sub> 130 <b>R</b> L	MDL	Unit	D	06/29/21 14:37 Prepared	06/29/21 23:20 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier		MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D	Qualifier U	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.8	Qualifier U	RL49.8	MDL	mg/Kg	<u>D</u>	Prepared 06/29/21 09:38	<b>Analyzed</b> 06/29/21 15:24	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.8	Qualifier U	RL49.8	MDL	mg/Kg	<u>D</u>	Prepared 06/29/21 09:38	<b>Analyzed</b> 06/29/21 15:24	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.8	Qualifier U U	RL 49.8	MDL	mg/Kg	<u>D</u>	Prepared 06/29/21 09:38 06/29/21 09:38	Analyzed 06/29/21 15:24 06/29/21 15:24	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	ge Organics (D) Result <49.8 <49.8	Qualifier U U U U	RL 49.8 49.8 49.8	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	Analyzed 06/29/21 15:24 06/29/21 15:24 06/29/21 15:24	1 1 1
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	ge Organics (D) Result <49.8 <49.8 <49.8 <49.8	Qualifier U U U U	RL 49.8 49.8 49.8 49.8	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	Analyzed 06/29/21 15:24 06/29/21 15:24 06/29/21 15:24 06/29/21 15:24	1 Dil Fac 1 1 1 1 1 Dil Fac 7 1

RL

5.00

MDL Unit

mg/Kg

D

Prepared

Analyzed

07/01/21 20:18

Dil Fac

Eurofins Xenco, Carlsbad

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

854

#### **Surrogate Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Red
		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-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (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

Eurofins Xenco, Carlsbad

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Client: WSP USA Inc. Job ID: 890-850-1 Project/Site: Holly A Federal #006 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

ı		IVID	IVID							
	Analyte	Result	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
I	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
I	Total BTEX	<0.00400	U	0.00400		mg/Kg		06/29/21 10:28	06/29/21 16:33	1
ı										

MB MB

MD MD

Surrogate	%Recovery	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

Spike LCS LCS %Rec. Result Qualifier Analyte Added Unit %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 87 70 - 130 mg/Kg o-Xylene 0.100 0.08872 mg/Kg 89 70 - 130

LCS LCS

Surrogate	%Recovery 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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

LCSD LCSD

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Eurofins Xenco, Carlsbad

Client: WSP USA Inc. Job ID: 890-850-1 Project/Site: Holly A Federal #006 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

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

мв мв

Surrogate	%Recovery	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 **Client Sample ID: Lab Control Sample Matrix: Solid** 

**Analysis Batch: 4728** 

Prep Type: Total/NA Prep Batch: 4722 LCS LCS Spike %Rec.

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

LCS LCS

Surrogate	%Recovery 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

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

LCSD LCSD

Surrogate	%Recovery Qua	lifier 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** 

MB MB

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

Eurofins Xenco, Carlsbad

Client: WSP USA Inc. Job ID: 890-850-1 Project/Site: Holly A Federal #006 SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid Analysis Batch: 4825** 

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

Lab Sample ID: LCSD 880-4824/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4825** 

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

Eurofins Xenco, Carlsbad

Released to Imaging: 1/17/2024 10:24:54PAM

# **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 890-850-1	Client Sample ID BH05	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 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	- <del> </del>
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

Eurofins Xenco, Carlsbad

# **Lab Chronicle**

Client: WSP USA Inc. Job ID: 890-850-1 Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH05** 

Lab Sample ID: 890-850-1

Matrix: Solid

Date Collected: 06/18/21 14:25 Date Received: 06/22/21 11:39

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

Eurofins Xenco, Carlsbad

# **Accreditation/Certification Summary**

Client: WSP USA Inc. Job ID: 890-850-1 Project/Site: Holly A Federal #006

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	<b>Expiration Date</b>
Texas	NELAP	T104704400-20-21	06-30-22
The following analytes are inclu	ded in this report, but the laboratory is not ce	ertified by the governing authority. This list ma	av include analytes for w

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

Eurofins Xenco, Carlsbad

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# 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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Environment Testing

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# Chain of Custody

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

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ture) Date/Time	ıre) Received by: (Signature)	Relinquished by: (Signature)	Date/Time	ō	ure)	/Received by: (Signature)	(Signature)	Relinquished by: (Signature)
ed.	Notice: Signature of this occument and relinquishment of samples constitutes a valid purchase order from client company to Eurolins Activo, its animates and subconductors. It easily is 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 service. 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.	rofins Xenco, but not analyzed. These term	osses or expe	y for any i	me any responsibiliting of \$5 for each	samples constitutes a valid pit of samples and shall not assurblied to each project and a ch	will be liable only for the cost on the cost of the co	ce: Signature of this de ervice. Eurofins Xenco urofins Xenco. A minir
	it colors tradard terms and conditions	. Villa Military						
5.1 / 7470 / 7471	Ni Se Ag TI U Hg: 1631	RA 13PPM TEXAS IT AT SO AS BAIRE OF CO CULTE PO	AS BA B	RA SB	M Texas 11 At Sb As Ba Be b	, e	0 200.8 / 6020:	Total 200.7 / 6010
Na Sr TI Sn II V Zn								
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			+	-				
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HO C		×	×	-	6 Prado	6/18/21 1425	S	BHBS
Sample Comments		Chi	TP	# of	Depth Comp	Sampled Sampled	Matrix	Sample Identification
		on	_	-		Corrected Temperature:		Total Containers:
Zn Acetate+NaOH: Zn	1	_	(E		25	Temperature Reading:	Yes No N/A	Sample Custody Seals
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>		890-850 Chain of C	_	_	-0.2	Correction Factor:	Yes No NIA	Cooler Custody Seals:
NaHSO4: NABIS		EPI		aran	FNM-007	Thermometer ID:	Cyes) No	Samples Received Intact:
H <sub>3</sub> PO <sub>4</sub> : HP		A 3		+	(Yes) No	(es) No Wet Ice:	Temp Blank:	SAMPLE RECEIPT
H <sub>2</sub> S0 <sub>4</sub> : H <sub>2</sub> NaOH: Na		3¢ ¢		-	the lab, if received by 4:30pm	٦	0	
HCL: HC HNO3: HN	-	3. p	_	_	TAT starts the day received by	TAT starts th	ANDA BYERS	Sampler's Name:
Cool: Cool MeOH: Me		*)	4)	_	3 DAYTAT	Due Date:	FUN NOO YOUR	Project Location:
None: NO DI Water: H <sub>2</sub> O				Code	<b>D</b> Rush	Ø34€ □Routine	3146.3348. AZI. B310	Project Number:
Preservative Codes	QUEST	ANALYSIS REC			Turn Around		HOLLY A REDERAL # DELY	Project Name:
other:	Deliverables: EDD	wsp, com	@ WSE	byes	anna. b	29 Email:	(281) 402-1329	Phone:
ST/UST   TRRP   Level IV	Reporting: Level II  Level III  PST/UST  TRRP	CARLSBAD, NM BORRS	CARLS		City, State ZIP:	105 105	MIDLAND TX 49705	City, State ZIP:
	State of Project:	5315 BUENAVISTA DR	5315		Address:		SSOO NA STREET	Address:
vnfields ☐ RRC ☐ Superfund ☐	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐	ENERGY	WAX	ļ.,	Company Name		WSP USA	Company Name:
Comments	Work Order Comments	JIM PALEY	412		Bill to: (if different)		JOSEPH HEPNANDER	Project Manager:
	WWW.XEIICO.COIII							

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 Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

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	

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# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-850-1 SDG Number: Eddy County

Login Number: 850
List Source: Eurofins Xenco, Midland
List Number: 2
List Creation: 06/23/21 11:29 AM

Creator: Copeland, Tatiana

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	True	

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<6mm (1/4").

# **Environment Testing America**

# **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

JURAMER

Authorized for release by: 7/2/2021 9:34:28 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

-----LINKS

Review your project results through

lotal Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 1/17/2024 10:24:54 AM

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

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

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Client: WSP USA Inc.

Project/Site: Holly A Federal #006

Laboratory Job ID: 890-851-1

SDG: Eddy County

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# **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** 

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac Dilution Factor

Detection Limit (DoD/DOE) DL

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) Most Probable Number MPN Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

Eurofins Xenco, Carlsbad

#### **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.

Matrix: Solid

Lab Sample ID: 890-851-1

# **Client Sample Results**

Client: WSP USA Inc. Job ID: 890-851-1

Project/Site: Holly A Federal #006 SDG: Eddy County

**Client Sample ID: BH06** 

Date Collected: 06/18/21 14:30 Date Received: 06/22/21 11:39

Sample Depth: - 6

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 <sub>-</sub> 130				06/29/21 14:37	06/29/21 23:46	1
Method: 8015B NM - Diesel Rand	ge Organics (DI	RO) (GC)							
Method: 8015B NM - Diesel Rang	ge Organics (DI	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 06/29/21 09:38	Analyzed 06/29/21 15:45	
Analyte Gasoline Range Organics	Result	Qualifier		MDL		<u>D</u>	<u>.</u>		
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>	<u>.</u>		1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)		Qualifier U	49.7	MDL	mg/Kg	<u>D</u>	06/29/21 09:38	06/29/21 15:45	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.7	Qualifier U U	49.7	MDL	mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38	06/29/21 15:45 06/29/21 15:45	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	Result   <49.7   <49.7   <49.7	Qualifier U U U U	49.7 49.7 49.7	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 15:45 06/29/21 15:45 06/29/21 15:45	1 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result <49.7 <49.7 <49.7 <49.7	Qualifier U U U U	49.7 49.7 49.7 49.7	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38	06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 06/29/21 15:45	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate	Result   <49.7   <49.7   <49.7   <49.7   <49.7   <49.7   <49.7   <49.7   %Recovery	Qualifier U U U U	49.7 49.7 49.7 49.7 Limits	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared	06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier U U U Qualifier	49.7 49.7 49.7 49.7 Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 Analyzed 06/29/21 15:45	1 1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U U Qualifier	49.7 49.7 49.7 49.7 Limits 70 - 130		mg/Kg mg/Kg mg/Kg	D	06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 06/29/21 09:38 Prepared 06/29/21 09:38	06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 06/29/21 15:45 Analyzed 06/29/21 15:45	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

# **Surrogate Summary**

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Re
		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-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (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

Eurofins Xenco, Carlsbad

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Client: WSP USA Inc. Job ID: 890-851-1 Project/Site: Holly A Federal #006 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

	IVID	IVID							
Analyte	Result	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

MB MB

MD MD

Surrogate	%Recovery	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

**Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Analysis Batch: 4740

Lab Sample ID: LCS 880-4724/1-A

Prep Type: Total/NA Prep Batch: 4724

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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	

LCS LCS

Surrogate	%Recovery 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

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1.4-Difluorobenzene (Surr)	102		70 - 130

Eurofins Xenco, Carlsbad

7/2/2021

Client: WSP USA Inc. Job ID: 890-851-1 Project/Site: Holly A Federal #006 SDG: Eddy County

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

Lab Sample ID: MB 880-4722/1-A

**Analysis Batch: 4728** 

**Matrix: Solid** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

мв мв

Surrogate	%Recovery	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 **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 4728** 

Prep Batch: 4722 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 902.5 90 70 - 130 mg/Kg (GRO)-C6-C10

955.9

mg/Kg

1000

Diesel Range Organics (Over

C10-C28)

Surrogate	%Recovery Qualifie	r Limits
1-Chlorooctane	97	70 _ 130
o-Terphenyl	98	70 - 130

LCS LCS

Lab Sample ID: LCSD 880-4722/3-A

**Matrix: Solid** 

**Analysis Batch: 4728** 

Client Sample ID: Lab Control Sample Dup

70 - 130

96

Prep Type: Total/NA

Prep Batch: 4722

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

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

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** 

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

Eurofins Xenco, Carlsbad

Client: WSP USA Inc. Job ID: 890-851-1 Project/Site: Holly A Federal #006 SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4824/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4825** 

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

Lab Sample ID: LCSD 880-4824/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 4825** 

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

Eurofins Xenco, Carlsbad

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# Lab Chronicle

Client: WSP USA Inc.

Project/Site: Holly A Federal #006

SDG: Eddy County

**Client Sample ID: BH06** 

Lab Sample ID: 890-851-1

Matrix: Solid

Date Collected: 06/18/21 14:30 Date Received: 06/22/21 11:39

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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

Eurofins Xenco, Carlsbad

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# **Accreditation/Certification Summary**

Client: WSP USA Inc. Job ID: 890-851-1 Project/Site: Holly A Federal #006

SDG: Eddy County

# Laboratory: Eurofins Xenco, Midland

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

Program	Identification Number	<b>Expiration Date</b>
NELAP	T104704400-20-21	06-30-22
	NELAP	NELAP T104704400-20-21

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: 890-851-1

SDG: Eddy County

aboratory	
EN MID	
FN MID	

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

Eurofins Xenco, Carlsbad

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# **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

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# **Chain of Custody**

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Signature) Date/Time	ture) Received by: (Signature)	Relinquished by: (Signatu	Date/Time	ature)	, Received by: (Signature)	y: (Signature)	Relinquished by: (Signature)
negotiated.	will be enforced unless previously r	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	submitted to Eurofins	charge of \$5 for each sample	be applied to each project and a	nimum charge of \$85.00 will	irofins Xenco. A mi
ditions	s. It assigns standard terms and conditions are due to circumstances beyond the control	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 and subcontractors are due to circumstances beyond the control of service and subcontractors. It assigns standard terms and conditions of service are functionally such losses are due to circumstances beyond the control of services.	ompany to Eurofins Xer	purchase order from client c	ent of samples constitutes a valid	document and relinquishme	e: Signature of this
Hg: 1631 / 245.1 / 7470 / 7471	Ni Se Ag TI U Hg:	Cr Co Cu Pb Mn Mo	SD AS BA BE Cd	TCLP / SPLP 6010: ORCRA SD AS BA BE		Circle Method(s) and Metal(s) to be analyzed	tle Method(s) a
SiO <sub>2</sub> Na Sr Tl Sn	Mg Mn Mo Ni K Se Ag	Ba Be B Cd Ca Cr Co Cu Fe Pb	As	13PPM Texas 11 Al Sb	8RCRA	010 200.8 / 6020:	Total 200.7 / 6010
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HOLD			x X X	b' Bab 1	6/18/21 1430	S	8HD6
Sample Comments			TP BTE Chi	Depth Grab/ # of Comp Cont	Date Time Sampled Sampled	ntification Matrix	Sample Identification
NaCH+Ascordic Acid. SAFC			*(	11	Corrected Temperature:		Total Containers:
Zn Acetate+NaOH: Zn			E	5.1	$\overline{}$		Sample Custody Seals:
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>			A	-	-	Ye	Cooler Custody Seals:
NaHSO <sub>4</sub> : NABIS	Custody	890-851 Chain of C	Bý	2	Thermomete		Samples Received Intact:
H₃PO₄: HP			62	Yes No	Yes No Wet Ice:	IPT Temp Blank:	SAMPLE RECEIPT
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na			В	the lab, if received by 4:30pm		nAPP211654879	PO#:
HCL: HC HNO3: HN			)	he day received by		AUNA RHERS	Sampler's Name:
Cool: Cool MeOH: Me	- -			Due Date: 3 JAY TRT		HUNDO HADE	Project Location:
None: NO DI Water: H <sub>2</sub> O				Trush Code	Rout	31463366,001.0348	Project Number:
Preservative Codes	UEST	ANALYSIS REQ		Turn Around		HOLLY A FEDERAL # MEG	Project Name:
AUaP1 LI Other:	Deliverables: EDD		5 @ wsp. com	anna byers	2529 Email:	(281) 762-2329	Phone:
I PST/UST   IRRP   Level IV	Reporting: Level III Level III PST/UST LIRRY LI	CAPUSBAD, UM 68220	CAPLSBA	City, State ZIP:	S Athe XI	MIDLAND, J	City, State ZIP:
	State of Project:	BUENAVISTA DR	5315 But	Address:	STREET	3370 N A	Address:
Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐	Program: UST/PST ☐ PRP☐	ζ.	WPX EN	Company Name:		MSP USA	Company Name:
Work Order Comments	Work O	RALEY	Jim RA	Bill to: (if different)	ENANDEZ	JOSEPH HERNANDEZ	Project Manager:
co.com Page of	www.xenco.com						
_		EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	915) 585-3443, Lubbo 75) 392-7550, Carlsba	EL Paso, TX (	0	+ Xerico	
Work Order No: 22	Work Orde	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	2) 704-5440, San Ant	Midland, TX (43	Environment lesting		
:: N: 0 <		Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300	(281) 240-4200, Dalla	Houston, TX			CULOIIUZ
		. Cross		•		, C:	9

# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-851-1

SDG Number: Eddy County

Login Number: 851 List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

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	

Eurofins Xenco, Carlsbad

Released to Imaging: 1/17/2024 10:24:54PAM

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# **Login Sample Receipt Checklist**

Client: WSP USA Inc.

Job Number: 890-851-1 SDG Number: Eddy County

List Source: Eurofins Xenco, Midland

List Creation: 06/23/21 11:28 AM

Creator: Copeland, Tatiana

Login Number: 851 List Number: 2

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	True	

<6mm (1/4").

2023 8:28:57 AM State of New Mexico

Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must b	e included in the plan.
<ul> <li>✓ Detailed description of proposed remediation technique</li> <li>✓ Scaled sitemap with GPS coordinates showing delineation point</li> <li>✓ Estimated volume of material to be remediated</li> <li>✓ Closure criteria is to Table 1 specifications subject to 19.15.29.</li> <li>✓ Proposed schedule for remediation (note if remediation plan times)</li> </ul>	12(C)(4) NMAC
Deferral Requests Only: Each of the following items must be con	nfirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around predeconstruction.	roduction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health	n, the environment, or groundwater.
	e and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name: Jim Raley	Title: Environmental Professional
Signature:	Date:9/1/2021
email: jim.raley.dvn.com	Telephone: 575-689-7597
OCD Only	
Received by: Robert Hamlet	Date:1/14/2022
☐ Approved	Approval
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

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 45734

#### **CONDITIONS**

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	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

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

CONDITIONS

Action 246967

#### **CONDITIONS**

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	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