

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: jim.raley@dv.com	Incident # (assigned by OCD) nAPP2116548791
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

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

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

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

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 29	Volume Recovered (bbls) 20
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Hole developed in bottom of production tank, allowing release of fluids to secondary containment.

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


State of New Mexico
Oil Conservation Division

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>James Raley</u>	Title: Environmental Specialist _____
Signature: 	Date: <u>06/22/2021</u>
email: <u>jim.raley@dvn.com</u>	Telephone: <u>575-689-7597</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>6/28/2021</u>

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

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

CONDITIONS

Action 33251

CONDITIONS

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

CONDITIONS

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

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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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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


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

State of New Mexico
Oil Conservation Division

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

Printed Name: Jim Raley Title: Environmental Professional
Signature:  Date: 9-1-2021
email: jim.raley.dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2116548791
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Application ID	

Remediation Plan


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

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

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

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

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

Printed Name: Jim Raley Title: Environmental Professional
Signature:  Date: 9/1/2021
email: jim.raley.dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____



WSP USA

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

August 22, 2021

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

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

To Whom it May Concern:

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

RELEASE BACKGROUND

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

SITE CHARACTERIZATION

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



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

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

CLOSURE CRITERIA

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

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

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

SITE ASSESSMENT AND DELINEATION SOIL SAMPLING ACTIVITIES

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

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



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

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

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

LABORATORY ANALYTICAL RESULTS

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

PROPOSED WORK PLAN

Impacts within the release have been defined through soil borings BH01 through 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.



District II
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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.

A handwritten signature in black ink that reads 'Anna Byers'.

Anna Byers
Consultant, Geologist

A handwritten signature in black ink that appears to read 'Daniel R. Moir'.

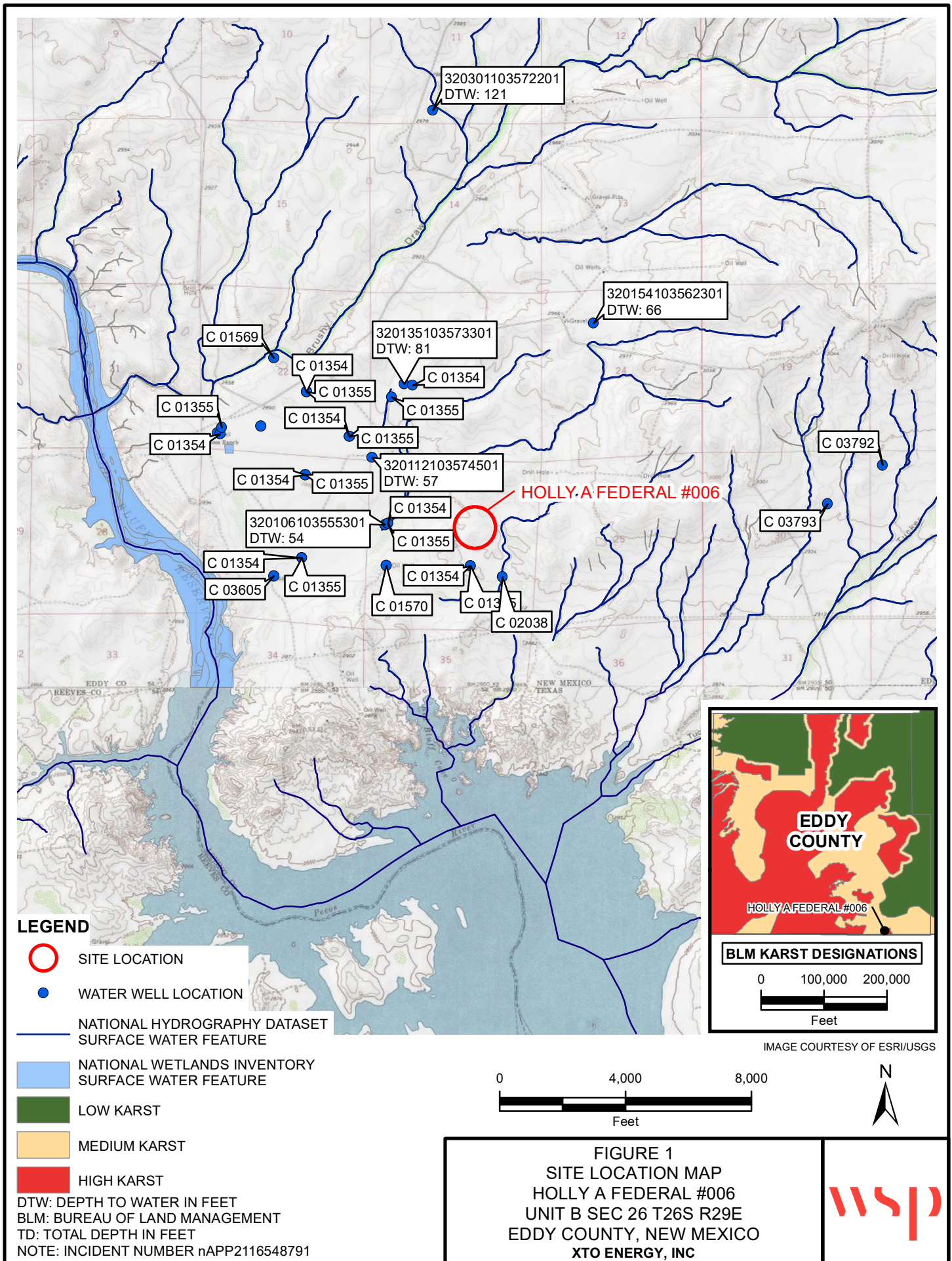
Daniel R. Moir, P.G.
Lead Consultant, Geologist

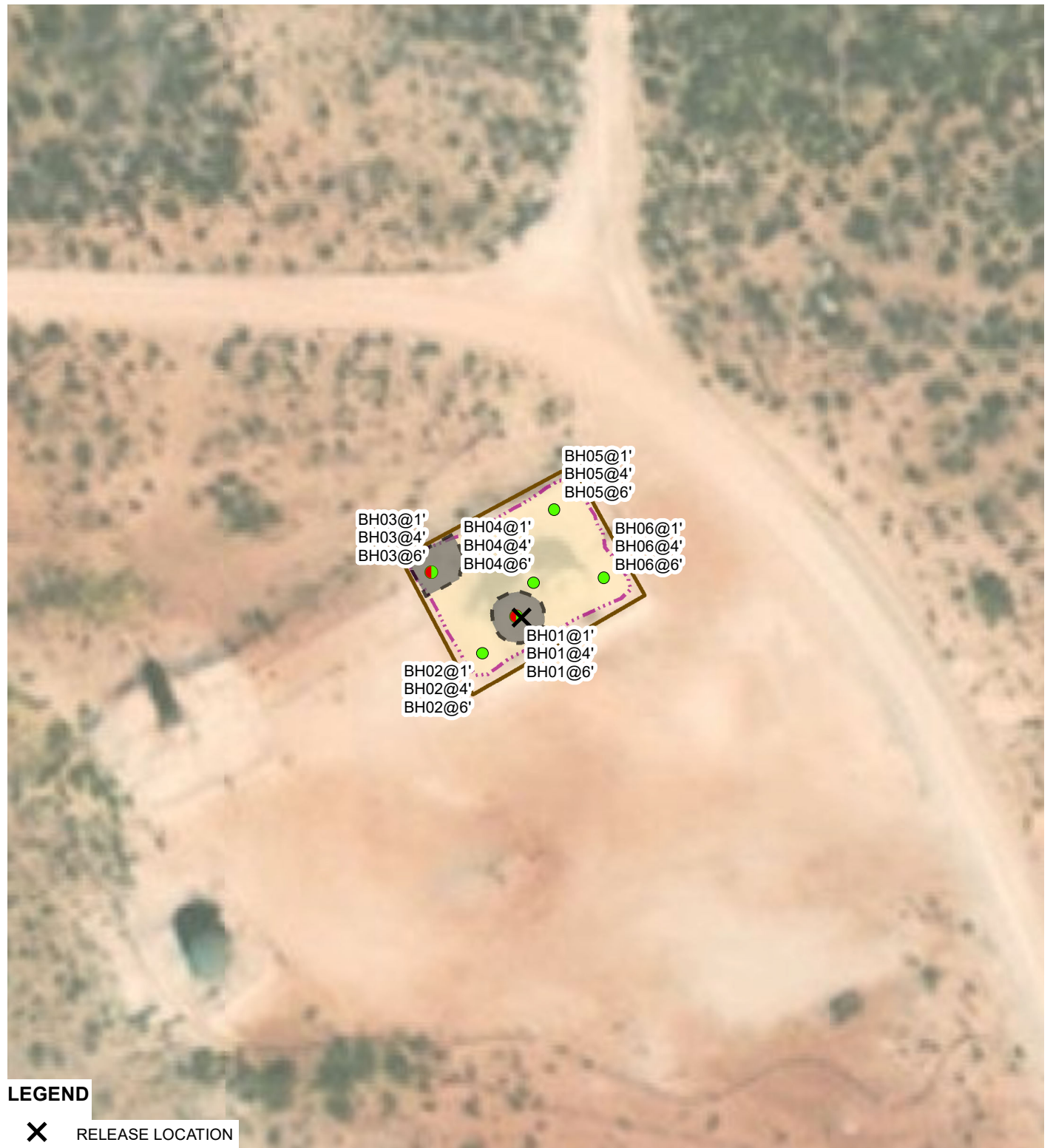
cc: Jim Raley, Devon
Bureau of Land Management

Attachments:

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

FIGURES



**LEGEND**

RELEASE LOCATION

DELINEATION SOIL SAMPLE WITH CONCENTRATIONS
PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIADELINEATION SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

RELEASE EXTENT



EARTHEN BERM



ESTIMATED EXCAVATION EXTENT

NOTE: INCIDENT NUMBER nAPP2116548791

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

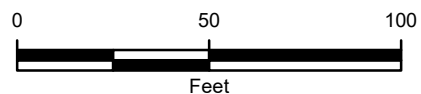


FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
 HOLLY A FEDERAL #006
 UNIT B SEC 26 T26S R29E
 EDDY COUNTY, NEW MEXICO
 WPX ENERGY PERMIAN, LLC



TABLES

Table 1

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

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total DRO+GRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Samples										
BH01	06/18/2021	1	0.0258	1.77	1,730	257	367	1,990	2,350	6,680
BH01	06/18/2021	4	<0.00200	0.0131	2,380	<49.7	757	2,380	3,140	158
BH01	06/18/2021	6	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	<49.7	153
BH02	06/18/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,730
BH02	06/18/2021	4	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	11.2
BH02	06/18/2021	6	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	30.9
BH03	06/18/2021	1	<0.00198	<0.00396	10,400	<249	2,290	10,400	12,700	4,350
BH03	06/18/2021	4	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	600
BH03	06/18/2021	6	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,060
BH04	06/18/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	173
BH04	06/18/2021	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	334
BH04	06/18/2021	6	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	215

Table 1

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

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total DRO+GRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
BH05	06/18/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	243
BH05	06/18/2021	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	469
BH05	06/18/2021	6	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	854
BH06	06/18/2021	1	<0.00202	<0.00403	89.8	<50.0	<50.0	89.8	89.8	24.0
BH06	06/18/2021	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	96.6
BH06	06/18/2021	6	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	22.4

Notes

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard

ATTACHMENT 1: REFERENCED WELL RECORD



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

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Groundwater levels for the Nation

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 320106103555301

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 320106103555301 26S.29E.26.13143

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

Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

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

Explanation

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

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

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-08-18 10:04:41 EDT

0.34 0.29 nadww01



ATTACHMENT 2: PHOTOGRAPHIC LOG



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



Photo No.	Date	
1	June 15, 2021	
Southeast view of the Site during the assessment.		 A photograph showing a large, cylindrical, weathered metal storage tank with a rusted surface. A metal staircase is attached to the side of the tank, leading up to a platform. The ground is dry, dusty, and uneven. The sky is clear and blue.

Photo No.	Date	
2	June 15, 2021	
West view of the Site during the assessment.		 A photograph showing a large, cylindrical, weathered metal storage tank with a rusted surface. A metal staircase is attached to the side of the tank, leading up to a platform. In the foreground, there is a yellow caution sign on a metal frame. The ground is dry, dusty, and uneven. The sky is clear and blue.



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






Photo No.	Date	
3	June 18, 2021	
View of the release area following removal of decommissioned tank.		 A photograph showing a large, dark, irregularly shaped area of contamination on the ground. The area is surrounded by dry, brown earth. In the background, there are two white pickup trucks parked on a dirt road, and a green storage tank is visible on the right. The sky is clear and blue.


Photo No.	Date	
4	June 18, 2021	
View of the release area following removal of decommissioned tank.		 A photograph showing a large, cylindrical, rusted metal tank lying on its side on a dirt surface. The tank is surrounded by dry, brown earth. In the background, there are power lines and a white pickup truck. The sky is clear and blue.


ATTACHMENT 3: LITHOLOGIC/SOIL SAMPLING LOG


 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH Name:		Date:				
		BH01		6/18/2021				
		Site Name: Holly A Federal #006						
		Incident Number: nAPP2116548791						
WSP Job Number: 31403306.001.0348								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.014105, -103.952305		Field Screening: Chloride, PID		Hole Diameter: 2.5 inches				
				Total Depth: 6 feet				
Comments: Moisture Content "M" - Moist; Staining "Y" - Yes; Vapor "MAX" - PID reading >15,000 ppm; Chloride values do no include correction factor								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	6,896	MAX	Y	BH01	1	1	SW-SM	brown well-graded sand (f. to c.) with gravel, odor
M	376	MAX	Y	-	2	2	SP-SM	brown well-graded sand (f. to c.) with gravel, odor
						3		
M	132	310.6	N	BH01	4	4	SC	red clayey-sand (m.), low plasticity, odor
						5		
M	156	MAX	N	BH01	6	6	SC	red clayey-sand (m.), moderate plasticity, compacted, odor
Total Depth								

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH Name:		Date:	
								BH02		6/18/2021	
								Site Name: Holly A Federal #006			
								Incident Number: nAPP2116548791			
WSP Job Number: 31403306.001.0348											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.014068, -103.952343				Field Screening: Chloride, PID		Hole Diameter: 2.5 inches		Total Depth: 6 feet			
Comments: Moisture Content "M" - Moist; BDL - Below Detection Limit of HACH Low Range Chloride Test Strips; Chloride values do no include correction factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
M	588	111	No	BH02	1	1	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
M	5,464	23.9	No	-	2	2	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
						3					
M	BDL	1.4	No	BH02	4	4	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
						5					
M	BDL	0	No	BH02	6	6	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
Total Depth											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH Name:		Date:				
		BH03		6/18/2021				
		Site Name: Holly A Federal #006						
		Incident Number: nAPP2116548791						
WSP Job Number: 31403306.001.0348								
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.014147, -103.952401		Field Screening: Chloride, PID		Hole Diameter: 2.5 inches				
				Total Depth: 6 feet				
Comments: Moisture Content "M" - Moist/"D" - Dry; Staining "Y" - Yes; Vapor "MAX" - PID reading >15,000 ppm; Chloride values do not include correction factor								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
M	3,976	MAX	Y	BH03	1	1	SP-SM	dark brown poorly-graded sand with gravel, poorly consolidated, no odor
M	5,464	MAX	No	-	2	2	SP-SM	dark brown poorly-graded sand with gravel, poorly consolidated, no odor
						3		
D	1,988	156.4	No	BH03	4	4	SP-SM	light brown poorly-graded sand with gravel, poorly consolidated, no odor
						5		
D	8,052	112.2	No	BH03	6	6	SP-SM	light brown poorly-graded sand with gravel, poorly consolidated, no odor
Total Depth								

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH Name: BH04		Date: 6/18/2021	
Site Name: Holly A Federal #006								Incident Number: nAPP2116548791			
WSP Job Number: 31403306.001.0348											
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Anna Byers		Method: Hand Auger	
Lat/Long: 32.014137, -103.952285				Field Screening: Chloride, PID				Hole Diameter: 2.5 inches		Total Depth: 6 feet	
Comments: Moisture Content "M" - Moist; BDL - Below Detection Limit of HACH Low Range Chloride Test Strips; Chloride values do no include correction factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
M	BDL	40.9	No	BH04	1	1	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
M	240	10.6	No	-	2	2	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
						3					
M	456	3.6	No	BH04	4	4	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
						5					
M	456	2.8	No	BH04	6	6	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
Total Depth											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH Name: BH05		Date: 6/18/2021	
LITHOLOGIC / SOIL SAMPLING LOG								Site Name: Holly A Federal #006			
Lat/Long: 32.014207, -103.952261								Incident Number: nAPP2116548791			
Field Screening: Chloride, PID								WSP Job Number: 31403306.001.0348			
Logged By: Anna Byers								Method: Hand Auger			
Hole Diameter: 2.5 inches								Total Depth: 6 feet			
Comments: Moisture Content "M" - Moist; Moisture Content "D" - Dry; Chloride values do no include correction factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
M	272	278.6	No	BH05	1	1	SP-SM	brown poorly-graded sand (m.) with silt and gravel, poorly consolidated, odor			
M	928	175.7	No	-	2	2	CCHE	tan, poorly cemented caliche with gravel, odor			
						3					
D	500	20.8	No	BH05	4	4	SM	light brown silty sand (m.), well consolidated, no odor			
						5					
D	928	16.2	No	BH05	6	6	SM	light brown silty sand (m.), well consolidated, no odor			
Total Depth											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH Name: BH06		Date: 6/18/2021	
								Site Name: Holly A Federal #006			
								Incident Number: nAPP2116548791			
								WSP Job Number: 31403306.001.0348			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Anna Byers		Method: Hand Auger	
Lat/Long: 32.014142, -103.952205				Field Screening: Chloride, PID				Hole Diameter: 2.5 inches		Total Depth: 6 feet	
Comments: Moisture Content "M" - Moist/"D" - Dry; Chloride values do not include correction factor; BDL - Below Detection Limit of HACH Low Range Chloride Test Strips											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
M	BDL	24.7	No	BH06	1	1	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
M	BDL	10.8	No	-	2	2	SP-SM	red poorly-graded sand with gravel, poorly consolidated, no odor			
						3					
D	BDL	7.8	No	BH06	4	4	SP-SM	red poorly-graded sand with gravel and capsules of white caliche, poorly consolidated, no odor			
						5					
D	BDL	6.2	No	BH06	6	6	SP-SM	red poorly-graded sand with gravel and capsules of white caliche, poorly consolidated, no odor			
Total Depth											

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS



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

A handwritten signature in black ink that reads "Kramer".

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

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

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

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

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

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

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-844-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-844-1

Receipt

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

Receipt Exceptions

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

GC VOA

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

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

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH01

Lab Sample ID: 890-844-1

Date Collected: 06/18/21 09:15

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH01

Lab Sample ID: 890-844-2

Date Collected: 06/18/21 09:25

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 09:59	06/23/21 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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH01

Lab Sample ID: 890-844-2

Date Collected: 06/18/21 09:25

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH02

Lab Sample ID: 890-844-3

Date Collected: 06/18/21 11:10

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH02

Lab Sample ID: 890-844-4

Date Collected: 06/18/21 11:30

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH03

Lab Sample ID: 890-844-5

Date Collected: 06/18/21 12:10

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH03

Lab Sample ID: 890-844-5

Date Collected: 06/18/21 12:10

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH03

Lab Sample ID: 890-844-6

Date Collected: 06/18/21 12:30

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH04

Lab Sample ID: 890-844-7

Date Collected: 06/18/21 10:45

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH04

Lab Sample ID: 890-844-8

Date Collected: 06/18/21 11:05

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

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

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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH04

Lab Sample ID: 890-844-8

Date Collected: 06/18/21 11:05

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH05

Lab Sample ID: 890-844-9

Date Collected: 06/18/21 12:50

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH05

Lab Sample ID: 890-844-10

Date Collected: 06/18/21 13:25

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH06

Lab Sample ID: 890-844-11

Date Collected: 06/18/21 13:45

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

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

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

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: BH06

Lab Sample ID: 890-844-11

Date Collected: 06/18/21 13:45

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 1

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Client Sample ID: BH06

Lab Sample ID: 890-844-12

Date Collected: 06/18/21 14:10

Matrix: Solid

Date Received: 06/22/21 11:41

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

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

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

Matrix: Solid

Prep Type: Total/NA

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4500/5-A

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4500

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

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

Lab Sample ID: LCS 880-4500/1-A

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4500

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

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

Lab Sample ID: LCSD 880-4500/2-A

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4500

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

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

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

Matrix: Solid

Analysis Batch: 4608

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4592

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4608

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4592

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

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

Lab Sample ID: LCS 880-4592/1-A

Matrix: Solid

Analysis Batch: 4608

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4592

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

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

Lab Sample ID: LCSD 880-4592/2-A

Matrix: Solid

Analysis Batch: 4608

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4592

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

Lab Sample ID: MB 880-4520/1-A

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4520

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

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

Lab Sample ID: LCS 880-4520/2-A

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4520

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

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

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

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4520

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

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

Lab Sample ID: 890-844-3 MS

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: BH02

Prep Type: Total/NA

Prep Batch: 4520

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

Lab Sample ID: 890-844-3 MS

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: BH02

Prep Type: Total/NA

Prep Batch: 4520

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

Lab Sample ID: 890-844-3 MSD

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: BH02

Prep Type: Total/NA

Prep Batch: 4520

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4512/1-A

Matrix: Solid

Analysis Batch: 4595

Client Sample ID: Method Blank

Prep Type: Soluble

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

Lab Sample ID: LCS 880-4512/2-A

Matrix: Solid

Analysis Batch: 4595

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-4512/3-A

Matrix: Solid

Analysis Batch: 4595

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

Lab Sample ID: 890-844-5 MS

Matrix: Solid

Analysis Batch: 4595

Client Sample ID: BH03

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-844-5 MSD									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	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4592/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4592/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4592/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4608

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

Eurofins Xenco, Carlsbad

QC Association Summary

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

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

GC Semi VOA

Analysis Batch: 4494

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

Analysis Batch: 4496

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

Prep Batch: 4520

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

HPLC/IC

Leach Batch: 4512

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

Eurofins Xenco, Carlsbad

QC Association Summary

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

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

HPLC/IC (Continued)

Leach Batch: 4512 (Continued)

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

Analysis Batch: 4595

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

Lab Chronicle

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

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

Client Sample ID: BH01

Lab Sample ID: 890-844-1

Date Collected: 06/18/21 09:15

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH01

Lab Sample ID: 890-844-2

Date Collected: 06/18/21 09:25

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH02

Lab Sample ID: 890-844-3

Date Collected: 06/18/21 11:10

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH02

Lab Sample ID: 890-844-4

Date Collected: 06/18/21 11:30

Matrix: Solid

Date Received: 06/22/21 11:41

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

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH03

Lab Sample ID: 890-844-5

Date Collected: 06/18/21 12:10

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH03

Lab Sample ID: 890-844-6

Date Collected: 06/18/21 12:30

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH04

Lab Sample ID: 890-844-7

Date Collected: 06/18/21 10:45

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH04

Lab Sample ID: 890-844-8

Date Collected: 06/18/21 11:05

Matrix: Solid

Date Received: 06/22/21 11:41

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

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH05

Lab Sample ID: 890-844-9

Date Collected: 06/18/21 12:50

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH05

Lab Sample ID: 890-844-10

Date Collected: 06/18/21 13:25

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH06

Lab Sample ID: 890-844-11

Date Collected: 06/18/21 13:45

Matrix: Solid

Date Received: 06/22/21 11:41

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

Client Sample ID: BH06

Lab Sample ID: 890-844-12

Date Collected: 06/18/21 14:10

Matrix: Solid

Date Received: 06/22/21 11:41

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

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

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

Eurofins Xenco, Carlsbad



Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM PALEY
Company Name:	WSP USA	Company Name:	WSP ENERGY
Address:	3366 N A STREET	Address:	5315 BUENA VISTA DR.
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 762-2329	Email:	anna.byles@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	HOLLY A FEDERAL #886	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number:	31483302, 021, 0348	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush			None: NO DI Water: H ₂ O
Project Location:	EDDY COUNTRY	Due Date:	3 DAY/TAT		Cool: Cool MeOH: Me
Sampler's Name:	ANNA BYLES	TAT starts the day received by the lab, if received by 4:30pm			HCL: HC HNO ₃ : HN
PO #:	6113/21 Release	Temp Blank:	Yes No	Wet Ice:	H ₂ SO ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT		Thermometer ID:	7 NTC-003		H ₃ PO ₄ : HP
Samples Received Inact:	Yes No	Correction Factor:	-0.2		NaHSO ₄ : NABIS
Cooler Custody Seals:	Yes No	Temperature Reading:	5.2/5.0		Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	Yes No	Corrected Temperature:			Zn Acetate+NaOH: Zn
Total Containers:					NaOH+Ascorbic Acid: SAPC

890-844 Chain of Custody



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Sample Comments
BH01	5	4/8/21	0915	1'	Grab	1	TPH (EPA 8015 MOD)	0402110548791
BH01			0925	4'		1	BTEX (EPA 821 B)	
BH02			1110	1'		1	Chloride (EPA 300.0)	
BH02			1130	4'		1		
BH03			1210	1'		1		
BH03			1230	4'		1		
BH04			1045	1'		1		
BH04			1105	4'		1		
BH05			1250	1'		1		
BH05			1325	4'		1		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 TCLF / SPLP 8010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byles	Cee Culp	6-22-21 1138			



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
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El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 968-3199

Chain of Custody


Work Order No: _____

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Project Manager:	JOSEPH HERVANDIZ	Bill to: (if different)	TIM RAEY
Company Name:	WSP USA	Company Name:	WYX ENERGY
Address:	3800 N A STREET	Address:	5315 BUENA VISTA DR.
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 392-2329	Email:	anna.byeas@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	HOLLY A FEDERAL TANK	Turn Around	Pres. Code	ANALYSIS REQUEST																Preservative Codes				
Project Number:	3403300.001.0318	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush																		None: NO	DI Water: H ₂ O			
Project Location:	EDDY COUNTY	Due Date:	3/24/2021																	Cool: Cool	MeOH: Me			
Sampler's Name:	ANNA BYEAS	TAT starts the day received by the lab, if received by 4:30pm																		HCL: HC	HNO ₃ : HN			
PO #:	6/13/21 Release																			H ₂ SO ₄ : H ₂	NaOH: Na			
SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No																	H ₃ PO ₄ : HP	
Samples Received Intact:	Yes	No	Thermometer ID:	(21)																	NaHSO ₄ : NABIS			
Cooler Custody Seals:	Yes	No	Correction Factor:																		Na ₂ S ₂ O ₃ : NASO ₃			
Sample Custody Seals:	Yes	No	Temperature Reading:																		Zn Acetate+NaOH: Zn			
Total Containers:	Yes	No	Corrected Temperature:																		NaOH+Ascorbic Acid: SACP			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPI	BTE	Chk	Sample Comments
BTEX	S	6/18/21	13:15	1'	Grab	1	X	X	X	nAP2116548791
BTEX	S	6/18/21	14:15	4'	Grab	1	X	X	X	
										

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	Carlsbad	6-22-21 138			
3					
5					

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-844-1

SDG Number: Eddy County

Login Number: 844

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-844-1

SDG Number: Eddy County

Login Number: 844

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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



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

A handwritten signature in black ink that reads "Jessica Kramer".

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

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

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

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

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

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

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-845-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-845-1

Receipt

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

Receipt Exceptions

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

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH01

Lab Sample ID: 890-845-1

Date Collected: 06/18/21 10:00

Matrix: Solid

Date Received: 06/22/21 11:44

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

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

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

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

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

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

Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-845-1	BH01	103	99
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

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

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4724

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: LCS 880-4722/2-A

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4722

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: 890-845-1 MS

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 4722

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

Lab Sample ID: 890-845-1 MS

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 4722

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

Lab Sample ID: 890-845-1 MSD

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 4722

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Method Blank

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Association Summary

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

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

GC VOA

Prep Batch: 4724

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

Analysis Batch: 4740

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

GC Semi VOA

Prep Batch: 4722

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

Analysis Batch: 4728

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

HPLC/IC

Leach Batch: 4824

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

Analysis Batch: 4825

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

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH01
Date Collected: 06/18/21 10:00
Date Received: 06/22/21 11:44

Lab Sample ID: 890-845-1
Matrix: Solid

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

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing
Xenoco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0360
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

Chain of Custody

Work Order No:

www.xenco.com Page _____ of _____

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPR ENERGY
Address:	3380 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 792-2329	Email:	anna.byles@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADAPT ☐ Other: _____

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	BTE	Chl	Sample Comments
BH21	S	6/18/21	1440	6'	Gas	1	X	X	X	BH21 0492116548791

Chemical Method(s) and Material(s) to be analyzed	200.8 / 6020:	200.7 / 6010
ICLCP/SLEP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471	
8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Anna Byers</i>	<i>Care Cup</i>	10/22/21 11:38	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-845-1

SDG Number: Eddy County

Login Number: 845

List Number: 1

Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-845-1

SDG Number: Eddy County

Login Number: 845

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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



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

A handwritten signature in black ink that reads "Jessica Kramer".

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

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

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

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

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

Laboratory Job ID: 890-847-1
SDG: Eddy County

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-847-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-847-1

Receipt

The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH02 (890-847-1).

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH02

Lab Sample ID: 890-847-1

Date Collected: 06/18/21 15:35

Matrix: Solid

Date Received: 06/22/21 11:39

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 18:13	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/29/21 14:37	06/29/21 18:13	1
1,4-Difluorobenzene (Surr)	96		70 - 130	06/29/21 14:37	06/29/21 18:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1
Total TPH	<49.9	U	49.9		mg/Kg		06/29/21 09:38	06/29/21 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/29/21 09:38	06/29/21 14:22	1
o-Terphenyl	107		70 - 130	06/29/21 09:38	06/29/21 14:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.9		5.03		mg/Kg			07/01/21 19:59	1

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-847-1	BH02	98	96
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-847-1	BH02	102	107
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4724

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: LCS 880-4722/2-A

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4722

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4722

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Method Blank

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

QC Association Summary

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

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

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-847-1	BH02	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH02

Lab Sample ID: 890-847-1

Date Collected: 06/18/21 15:35

Matrix: Solid

Date Received: 06/22/21 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 18:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 14:22	AM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 19:59	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-847-1	BH02	Solid	06/18/21 15:35	06/22/21 11:39	- 6

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing
Xenco

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) 794-4296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: 8479

Page 1 of 1
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Project Manager:	JOSEPH HERLAUNDER	Bill to: (if different)	JIM PALEY
Company Name:	WSP USA	Company Name:	WPX ENERGY
Address:	3300 N A STREET	Address:	5335 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 702-2329	Email:	anna.byles@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDO <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	BTE	Cu	Sample Comments
BA02	S	6/18/21	1535	6'	Grab	1	X	X	X	HR-10

Element	200.7/6010	200.8/6020:
8RCRA	13PPM	Texas 11
Al	Sb	As
Ba	Be	B
Cd	Ca	Cr
Co	Cu	Fe
Pb	Mg	Mn
Mo	Ni	K
Se	Ag	SiO ₂
Sn	Na	Sr
U	V	Zn
Zr		

Notice: Signature of this document and reimbursement of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>James Boyers</i>	<i>Diep Gup</i>	12-22-21 1139	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-847-1

SDG Number: Eddy County

Login Number: 847

List Number: 1

Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-847-1

SDG Number: Eddy County

Login Number: 847

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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



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

A handwritten signature in black ink that reads "Jessica Kramer".

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

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

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

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

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

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

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-848-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-848-1

Receipt

The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH03 (890-848-1).BTEX8021

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH03

Lab Sample ID: 890-848-1

Date Collected: 06/18/21 15:25

Matrix: Solid

Date Received: 06/22/21 11:39

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 22:29	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 22:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	06/29/21 14:37	06/29/21 22:29	1
1,4-Difluorobenzene (Surr)	81		70 - 130	06/29/21 14:37	06/29/21 22:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1
Total TPH	<50.0	U	50.0		mg/Kg		06/29/21 09:38	06/29/21 14:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	06/29/21 09:38	06/29/21 14:42	1
o-Terphenyl	114		70 - 130	06/29/21 09:38	06/29/21 14:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1060		4.97		mg/Kg			07/01/21 20:05	1

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-848-1	BH03	92	81
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-848-1	BH03	106	114
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4724

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: LCS 880-4722/2-A

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4722

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4722

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Method Blank

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

QC Association Summary

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

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

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-848-1	BH03	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH03

Lab Sample ID: 890-848-1

Date Collected: 06/18/21 15:25

Matrix: Solid

Date Received: 06/22/21 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 22:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 14:42	AM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:05	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-848-1	BH03	Solid	06/18/21 15:25	06/22/21 11:39	- 6

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



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

Work Order No: 048

Page _____ of _____
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Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WRX ENERGY
Address:	33800 N. A STREET	Address:	5815 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(801) 702-2329	Email:	anna.bjers@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	BTE	Chlor	Sample Comments
BTPD 3	S	6/18/01	15:25	6'	Grab	1	X	X	X	Hold

Total	200.7 / 6010	200.8 / 6020:	Circle Method(s) and Metals(s) to be analyzed																											
8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
TELP / SLEP 0010: 0RCRA			SP	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U												
			Hg: 1631 / 245, 1 / 7470 / 7471																											

Notice: Signature of this document and encashment of samples constitutes a valid purchase order from client company to Eurofins Xencro, its affiliates and subcontractors. It assigns standard terms and conditions for service. Eurofins Xencro 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 Xencro. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencro, but not analyzed. These terms will be enforced unless previously negotiated to Eurofins Xencro. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencro, but not analyzed. These terms will be enforced unless previously negotiated to Eurofins Xencro.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Lane Byers</i>	<i>N. Oller</i>	6/22/21 11:39 ²			
3		4			
5		6			

Revised Date: 08/25/2020 Rev. 202

Login Sample Receipt Checklist

Client: WSP USA Inc.

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	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-848-1

SDG Number: Eddy County

Login Number: 848

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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



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

A handwritten signature in black ink that reads "Jessica Kramer".

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

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

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

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

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

Laboratory Job ID: 890-849-1
SDG: Eddy County

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-849-1

Laboratory: Eurofins Xenco, Carlsbad**Narrative**

**Job Narrative
890-849-1****Receipt**

The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH04 (890-849-1)

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH04

Lab Sample ID: 890-849-1

Date Collected: 06/18/21 14:58

Matrix: Solid

Date Received: 06/22/21 11:39

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 22:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	06/29/21 14:37	06/29/21 22:54	1
1,4-Difluorobenzene (Surr)	88		70 - 130	06/29/21 14:37	06/29/21 22:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1
Total TPH	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	06/29/21 09:38	06/29/21 15:03	1
o-Terphenyl	115		70 - 130	06/29/21 09:38	06/29/21 15:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	215		4.95		mg/Kg			07/01/21 20:12	1

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-849-1	BH04	91	88
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-849-1	BH04	106	115
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4724

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: LCS 880-4722/2-A

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4722

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4722

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Method Blank

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

QC Association Summary

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

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

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-849-1	BH04	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH04
Date Collected: 06/18/21 14:58
Date Received: 06/22/21 11:39

Lab Sample ID: 890-849-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 22:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 15:03	AM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:12	CH	XEN MID

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-849-1	BH04	Solid	06/18/21 14:58	06/22/21 11:39	- 6

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing
Xenco

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

Chain of Custody

Work Order No: 849

www.xenco.com Page 1 of 1

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WXP ENERGY
Address:	3320 N A STREET	Address:	5315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(201) 702-2329	Email:	anna.byers@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TP	BTP	Chl	Sample Comments
BTP4	S	6/18/91	1458	6'	Grab	1	x	x	x	Hold

Total	200.7 / 6010	200.8 / 6020:	BRCHA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO₂	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed			ICDLSPRLP6040	0RCH	0R	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U												
<p>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 \$5.00 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.</p>																																		
<p>Hg: 1631 / 245, 1 / 7470 / 7471</p>																																		

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Dawn Byers</i>	<i>N. [Signature]</i>	6/22/21 11:39	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020

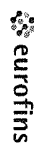
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220
 Phone 575 889 3100

Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-849-1

SDG Number: Eddy County

Login Number: 849

List Number: 1

Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-849-1

SDG Number: Eddy County

Login Number: 849

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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



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

A handwritten signature in black ink that reads "Jessica Kramer".

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

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

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

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

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

Laboratory Job ID: 890-850-1
SDG: Eddy County

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-850-1

Laboratory: Eurofins Xenco, Carlsbad**Narrative**

**Job Narrative
890-850-1****Receipt**

The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH05 (890-850-1)

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH05

Lab Sample ID: 890-850-1

Date Collected: 06/18/21 14:25

Matrix: Solid

Date Received: 06/22/21 11:39

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 23:20	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/29/21 14:37	06/29/21 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	06/29/21 14:37	06/29/21 23:20	1
1,4-Difluorobenzene (Surr)	85		70 - 130	06/29/21 14:37	06/29/21 23:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1
Total TPH	<49.8	U	49.8		mg/Kg		06/29/21 09:38	06/29/21 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	06/29/21 09:38	06/29/21 15:24	1
o-Terphenyl	90		70 - 130	06/29/21 09:38	06/29/21 15:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	854		5.00		mg/Kg			07/01/21 20:18	1

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-850-1	BH05	88	85
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-850-1	BH05	82	90
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4724

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: LCS 880-4722/2-A

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4722

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4722

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Method Blank

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

QC Association Summary

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

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

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-850-1	BH05	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH05
Date Collected: 06/18/21 14:25
Date Received: 06/22/21 11:39

Lab Sample ID: 890-850-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 23:20	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 15:24	AM	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:18	CH	XEN MID

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-850-1	BH05	Solid	06/18/21 14:25	06/22/21 11:39	- 6

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



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

Work Order No: 250

Page 1 of 1
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Work Order Comments
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	BIE	Chlo	Sample Comments
BHP 5	S	6/8/21	1425	6	Grab	1	X	X	X	Hand

	200.7 / 6010	200.8 / 6020:	
Total	200.7 / 6010	200.8 / 6020:	
	8RCRA	13PPM	Texas 11
	Al	Sb	As
	Ba	Be	B
	Cd	Ca	Cr
	Co	Cu	Fe
	Pb	Mg	Mn
	Mo	Ni	K
	Se	Ag	SiO ₂
	Na	Sr	Ti
	Sn	U	V
	Zn		
Cycle Method(s) and Metal(s) to be analyzed	TECP/STCP 6010: 8RCRA	SB	As
	Ba	Be	Cd
	Cr	Co	Cu
	Pb	Mn	Mo
	Ni	Se	Ag
	Ti	U	
	Hg:	1631 / 245.1 / 7470 / 7471	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xencro 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 Xencro. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencro, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Dawn Byers</i>	<i>V. C. [Signature]</i>	6/22/21 11:32			
3		4			
5		6			

Revised Date 08/25/2020 Rev. 2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-850-1

SDG Number: Eddy County

Login Number: 850

List Number: 1

Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-850-1

SDG Number: Eddy County

Login Number: 850

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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



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

A handwritten signature in black ink that reads "Jessica Kramer".

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

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

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

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

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

Laboratory Job ID: 890-851-1
SDG: Eddy County

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Definitions/Glossary

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

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

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

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

Job ID: 890-851-1

Laboratory: Eurofins Xenco, Carlsbad**Narrative**

**Job Narrative
890-851-1****Receipt**

The sample was received on 6/22/2021 11:39 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH06 (890-851-1)

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

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

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

Client Sample ID: BH06

Lab Sample ID: 890-851-1

Date Collected: 06/18/21 14:30

Matrix: Solid

Date Received: 06/22/21 11:39

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 23:46	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/29/21 14:37	06/29/21 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/29/21 14:37	06/29/21 23:46	1
1,4-Difluorobenzene (Surr)	100		70 - 130	06/29/21 14:37	06/29/21 23:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1
Total TPH	<49.7	U	49.7		mg/Kg		06/29/21 09:38	06/29/21 15:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	06/29/21 09:38	06/29/21 15:45	1
o-Terphenyl	112		70 - 130	06/29/21 09:38	06/29/21 15:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		5.01		mg/Kg			07/01/21 20:24	1

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-851-1	BH06	97	100
LCS 880-4724/1-A	Lab Control Sample	87	97
LCSD 880-4724/2-A	Lab Control Sample Dup	94	102
MB 880-4724/5-A	Method Blank	60 S1-	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-851-1	BH06	106	112
LCS 880-4722/2-A	Lab Control Sample	97	98
LCSD 880-4722/3-A	Lab Control Sample Dup	112	107
MB 880-4722/1-A	Method Blank	90	101
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

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

Method: 8021B - Volatile Organic Compounds (GC)

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4724

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

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

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

Matrix: Solid

Analysis Batch: 4740

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4724

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

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4722

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

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

Lab Sample ID: LCS 880-4722/2-A

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4722

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

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

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

Matrix: Solid

Analysis Batch: 4728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4722

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

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4824/1-A

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Method Blank

Prep Type: Soluble

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

Eurofins Xenco, Carlsbad

QC Sample Results

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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

Matrix: Solid

Analysis Batch: 4825

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

QC Association Summary

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

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

GC VOA

Prep Batch: 4724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	5035	
MB 880-4724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	8021B	4724
MB 880-4724/5-A	Method Blank	Total/NA	Solid	8021B	4724
LCS 880-4724/1-A	Lab Control Sample	Total/NA	Solid	8021B	4724
LCSD 880-4724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4724

GC Semi VOA

Prep Batch: 4722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	8015NM Prep	
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Total/NA	Solid	8015B NM	4722
MB 880-4722/1-A	Method Blank	Total/NA	Solid	8015B NM	4722
LCS 880-4722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4722
LCSD 880-4722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4722

HPLC/IC

Leach Batch: 4824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Soluble	Solid	DI Leach	
MB 880-4824/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-851-1	BH06	Soluble	Solid	300.0	4824
MB 880-4824/1-A	Method Blank	Soluble	Solid	300.0	4824
LCS 880-4824/2-A	Lab Control Sample	Soluble	Solid	300.0	4824
LCSD 880-4824/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4824

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: BH06
Date Collected: 06/18/21 14:30
Date Received: 06/22/21 11:39

Lab Sample ID: 890-851-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	4724	06/29/21 14:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	4740	06/29/21 23:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	4722	06/29/21 09:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			4728	06/29/21 15:45	AM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	4824	07/01/21 12:13	CH	XEN MID
Soluble	Analysis	300.0		1			4825	07/01/21 20:24	CH	XEN MID

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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

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

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-851-1	BH06	Solid	06/18/21 14:30	06/22/21 11:39	- 6

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing
Xenco

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

Chain of Custody

Work Order No: 851

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Project Manager:	JOSPH HERNANDEZ	Bill to: (if different)	JIM RALEY
Company Name:	WSP USA	Company Name:	WPA ENERGY
Address:	3300 N A STREET	Address:	6315 BUENA VISTA DR
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(281) 302-2329	Email:	anna.byers@wsp.com

Work Order Comments	
Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: <input type="checkbox"/> Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	HOLLY A FEDERAL # 006	Turn Around	Pres. Code	ANALYSIS REQUEST		Preservative Codes
Project Number:	3463366.001.0318	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush				None: NO
Project Location:	EDDY COUNTY	Due Date:	3 MAY 2021			DI Water: H ₂ O
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm				Cool: Cool
PO #:	NAPP2116548491					HCL: HC
SAMPLE RECEIPT		Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	H ₂ SO ₄ : H ₂
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	IT-NM-007			H ₃ PO ₄ : HP
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.02			NaHSO ₄ : NABIS
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	5.2			Na ₂ S ₂ O ₃ : NaSO ₃
Total Containers:		Corrected Temperature:	5.0			Zn Acetate+NaOH: Zn
						NaOH+Ascorbic Acid: SAPC



890-851 Chain of Custody

Sample Identification Matrix Date Sampled Time Sampled Depth Grab/Comp # of Cont

Bottle S 6/18/21 1430 6' bab 1 X TPH (EPA 8215 mod) X BTEX (EPA 821 B) X Chloride (EPA 300.0)

HOLD

Sample Comments

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

Circle Method(s) and Metal(s) to be analyzed: TCLP, EPA 8210, 8RCRA, SO₄, AS, BA, BE, CD, CR, CO, CU, PB, MN, MO, NI, SE, AG, TI, U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Anna Byers	A. Byers	6/22/21 11:30			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-851-1

SDG Number: Eddy County

Login Number: 851

List Number: 1

Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-851-1

SDG Number: Eddy County

Login Number: 851

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

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

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

Incident ID	nAPP2116548791
District RP	
Facility ID	
Application ID	

Remediation Plan


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

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

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

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

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

Printed Name: Jim Raley Title: Environmental Professional
Signature:  Date: 9/1/2021
email: jim.raley.dvn.com Telephone: 575-689-7597

OCD Only

Received by: Robert Hamlet Date: 1/14/2022

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

Signature:  Date: 1/14/2022

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

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

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 45734

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 45734
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Workplan/Remediation Plan is approved with the following conditions: Please make sure the floor samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release.	1/14/2022