HOBBS OCD

MAY 10 2013

RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Chevron USA	**Contact:** Bradley Blevins
Address: P.O. Box 190, Hobbs, NM 88240	**Telephone No.:** (575) 391-1462 ext. 86424
Facility Name: Trinity Burrus ABO Unit #16	**Facility Type:** Tank Battery

Surface Owner: 070 Ranchland Ltd	**Mineral Owner:**	**API No.:** 30-025-36251

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	23	12S	38E	1980	South	660	West	Lea

Latitude: N 33° 15' 45.10" **Longitude:** W 103° 04' 27.73"

NATURE OF RELEASE

Type of Release: Produced Water	**Volume of Release:** 52 bbls	**Volume Recovered:** 3 bbls
Source of Release: One inch nipple failed on water pump.	**Date and Hour of Occurrence:** 5/2/13 @ 10:00	**Date and Hour of Discovery:** 5/2/13 @ 10:00
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** GEOFF LEKING NMOCD	
By Whom? Bradley Blevins	**Date and Hour:** 5/2/13 @ 2:00PM	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse:**	

Depth to water: ~25 ft

If a Watercourse was Impacted, Describe Fully:

Describe Cause of Problem and Remedial Action Taken.* Release was caused by a one inch nipple failure on water pump. Approximately 52 bbls of produced water was released with 3 bbls recovered. An Emergency Response Team arrived at the release area and began continuous abatement of the impacted area.

Describe Area Affected and Cleanup Action Taken.* Approximately 15,200 square feet of area was affected by the release of produced water. Visibly stained soil was excavated and hauled away for disposal at a state approved facility. Soil samples were collected and submitted to Cardinal Laboratories for testing. Upon receiving acceptable results and NMOCD approval, the affected area will be backfilled, and returned to proper conditions.

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

Signature: Bradley Blevins

Printed Name: Bradley Blevins

Title: HE Specialist

E-mail Address: bradley.blevins@chevron.com

Date: **Phone:** (575) 391-1462 ext. 86424

OIL CONSERVATION DIVISION

Approved by District Supervisor: Bradley Leking Environmental Specialist

Approval Date: 5/10/13 **Expiration Date:** 7/10/13

Conditions of Approval: SUBMIT FINAL C-141 BY 7/10/13

Attached ☐ IRP-5-13-2922

* **Attach Additional Sheets If Necessary**

MAY 20 2013

Incident ID	NGRL1313056354
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NGRL1313056354
District RP	
Facility ID	
Application ID	

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

Printed Name: Jeffery Tew Title: Operations Engineer

Signature: Jeffery Tew Date: 3/22/2022

email: jtew@aecnm.com Telephone: 575-623-2999

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NGRL1313056354
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Jeffery Tew Title: Operations Engineer

Signature: Jeffery Tew Date: 03/22/2022

Email: jtew@aecnm.com Telephone: 575-623-2999

ODC Only

Received by: _____ Date: _____

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

Closure Approved by: Jennifer Nobui Date: 06/21/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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

March 16, 2022

District 1 - Hobbs
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Request
Trinity Burrus Abo Unit #016
Incident Number NGRL1313056354
Lea County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of Armstrong Energy Corporation (Armstrong), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Trinity Burrus Abo Unit #016 (Site), located in Unit L, Section 23, Township 12 South, Range 38 East, in Lea County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following the release of produced water at the Site. Based on excavation activities and laboratory analytical results from the soil sampling event, Armstrong is submitting this Closure Request and requesting no further action (NFA) for Incident Number NGRL1313056354.

RELEASE BACKGROUND

On May 2, 2013, a 1-inch nipple failed on a water pump, resulting in the release of approximately 52 barrels (bbls) of produced water onto the surface of the well pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids and saturated surficial soil; approximately 3 bbls of produced water were recovered. Chevron USA, the operator of the facility at the time of the release, notified the New Mexico Oil Conservation Division (NMOCD) on May 10, 2013. The release was assigned Incident Number NGRL1313056354. Armstrong is the current owner and operator of the Site and it was brought to their attention this release was not considered closed by NMOCD. As such, Armstrong completed site assessment activities as to gain NFA for the release.

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 less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS)

well 331518103044201, located approximately 0.37 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 23 feet bgs and an undetermined total well depth. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced water well records are provided in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent freshwater pond, located approximately 1,942 feet southwest 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 (low 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): 100 mg/kg
- Chloride: 600 mg/kg

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On January 24, 2022, WSP personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel advanced five boreholes (BH01 though BH05) via hand-auger to assess the presence or absence of soil impacts. Two soil samples were collected from each borehole from a depth of approximately 0.5 feet and 1-foot bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the boreholes were documented on a lithologic/soil sampling log and are included as Attachment 2. The delineation boreholes were backfilled with the soil removed. The borehole delineation soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the Site visit. The photographic log is included in Attachment 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States

Environmental Protection Agency (EPA) Method 8021B; TPH- gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for delineation soil sample BH01, collected at 0.5 feet bgs, indicated chloride concentrations exceeded the Closure Criteria. Soil sample BH01A, collected at 1-foot bgs, indicated benzene, BTEX, TPH, and chloride concentrations were all compliant with the Closure Criteria. Laboratory analytical results for delineation soil samples BH02 through BH05, collected at depths of approximately 0.5 feet and 1-foot bgs, indicated benzene, BTEX, TPH, and chloride concentrations were all compliant with the Closure Criteria.

EXCAVATION AND CONFIRMATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On February 28, 2022, WSP personnel returned to the Site to oversee excavation activities as indicated by laboratory analytical results. Excavation activities were completed to remove impacted soil in the vicinity surrounding delineation soil sample BH01. Excavation activities were performed using a backhoe and transport vehicle. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride. The excavation was completed to a depth of approximately 1.5 feet bgs.

Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite floor samples FS01 through FS04 were collected from the floor of the excavation from a depth of 1.5 feet bgs. Due to the shallow depth of the of the excavation, the floor samples represented the floor and sidewalls of the excavation. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3. Photographic documentation is included in Attachment 3.

Laboratory analytical results for excavation floor samples FS01 through FS04, collected from the final excavation extent, indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 4.

The final excavation extent measured approximately 759 square feet. At the completion of excavation activities, approximately 42 cubic yards of impacted soil were removed. The impacted soil was transported and properly disposed of at R360 Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation area was backfilled.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the May 2, 2013 produced water release. Once the release was discovered, the former operator immediately dispatched a vacuum truck to the Site to recover freestanding fluids and remove stained soil. Laboratory analytical results for excavation soil samples, collected from the final excavation extent, indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for the remaining 2022 delineation soil samples (BH02 through BH05) indicated benzene, BTEX, TPH and chloride concentrations were compliant with Closure Criteria. As such, there appears to be an absence of soil impacts related to the 2013 release outside of the excavation extent and no further remediation appears necessary.

Based on initial response efforts and laboratory analytical results compliant with Closure Criteria, remedial actions taken at the Stie appear to have been sufficient in protecting human health, the environment, and groundwater and as a result, Armstrong respectfully requests NFA for Incident Number NGRL1313056354.

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.

Kalei Jennings
Consultant, Environmental Scientist

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

cc: Kyle Alpers, Armstrong Energy Corporation

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Lithologic/Sampling Logs
Attachment 3	Photographic Log

Attachment 4 Laboratory Analytical Reports

FIGURES

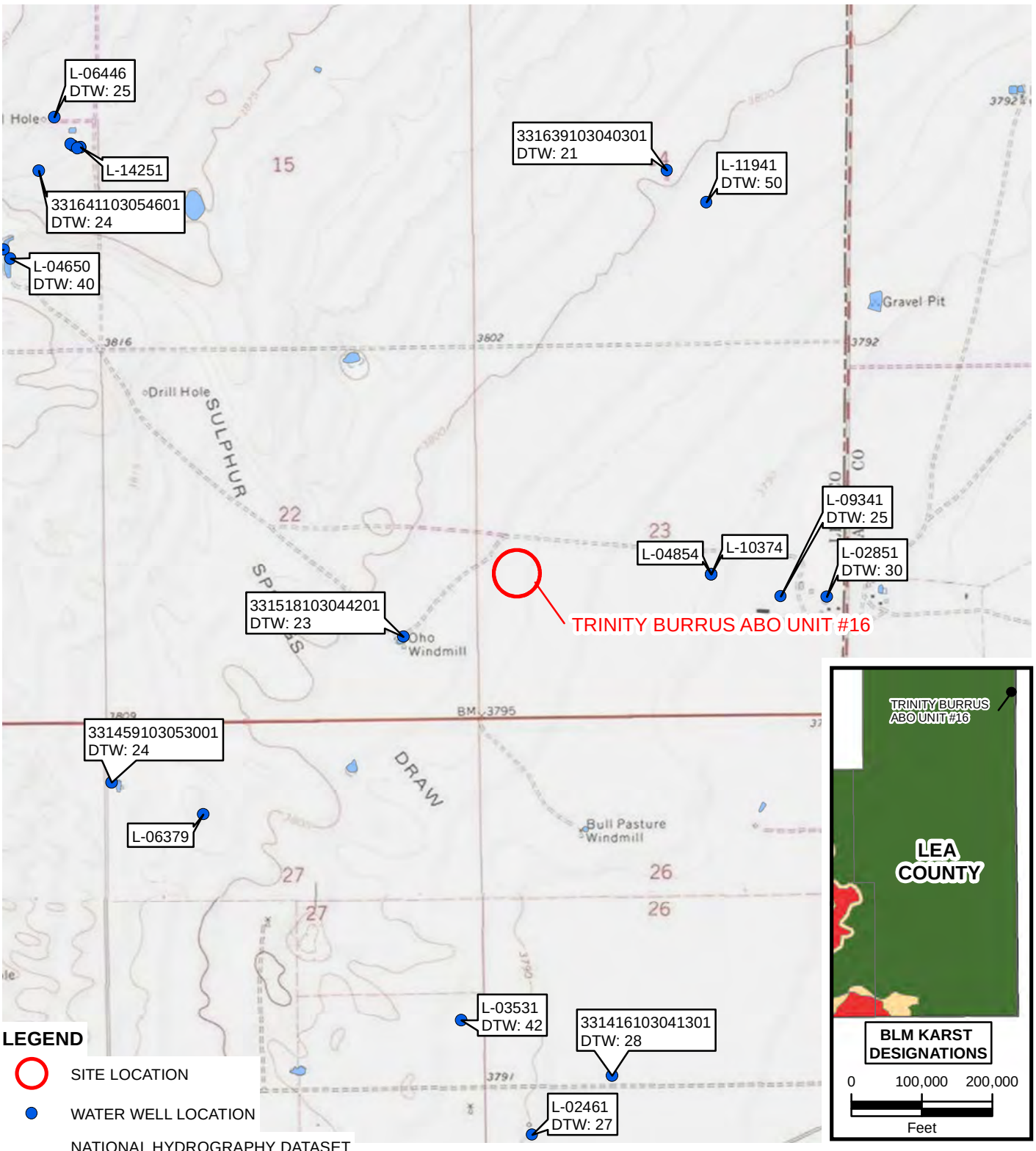


FIGURE 1
SITE LOCATION MAP
TRINITY BURRUS ABO UNIT #16
UNIT L SEC 23 T12S R38E
LEA COUNTY, NEW MEXICO
ARMSTRONG ENERGY CORPORATION

P:\Armstrong Energy Corp\GIS\31403471.003_TRINITY BURRUS ABO UNT #16\MXD\31403471.003_FIG01_SL_RECEPTOR_2022.mxd

IMAGE COURTESY OF ESRI

LEGEND

- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDINBG APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

0 100 200
Feet

N

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
TRINITY BURRUS ABO UNIT #16
UNIT L SEC 23 T12S R38E
LEA COUNTY, NEW MEXICO
ARMSTRONG ENERGY CORPORATION

NOTE: INCIDENT NUMBER NGRL1313056325
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

P:\Armstrong Energy Corp\GIS\31403471.003_TRINITY BURRUS ABO UNT #16\MXD\31403471.003_FIG02_DELINEATION_2022.mxd

IMAGE COURTESY OF ESRI

LEGEND

FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

EXCAVATION EXTENT

0 50 100

Feet

N

NOTE: INCIDENT NUMBER NGRL1313056325
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
TRINITY BURRUS ABO UNIT #16
UNIT L SEC 23 T12S R38E
LEA COUNTY, NEW MEXICO
ARMSTRONG ENERGY CORPORATION

P:\Armstrong Energy Corp\GIS\31403471.003_TRINITY BURRUS ABO UNT #16\MXD\31403471.003_FIG03_EXCAVATION_2022.mxd

TABLES

Table 1

Soil Analytical Results
Trinity Burrus Abo Unit #016
Incident Number NGRL1313056354
Lea County, New Mexico

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 GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
BH01	01/24/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**822**
BH01A	01/24/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	489
BH02	01/24/2022	0.5	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	504
BH02A	01/24/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	357
BH03	01/24/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	14.2
BH03A	01/24/2022	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	11.3
BH04	01/24/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	140
BH04A	01/24/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	282
BH05	01/24/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	19.9
BH05A	01/24/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	18.6
Excavation Floor Samples										
FS01	02/28/2022	1.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	530
FS02	02/28/2022	1.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	421
FS03	02/28/2022	1.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	359
FS04	02/28/2022	1.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	395

Notes:

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

ATTACHMENT 1: REFERENCED WELL RECORDS

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category: Site Information Geographic Area: United States GO

Click to hideNews Bulletins

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

USGS 331518103044201 12S.38E.22.44114

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 33°15'36", Longitude 103°04'45" NAD27
Lea County, New Mexico , Hydrologic Unit 12080006
Well depth: not determined.
Land surface altitude: 3,801.10 feet above NGVD29.
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

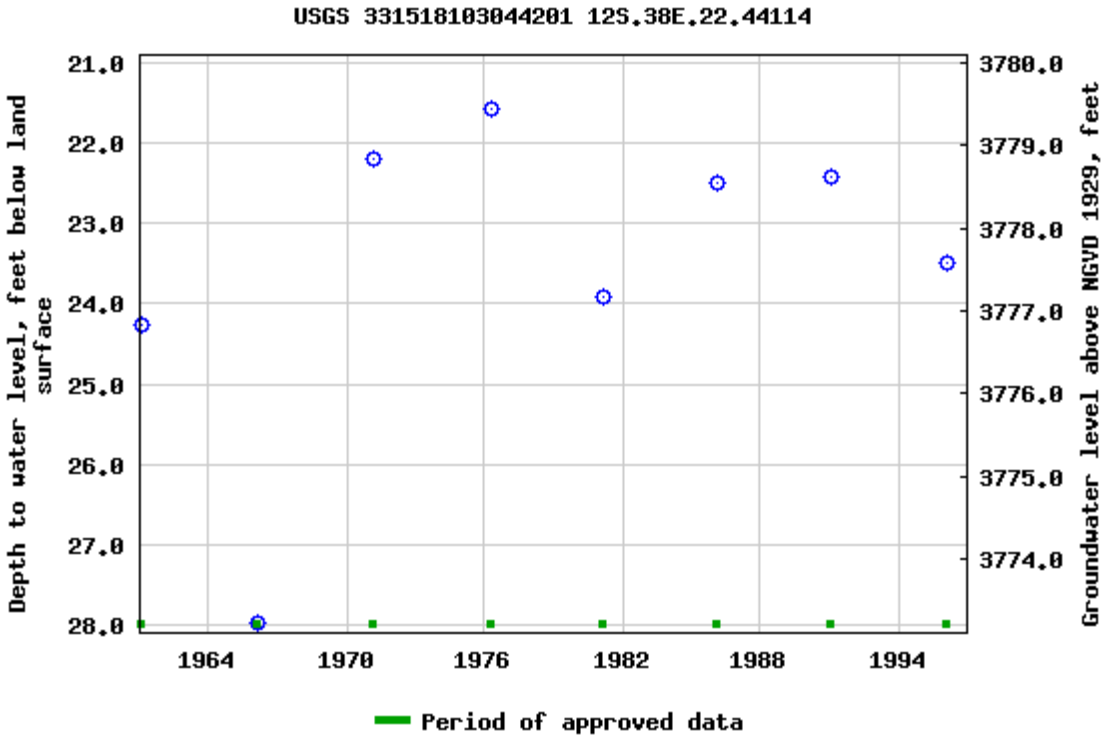
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1961-02-09	1996-03-01	5
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

---

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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

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: 2022-02-17 21:26:45 EST
0.74 0.48 nadww01

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOGS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: **BH01**		Date: **01/24/2022**	
Site Name: **Trinity Burrus Abo Unit #016**			
RP or Incident Number **NGRL1313056325**			
WSP Job Number: **31403471.003**			
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: TC	Method: Hand Auger
Lat/Long: **33.262527, -103.074369**	Field Screening: Hach chloride strips, PID	Hole Diameter: 3"	Total Depth: **1 foot**

Comments: All chloride field screenings include a 40% correction factor
M-moist; D-dry; Y-yes; N-no

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	1,058.4	0	N	BH01	1	0.5	GP/GW	REDISH-BROWN, DRY/POORLY GRADED GRAVEL WITH SAND NO STAIN, NO ODOR
D	498.4	0	Y	BH01A	2	1	GP/GW	STAINED DARK BROWN, DRY/POORLY GRADED WITH SAND NO ODOR
								TD @ 1' FT BGS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: **BH02**		Date: **01/24/2022**	
Site Name: **Trinity Burrus Abo Unit #016**			
RP or Incident Number **NGRL1313056325**			
WSP Job Number: **31403471.003**			
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: TC	Method: Hand Auger
Lat/Long: **33.262527, -103.074369**	Field Screening: Hach chloride strips, PID	Hole Diameter: 3"	Total Depth: **1 foot**

Comments: All chloride field screenings include a 40% correction factor
M-moist; D-dry; Y-yes; N-no

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	621.8	0.3	Y	BH02	0.5	0.5	GP/GW	DARK BROWN, DRY/POORLY GRADED GRAVEL WITH SAND, STAINED, NO ODOR
D	442.4	0.2	Y	BH02A	1	1	GP/GW	SAA
								TD @ 1' FT BGS

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: **BH03**	Date: **01/24/2022**	
Site Name: **Trinity Burrus Abo Unit #016**		
RP or Incident Number **NGRL1313056325**		
WSP Job Number: **31403471.003**		

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: TC	Method: Hand Auger		
Lat/Long: **33.262527, -103.074369**	Field Screening: Hach chloride strips, PID	Hole Diameter: 3"	Total Depth: **1 foot**

Comments: All chloride field screenings include a 40% correction factor
M-moist; D-dry; Y-yes; N-no

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	<168	0.5	Y	BH03	0.5	0.5	GP/GW	DARK BROWN, DRY/POORLY GRADED GRAVEL WITH SAND, STAINED, NO ODOR
D	<168	0.4	Y	BH03A	1	1	GP/GW	SAA
								TD @ 1' FT BGS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: **BH04** Date: **01/24/2022**

Site Name: **Trinity Burrus Abo Unit #016**

RP or Incident Number **NGRL1313056325**

WSP Job Number: **31403471.003**

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: TC | Method: Hand Auger

Lat/Long: **33.262527, -103.074369** | Field Screening: Hach chloride strips, PID | Hole Diameter: 3" | Total Depth: **1 foot**

Comments: All chloride field screenings include a 40% correction factor
M-moist; D-dry; Y-yes; N-no

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	212.8	0.3	Y	BH04	0.5	0.5	GP/GW	DARK BROWN, DRY/POORLY GRADED GRAVEL WITH SAND, STAINED, NO ODOR
D	352	0.2	Y	BH04A	1	1	GP/GW	SAA
								TD @ 1' FT BGS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: **BH05**		Date: **01/24/2022**	
Site Name: **Trinity Burrus Abo Unit #016**			
RP or Incident Number **NGRL1313056325**			
WSP Job Number: **31403471.003**			
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: TC	Method: Hand Auger
Lat/Long: **33.262527, -103.074369**	Field Screening: Hach chloride strips, PID	Hole Diameter: 3"	Total Depth: **1 foot**

Comments: All chloride field screenings include a 40% correction factor
M-moist; D-dry; Y-yes; N-no

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	<168	0.8	Y	BH05	0.5	0.5	GP/GW	DARK BROWN, DRY/POORLY GRADED GRAVEL WITH SAND, STAINED, NO ODOR
D	<168	0.4	Y	BH05A	1	1	GP/GW	SAA
								TD @ 1' FT BGS

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
Armstrong Energy Corporation	Trinity Burrus Abo Unit #016 Lea County, New Mexico	NGRL1313056354

Photo No.	Date
1	January 18, 2022

Photo of pad taken during delineation activities.

Photo No.	Date
2	January 18, 2022

Photo of pad taken during delineation activities.

PHOTOGRAPHIC LOG		
Armstrong Energy Corporation	Trinity Burrus Abo Unit #016 Lea County, New Mexico	NGRL1313056354

Photo No.	Date
1	February 28, 2022

View of excavation extent near BH01 location.

Photo No.	Date
2	February 28, 2022

View of excavation area once backfill was complete.

ATTACHMENT 4: LABORATORY ANALYTICAL **REPORTS**

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1867-1
Laboratory Sample Delivery Group: 31403471.004
Client Project/Site: Trinity Burrus Unit #016

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
1/31/2022 4:17:14 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Laboratory Job ID: 890-1867-1
SDG: 31403471.004

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Job ID: 890-1867-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1867-1

Receipt
The samples were received on 1/24/2022 4:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH01 (890-1867-1), BH01A (890-1867-2), BH02 (890-1867-3), BH02A (890-1867-4), BH04A (890-1867-8), BH05 (890-1867-9), BH05A (890-1867-10), (MB 880-17869/1-A) and (880-10594-A-1-G). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The laboratory control sample (LCS) associated with preparation batch 880-17771 and 880-17771 and analytical batch 880-17923 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Client Sample ID: BH01

Date Collected: 01/24/22 10:39
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Lab Sample ID: 890-1867-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 14:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 14:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 14:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/26/22 07:25	01/26/22 14:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 14:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/26/22 07:25	01/26/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*01/26/22 07:25*	*01/26/22 14:24*	*1*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*	*01/26/22 07:25*	*01/26/22 14:24*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 17:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 17:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 17:19*	*1*
o-Terphenyl	*161*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 17:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**822**	*-	4.97		mg/Kg			01/31/22 13:33	1

Client Sample ID: BH01A

Date Collected: 01/24/22 10:40
Date Received: 01/24/22 16:36
Sample Depth: 1

Lab Sample ID: 890-1867-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/26/22 07:25	01/26/22 14:44	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/26/22 07:25	01/26/22 14:44	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/26/22 07:25	01/26/22 14:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/26/22 07:25	01/26/22 14:44	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/26/22 07:25	01/26/22 14:44	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/26/22 07:25	01/26/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*01/26/22 07:25*	*01/26/22 14:44*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Client Sample ID: BH01A — Lab Sample ID: 890-1867-2

Date Collected: 01/24/22 10:40 **Matrix: Solid**
Date Received: 01/24/22 16:36
Sample Depth: 1

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/26/22 07:25*	*01/26/22 14:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/27/22 08:32	01/27/22 17:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/27/22 08:32	01/27/22 17:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/27/22 08:32	01/27/22 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*01/27/22 08:32*	*01/27/22 17:41*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 17:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**489**	*-	4.98	mg/Kg			01/31/22 13:45	1

Client Sample ID: BH02 — Lab Sample ID: 890-1867-3

Date Collected: 01/24/22 10:51 **Matrix: Solid**
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/26/22 07:25	01/26/22 15:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/26/22 07:25	01/26/22 15:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/26/22 07:25	01/26/22 15:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/26/22 07:25	01/26/22 15:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/26/22 07:25	01/26/22 15:05	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/26/22 07:25	01/26/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*01/26/22 07:25*	*01/26/22 15:05*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*01/26/22 07:25*	*01/26/22 15:05*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/27/22 16:17	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Client Sample ID: BH02

Date Collected: 01/24/22 10:51
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Lab Sample ID: 890-1867-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 18:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 18:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*01/27/22 08:32*	*01/27/22 18:02*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 18:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**504**	***-**	4.95		mg/Kg			01/31/22 13:57	1

Client Sample ID: BH02A

Date Collected: 01/24/22 10:52
Date Received: 01/24/22 16:36
Sample Depth: 1

Lab Sample ID: 890-1867-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/26/22 07:25	01/26/22 16:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/26/22 07:25	01/26/22 16:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/26/22 07:25	01/26/22 16:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/26/22 07:25	01/26/22 16:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/26/22 07:25	01/26/22 16:27	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/26/22 07:25	01/26/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/26/22 07:25*	*01/26/22 16:27*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/26/22 07:25*	*01/26/22 16:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 18:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 18:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 18:23*	*1*
o-Terphenyl	*153*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 18:23*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Client Sample ID: BH02A — Lab Sample ID: 890-1867-4

Date Collected: 01/24/22 10:52 **Matrix: Solid**
Date Received: 01/24/22 16:36
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	357	*-	5.04		mg/Kg			01/31/22 14:09	1

Client Sample ID: BH03 — Lab Sample ID: 890-1867-5

Date Collected: 01/24/22 10:57 **Matrix: Solid**
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 16:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 16:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 16:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/26/22 07:25	01/26/22 16:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 16:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/26/22 07:25	01/26/22 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*01/26/22 07:25*	*01/26/22 16:47*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/26/22 07:25*	*01/26/22 16:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 18:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 18:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*01/27/22 08:32*	*01/27/22 18:43*	*1*
o-Terphenyl	*116*		*70 - 130*	*01/27/22 08:32*	*01/27/22 18:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.2	*-	4.95		mg/Kg			01/31/22 14:21	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Client Sample ID: BH03A
Lab Sample ID: 890-1867-6
Date Collected: 01/24/22 10:58
Matrix: Solid
Date Received: 01/24/22 16:36
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/26/22 07:25	01/26/22 17:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/26/22 07:25	01/26/22 17:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/26/22 07:25	01/26/22 17:08	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		01/26/22 07:25	01/26/22 17:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/26/22 07:25	01/26/22 17:08	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/26/22 07:25	01/26/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/26/22 07:25*	*01/26/22 17:08*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/26/22 07:25*	*01/26/22 17:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 19:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 19:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/27/22 08:32	01/27/22 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*01/27/22 08:32*	*01/27/22 19:04*	*1*
o-Terphenyl	*129*		*70 - 130*	*01/27/22 08:32*	*01/27/22 19:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.3**	*-	4.99		mg/Kg			01/31/22 14:33	1

Client Sample ID: BH04
Lab Sample ID: 890-1867-7
Date Collected: 01/24/22 11:00
Matrix: Solid
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/26/22 07:25	01/26/22 17:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/26/22 07:25	01/26/22 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*01/26/22 07:25*	*01/26/22 17:28*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Client Sample ID: BH04

Date Collected: 01/24/22 11:00
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Lab Sample ID: 890-1867-7

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*01/26/22 07:25*	*01/26/22 17:28*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 19:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 19:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*118*		*70 - 130*	*01/27/22 08:32*	*01/27/22 19:26*	*1*
o-Terphenyl	*128*		*70 - 130*	*01/27/22 08:32*	*01/27/22 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**140**	***-**	5.05		mg/Kg			01/31/22 14:44	1

Client Sample ID: BH04A

Date Collected: 01/24/22 11:04
Date Received: 01/24/22 16:36
Sample Depth: 1

Lab Sample ID: 890-1867-8

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/26/22 07:25	01/26/22 17:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/26/22 07:25	01/26/22 17:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/26/22 07:25	01/26/22 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*01/26/22 07:25*	*01/26/22 17:49*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*01/26/22 07:25*	*01/26/22 17:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/27/22 16:17	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Client Sample ID: BH04A

Lab Sample ID: 890-1867-8
Matrix: Solid
Date Collected: 01/24/22 11:04
Date Received: 01/24/22 16:36
Sample Depth: 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*01/27/22 08:32*	*01/27/22 20:00*	*1*
o-Terphenyl	*148*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 20:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**282**		4.98		mg/Kg			01/27/22 16:58	1

Client Sample ID: BH05

Lab Sample ID: 890-1867-9
Matrix: Solid
Date Collected: 01/24/22 11:12
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/26/22 07:25	01/26/22 18:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/26/22 07:25	01/26/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*01/26/22 07:25*	*01/26/22 18:09*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/26/22 07:25*	*01/26/22 18:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 20:20*	*1*
o-Terphenyl	*165*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 20:20*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Client Sample ID: BH05

Lab Sample ID: 890-1867-9
Matrix: Solid
Date Collected: 01/24/22 11:12
Date Received: 01/24/22 16:36
Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.9		4.95		mg/Kg			01/27/22 17:05	1

Client Sample ID: BH05A

Lab Sample ID: 890-1867-10
Matrix: Solid
Date Collected: 01/24/22 11:13
Date Received: 01/24/22 16:36
Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/26/22 07:25	01/26/22 18:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 18:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/26/22 07:25	01/26/22 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*01/26/22 07:25*	*01/26/22 18:30*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*01/26/22 07:25*	*01/26/22 18:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/28/22 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/27/22 16:17	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 20:41*	*1*
o-Terphenyl	*153*	*S1+*	*70 - 130*	*01/27/22 08:32*	*01/27/22 20:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.6		4.97		mg/Kg			01/27/22 17:13	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1866-A-1-A MS	Matrix Spike	108	108
890-1866-A-1-B MSD	Matrix Spike Duplicate	103	97
890-1867-1	BH01	145 S1+	127
890-1867-2	BH01A	118	100
890-1867-3	BH02	127	112
890-1867-4	BH02A	107	108
890-1867-5	BH03	127	95
890-1867-6	BH03A	116	102
890-1867-7	BH04	105	105
890-1867-8	BH04A	105	80
890-1867-9	BH05	119	106
890-1867-10	BH05A	110	81
LCS 880-17744/1-A	Lab Control Sample	95	89
LCSD 880-17744/2-A	Lab Control Sample Dup	101	104
MB 880-17744/5-A	Method Blank	109	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-10594-A-1-H MS	Matrix Spike	92	83
880-10594-A-1-I MSD	Matrix Spike Duplicate	87	77
890-1867-1	BH01	135 S1+	161 S1+
890-1867-2	BH01A	116	134 S1+
890-1867-3	BH02	129	152 S1+
890-1867-4	BH02A	135 S1+	153 S1+
890-1867-5	BH03	111	116
890-1867-6	BH03A	118	129
890-1867-7	BH04	118	128
890-1867-8	BH04A	129	148 S1+
890-1867-9	BH05	136 S1+	165 S1+
890-1867-10	BH05A	132 S1+	153 S1+
LCS 880-17869/2-A	Lab Control Sample	84	82
LCSD 880-17869/3-A	Lab Control Sample Dup	78	75
MB 880-17869/1-A	Method Blank	162 S1+	180 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17744/5-A
Matrix: Solid
Analysis Batch: 17745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17744

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 10:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 10:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 10:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/26/22 07:25	01/26/22 10:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/26/22 07:25	01/26/22 10:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/26/22 07:25	01/26/22 10:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/26/22 07:25*	*01/26/22 10:46*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/26/22 07:25*	*01/26/22 10:46*	*1*

Lab Sample ID: LCS 880-17744/1-A
Matrix: Solid
Analysis Batch: 17745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17744

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08925		mg/Kg		89	70 - 130		
Toluene			0.100	0.08410		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08085		mg/Kg		81	70 - 130		
m-Xylene & p-Xylene			0.200	0.1687		mg/Kg		84	70 - 130		
o-Xylene			0.100	0.08470		mg/Kg		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 880-17744/2-A
Matrix: Solid
Analysis Batch: 17745

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17744

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09191		mg/Kg		92	70 - 130	3	35
Toluene			0.100	0.08406		mg/Kg		84	70 - 130	0	35
Ethylbenzene			0.100	0.08261		mg/Kg		83	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1708		mg/Kg		85	70 - 130	1	35
o-Xylene			0.100	0.08371		mg/Kg		84	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-1866-A-1-A MS
Matrix: Solid
Analysis Batch: 17745

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

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

Lab Sample ID: 890-1866-A-1-A MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17745

Surrogate	MS %Recovery	MS Qualifier	Limits
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-1866-A-1-B MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17745

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-17869/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17883 **Prep Batch: 17869**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 11:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 11:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/27/22 08:32	01/27/22 11:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	162	S1+	70 - 130	01/27/22 08:32	01/27/22 11:24	1
o-Terphenyl	180	S1+	70 - 130	01/27/22 08:32	01/27/22 11:24	1

Lab Sample ID: LCS 880-17869/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17883 **Prep Batch: 17869**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1128		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	854.6		mg/Kg		85	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: LCSD 880-17869/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17883 **Prep Batch: 17869**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1147		mg/Kg		115	70 - 130	2	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

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

Lab Sample ID: LCSD 880-17869/3-A
Matrix: Solid
Analysis Batch: 17883

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17869

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	809.5		mg/Kg		81	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 880-10594-A-1-H MS
Matrix: Solid
Analysis Batch: 17883

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17869

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1224		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1254		mg/Kg		126	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Lab Sample ID: 880-10594-A-1-I MSD
Matrix: Solid
Analysis Batch: 17883

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 17869

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	<49.9	U	996	1221		mg/Kg		119	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1180		mg/Kg		118	70 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*77*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-17771/1-A
Matrix: Solid
Analysis Batch: 17923

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/31/22 08:49	1

Lab Sample ID: LCS 880-17771/2-A
Matrix: Solid
Analysis Batch: 17923

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	234.5		mg/Kg		94	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-17771/3-A
Matrix: Solid
Analysis Batch: 17923

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	223.0	*-	mg/Kg		89	90 - 110	5	20

Lab Sample ID: 890-1864-A-18-C MS
Matrix: Solid
Analysis Batch: 17923

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	8.19	*-	250	252.8		mg/Kg		98	90 - 110		

Lab Sample ID: 890-1864-A-18-D MSD
Matrix: Solid
Analysis Batch: 17923

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8.19	*-	250	239.9		mg/Kg		93	90 - 110	5	20

Lab Sample ID: MB 880-17944/1-A
Matrix: Solid
Analysis Batch: 17946

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/27/22 14:48	1

Lab Sample ID: LCS 880-17944/2-A
Matrix: Solid
Analysis Batch: 17946

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	273.9		mg/Kg		110	90 - 110		

Lab Sample ID: LCSD 880-17944/3-A
Matrix: Solid
Analysis Batch: 17946

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	273.6		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-10422-A-20-B MS
Matrix: Solid
Analysis Batch: 17946

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	240		248	506.7		mg/Kg		108	90 - 110		

Lab Sample ID: 880-10422-A-20-C MSD
Matrix: Solid
Analysis Batch: 17946

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	240		248	499.0		mg/Kg		105	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

GC VOA

Prep Batch: 17744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Total/NA	Solid	5035	
890-1867-2	BH01A	Total/NA	Solid	5035	
890-1867-3	BH02	Total/NA	Solid	5035	
890-1867-4	BH02A	Total/NA	Solid	5035	
890-1867-5	BH03	Total/NA	Solid	5035	
890-1867-6	BH03A	Total/NA	Solid	5035	
890-1867-7	BH04	Total/NA	Solid	5035	
890-1867-8	BH04A	Total/NA	Solid	5035	
890-1867-9	BH05	Total/NA	Solid	5035	
890-1867-10	BH05A	Total/NA	Solid	5035	
MB 880-17744/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17744/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17744/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 17745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Total/NA	Solid	8021B	17744
890-1867-2	BH01A	Total/NA	Solid	8021B	17744
890-1867-3	BH02	Total/NA	Solid	8021B	17744
890-1867-4	BH02A	Total/NA	Solid	8021B	17744
890-1867-5	BH03	Total/NA	Solid	8021B	17744
890-1867-6	BH03A	Total/NA	Solid	8021B	17744
890-1867-7	BH04	Total/NA	Solid	8021B	17744
890-1867-8	BH04A	Total/NA	Solid	8021B	17744
890-1867-9	BH05	Total/NA	Solid	8021B	17744
890-1867-10	BH05A	Total/NA	Solid	8021B	17744
MB 880-17744/5-A	Method Blank	Total/NA	Solid	8021B	17744
LCS 880-17744/1-A	Lab Control Sample	Total/NA	Solid	8021B	17744
LCSD 880-17744/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17744
890-1866-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	
890-1866-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	

Analysis Batch: 18058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Total/NA	Solid	Total BTEX	
890-1867-2	BH01A	Total/NA	Solid	Total BTEX	
890-1867-3	BH02	Total/NA	Solid	Total BTEX	
890-1867-4	BH02A	Total/NA	Solid	Total BTEX	
890-1867-5	BH03	Total/NA	Solid	Total BTEX	
890-1867-6	BH03A	Total/NA	Solid	Total BTEX	
890-1867-7	BH04	Total/NA	Solid	Total BTEX	
890-1867-8	BH04A	Total/NA	Solid	Total BTEX	
890-1867-9	BH05	Total/NA	Solid	Total BTEX	
890-1867-10	BH05A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 17869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Total/NA	Solid	8015NM Prep	
890-1867-2	BH01A	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

GC Semi VOA (Continued)

Prep Batch: 17869 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-3	BH02	Total/NA	Solid	8015NM Prep	
890-1867-4	BH02A	Total/NA	Solid	8015NM Prep	
890-1867-5	BH03	Total/NA	Solid	8015NM Prep	
890-1867-6	BH03A	Total/NA	Solid	8015NM Prep	
890-1867-7	BH04	Total/NA	Solid	8015NM Prep	
890-1867-8	BH04A	Total/NA	Solid	8015NM Prep	
890-1867-9	BH05	Total/NA	Solid	8015NM Prep	
890-1867-10	BH05A	Total/NA	Solid	8015NM Prep	
MB 880-17869/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17869/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17869/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10594-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10594-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Total/NA	Solid	8015B NM	17869
890-1867-2	BH01A	Total/NA	Solid	8015B NM	17869
890-1867-3	BH02	Total/NA	Solid	8015B NM	17869
890-1867-4	BH02A	Total/NA	Solid	8015B NM	17869
890-1867-5	BH03	Total/NA	Solid	8015B NM	17869
890-1867-6	BH03A	Total/NA	Solid	8015B NM	17869
890-1867-7	BH04	Total/NA	Solid	8015B NM	17869
890-1867-8	BH04A	Total/NA	Solid	8015B NM	17869
890-1867-9	BH05	Total/NA	Solid	8015B NM	17869
890-1867-10	BH05A	Total/NA	Solid	8015B NM	17869
MB 880-17869/1-A	Method Blank	Total/NA	Solid	8015B NM	17869
LCS 880-17869/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17869
LCSD 880-17869/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17869
880-10594-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	17869
880-10594-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	17869

Analysis Batch: 17951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Total/NA	Solid	8015 NM	
890-1867-2	BH01A	Total/NA	Solid	8015 NM	
890-1867-3	BH02	Total/NA	Solid	8015 NM	
890-1867-4	BH02A	Total/NA	Solid	8015 NM	
890-1867-5	BH03	Total/NA	Solid	8015 NM	
890-1867-6	BH03A	Total/NA	Solid	8015 NM	
890-1867-7	BH04	Total/NA	Solid	8015 NM	
890-1867-8	BH04A	Total/NA	Solid	8015 NM	
890-1867-9	BH05	Total/NA	Solid	8015 NM	
890-1867-10	BH05A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 17771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Soluble	Solid	DI Leach	
890-1867-2	BH01A	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

HPLC/IC (Continued)

Leach Batch: 17771 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-3	BH02	Soluble	Solid	DI Leach	
890-1867-4	BH02A	Soluble	Solid	DI Leach	
890-1867-5	BH03	Soluble	Solid	DI Leach	
890-1867-6	BH03A	Soluble	Solid	DI Leach	
890-1867-7	BH04	Soluble	Solid	DI Leach	
MB 880-17771/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17771/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17771/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1864-A-18-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1864-A-18-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 17923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-1	BH01	Soluble	Solid	300.0	17771
890-1867-2	BH01A	Soluble	Solid	300.0	17771
890-1867-3	BH02	Soluble	Solid	300.0	17771
890-1867-4	BH02A	Soluble	Solid	300.0	17771
890-1867-5	BH03	Soluble	Solid	300.0	17771
890-1867-6	BH03A	Soluble	Solid	300.0	17771
890-1867-7	BH04	Soluble	Solid	300.0	17771
MB 880-17771/1-A	Method Blank	Soluble	Solid	300.0	17771
LCS 880-17771/2-A	Lab Control Sample	Soluble	Solid	300.0	17771
LCSD 880-17771/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17771
890-1864-A-18-C MS	Matrix Spike	Soluble	Solid	300.0	17771
890-1864-A-18-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	17771

Leach Batch: 17944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-8	BH04A	Soluble	Solid	DI Leach	
890-1867-9	BH05	Soluble	Solid	DI Leach	
890-1867-10	BH05A	Soluble	Solid	DI Leach	
MB 880-17944/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17944/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17944/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10422-A-20-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10422-A-20-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 17946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1867-8	BH04A	Soluble	Solid	300.0	17944
890-1867-9	BH05	Soluble	Solid	300.0	17944
890-1867-10	BH05A	Soluble	Solid	300.0	17944
MB 880-17944/1-A	Method Blank	Soluble	Solid	300.0	17944
LCS 880-17944/2-A	Lab Control Sample	Soluble	Solid	300.0	17944
LCSD 880-17944/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17944
880-10422-A-20-B MS	Matrix Spike	Soluble	Solid	300.0	17944
880-10422-A-20-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	17944

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Client Sample ID: BH01 Lab Sample ID: 890-1867-1

Date Collected: 01/24/22 10:39 **Matrix: Solid**
Date Received: 01/24/22 16:36

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	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 14:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 17:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 13:33	CH	XEN MID

Client Sample ID: BH01A Lab Sample ID: 890-1867-2

Date Collected: 01/24/22 10:40 **Matrix: Solid**
Date Received: 01/24/22 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 14:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 17:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 13:45	CH	XEN MID

Client Sample ID: BH02 Lab Sample ID: 890-1867-3

Date Collected: 01/24/22 10:51 **Matrix: Solid**
Date Received: 01/24/22 16:36

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	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 15:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 18:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 13:57	CH	XEN MID

Client Sample ID: BH02A Lab Sample ID: 890-1867-4

Date Collected: 01/24/22 10:52 **Matrix: Solid**
Date Received: 01/24/22 16:36

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	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 16:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Client Sample ID: BH02A

Date Collected: 01/24/22 10:52
Date Received: 01/24/22 16:36

Lab Sample ID: 890-1867-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 18:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 14:09	CH	XEN MID

Client Sample ID: BH03

Date Collected: 01/24/22 10:57
Date Received: 01/24/22 16:36

Lab Sample ID: 890-1867-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 16:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 18:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 14:21	CH	XEN MID

Client Sample ID: BH03A

Date Collected: 01/24/22 10:58
Date Received: 01/24/22 16:36

Lab Sample ID: 890-1867-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 17:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 19:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 14:33	CH	XEN MID

Client Sample ID: BH04

Date Collected: 01/24/22 11:00
Date Received: 01/24/22 16:36

Lab Sample ID: 890-1867-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 17:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 19:26	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-1867-1
Project/Site: Trinity Burrus Unit #016 SDG: 31403471.004

Client Sample ID: BH04 — Lab Sample ID: 890-1867-7

Date Collected: 01/24/22 11:00 **Matrix: Solid**
Date Received: 01/24/22 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	17771	01/26/22 10:14	CH	XEN MID
Soluble	Analysis	300.0		1			17923	01/31/22 14:44	CH	XEN MID

Client Sample ID: BH04A — Lab Sample ID: 890-1867-8

Date Collected: 01/24/22 11:04 **Matrix: Solid**
Date Received: 01/24/22 16:36

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	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 17:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 20:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	17944	01/27/22 14:21	CH	XEN MID
Soluble	Analysis	300.0		1			17946	01/27/22 16:58	CH	XEN MID

Client Sample ID: BH05 — Lab Sample ID: 890-1867-9

Date Collected: 01/24/22 11:12 **Matrix: Solid**
Date Received: 01/24/22 16:36

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	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 18:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 20:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	17944	01/27/22 14:30	CH	XEN MID
Soluble	Analysis	300.0		1			17946	01/27/22 17:05	CH	XEN MID

Client Sample ID: BH05A — Lab Sample ID: 890-1867-10

Date Collected: 01/24/22 11:13 **Matrix: Solid**
Date Received: 01/24/22 16:36

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	17744	01/26/22 07:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17745	01/26/22 18:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17869	01/27/22 08:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17883	01/27/22 20:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	17944	01/27/22 14:30	CH	XEN MID
Soluble	Analysis	300.0		1			17946	01/27/22 17:13	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Trinity Burrus Unit #016

Job ID: 890-1867-1
SDG: 31403471.004

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1867-1	BH01	Solid	01/24/22 10:39	01/24/22 16:36	0.5
890-1867-2	BH01A	Solid	01/24/22 10:40	01/24/22 16:36	1
890-1867-3	BH02	Solid	01/24/22 10:51	01/24/22 16:36	0.5
890-1867-4	BH02A	Solid	01/24/22 10:52	01/24/22 16:36	1
890-1867-5	BH03	Solid	01/24/22 10:57	01/24/22 16:36	0.5
890-1867-6	BH03A	Solid	01/24/22 10:58	01/24/22 16:36	1
890-1867-7	BH04	Solid	01/24/22 11:00	01/24/22 16:36	0.5
890-1867-8	BH04A	Solid	01/24/22 11:04	01/24/22 16:36	1
890-1867-9	BH05	Solid	01/24/22 11:12	01/24/22 16:36	0.5
890-1867-10	BH05A	Solid	01/24/22 11:13	01/24/22 16:36	1

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	
Company Name:	WSP USA Inc., Permian office	Company Name:	
Address:	3300 North A St. Bldg 1, Unit 222	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	(432) 704-5178	Email:	travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	Trinity Burrus Unit #016	Turn Around	
Project Number:	31403471.004	Routine X	
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.0 / 1.6	Thermometer ID	T-NA-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.7	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

890-1867 Chain of Custody

Work Order Notes

IN: NGRL1313056354
CC:
API: 30-025-36251

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
BH01	S	1/24/2022	10:39	0.5	1	x	x	x	Composite
BH01A	S	1/25/2022	10:40	1	1	x	x	x	Composite
BH02	S	1/26/2022	10:51	0.5	1	x	x	x	Composite
BH02A	S	1/27/2022	10:52	1	1	x	x	x	Composite
BH03	S	1/28/2022	10:57	0.5	1	x	x	x	Composite
BH03A	S	1/29/2022	10:58	1	1	x	x	x	Composite
BH04	S	1/30/2022	11:00	0.5	1	x	x	x	Composite
BH04A	S	1/31/2022	11:04	1	1	x	x	x	Composite
BH05	S	2/1/2022	11:12	0.5	1	x	x	x	Composite
BH05A	S	2/2/2022	11:13	1	1	x	x	x	Composite

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1/24/22 4:36	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone: 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-600 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1867-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 1/28/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Trinity Burrus Unit #016	Project #: 89000048			
Site	SSOW#:			

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I - Ice, J DI Water, K EDTA, L EDA
M - Hexane, N None, O - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W - pH 4-5, Z other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
BH01 (890-1867-1)	1/24/22	10 39 Mountain		Solid			X	X	X	X	X	1	
BH01A (890-1867-2)	1/24/22	10 40 Mountain		Solid			X	X	X	X	X	1	
BH02 (890-1867-3)	1/24/22	10 51 Mountain		Solid			X	X	X	X	X	1	
BH02A (890-1867-4)	1/24/22	10 52 Mountain		Solid			X	X	X	X	X	1	
BH03 (890-1867-5)	1/24/22	10 57 Mountain		Solid			X	X	X	X	X	1	
BH03A (890-1867-6)	1/24/22	10 58 Mountain		Solid			X	X	X	X	X	1	
BH04 (890-1867-7)	1/24/22	11 00 Mountain		Solid			X	X	X	X	X	1	
BH04A (890-1867-8)	1/24/22	11 04 Mountain		Solid			X	X	X	X	X	1	
BH05 (890-1867-9)	1/24/22	11 12 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For ________ Months*

Deliverable Requested I II III IV, Other (specify) — Primary Deliverable Rank 2
Special Instructions/QC Requirements.

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by: N. G[illegible]	Date/Time: 1/25/22	Company	Received by: N Kramer	Date/Time: 1/26/22	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 3.6/3.7		

Ver 06/08/2021

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-600 2
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-1867-1
Address: 1211 W Florida Ave,	Due Date Requested: 1/28/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Trinity Burrus Unit #016	Project #: 89000048			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
BH05A (890-1867-10)	1/24/22	11 13 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		1/25/22				
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1867-1
SDG Number: 31403471.004

Login Number: 1867
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1867-1
SDG Number: 31403471.004

Login Number: 1867
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 01/26/22 11:25 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").	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-11802-1
Laboratory Sample Delivery Group: 33.2624321, -103.0739899
Client Project/Site: Trinity Bumas A60 Unit #16

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
3/8/2022 12:28:26 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Laboratory Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16 SDG: 33.2624321, -103.0739899

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16 SDG: 33.2624321, -103.0739899

Job ID: 880-11802-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-11802-1

Receipt
The samples were received on 3/1/2022 8:51 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 4.2°C

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS01 (880-11802-1) and FS02 (880-11802-2). Evidence of matrix interferences is not obvious.

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: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Client Sample ID: FS01

Lab Sample ID: 880-11802-1
Matrix: Solid
Date Collected: 02/28/22 12:27
Date Received: 03/01/22 08:51
Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:09	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:09	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/04/22 16:00	03/05/22 00:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:09	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/04/22 16:00	03/05/22 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/04/22 16:00*	*03/05/22 00:09*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/22 16:00*	*03/05/22 00:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/22 10:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		03/02/22 15:27	03/03/22 06:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/22 15:27	03/03/22 06:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/22 15:27	03/03/22 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*03/02/22 15:27*	*03/03/22 06:19*	*1*
o-Terphenyl	*135*	*S1+*	*70 - 130*	*03/02/22 15:27*	*03/03/22 06:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**530**		4.97		mg/Kg			03/07/22 16:45	1

Client Sample ID: FS02

Lab Sample ID: 880-11802-2
Matrix: Solid
Date Collected: 02/28/22 12:31
Date Received: 03/01/22 08:51
Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 00:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 00:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 00:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/04/22 16:00	03/05/22 00:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 00:30	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/04/22 16:00	03/05/22 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/04/22 16:00*	*03/05/22 00:30*	*1*

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Client Sample ID: FS02

Lab Sample ID: 880-11802-2
Matrix: Solid
Date Collected: 02/28/22 12:31
Date Received: 03/01/22 08:51
Sample Depth: 1.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/22 16:00*	*03/05/22 00:30*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/03/22 10:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		03/02/22 15:27	03/03/22 06:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/02/22 15:27	03/03/22 06:40	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/02/22 15:27	03/03/22 06:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*117*		*70 - 130*	*03/02/22 15:27*	*03/03/22 06:40*	*1*
o-Terphenyl	*119*		*70 - 130*	*03/02/22 15:27*	*03/03/22 06:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**421**		4.98		mg/Kg			03/07/22 16:51	1

Client Sample ID: FS03

Lab Sample ID: 880-11802-3
Matrix: Solid
Date Collected: 02/28/22 13:36
Date Received: 03/01/22 08:51
Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/04/22 16:00	03/05/22 00:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 16:00	03/05/22 00:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/04/22 16:00	03/05/22 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/04/22 16:00*	*03/05/22 00:50*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/04/22 16:00*	*03/05/22 00:50*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 10:15	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Client Sample ID: FS03

Lab Sample ID: 880-11802-3
Matrix: Solid
Date Collected: 02/28/22 13:36
Date Received: 03/01/22 08:51
Sample Depth: 1.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/02/22 15:27	03/03/22 07:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 07:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 07:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/02/22 15:27*	*03/03/22 07:01*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/02/22 15:27*	*03/03/22 07:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**359**		4.97		mg/Kg			03/07/22 16:57	1

Client Sample ID: FS04

Lab Sample ID: 880-11802-4
Matrix: Solid
Date Collected: 02/28/22 12:41
Date Received: 03/01/22 08:51
Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 01:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 01:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 01:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/04/22 16:00	03/05/22 01:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 16:00	03/05/22 01:11	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/04/22 16:00	03/05/22 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/04/22 16:00*	*03/05/22 01:11*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/22 16:00*	*03/05/22 01:11*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/06/22 20:58	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/03/22 10:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/02/22 15:27	03/03/22 07:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 07:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/02/22 15:27*	*03/03/22 07:21*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/02/22 15:27*	*03/03/22 07:21*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Client Sample ID: FS04
Date Collected: 02/28/22 12:41
Date Received: 03/01/22 08:51
Sample Depth: 1.5

Lab Sample ID: 880-11802-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	395		5.00		mg/Kg			03/07/22 17:03	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16 SDG: 33.2624321, -103.0739899

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11802-1	FS01	104	98
880-11802-2	FS02	102	97
880-11802-3	FS03	103	97
880-11802-4	FS04	107	98
880-11985-A-1-C MS	Matrix Spike	100	102
880-11985-A-1-D MSD	Matrix Spike Duplicate	99	101
LCS 880-20798/1-A	Lab Control Sample	102	102
LCSD 880-20798/2-A	Lab Control Sample Dup	99	101
MB 880-20668/5-A	Method Blank	104	95
MB 880-20798/5-A	Method Blank	97	94

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-11802-1	FS01	131 S1+	135 S1+
880-11802-2	FS02	117	119
880-11802-3	FS03	108	111
880-11802-4	FS04	113	116
880-11895-A-1-D MS	Matrix Spike	108	101
880-11895-A-1-E MSD	Matrix Spike Duplicate	114	107
LCS 880-20708/2-A	Lab Control Sample	114	105
LCSD 880-20708/3-A	Lab Control Sample Dup	123	114
MB 880-20708/1-A	Method Blank	120	127

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20668/5-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20668

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 07:45	03/04/22 11:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/04/22 07:45*	*03/04/22 11:31*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/04/22 07:45*	*03/04/22 11:31*	*1*

Lab Sample ID: MB 880-20798/5-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20798

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/03/22 16:00	03/04/22 22:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/03/22 16:00	03/04/22 22:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/03/22 16:00	03/04/22 22:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/03/22 16:00	03/04/22 22:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/03/22 16:00	03/04/22 22:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/03/22 16:00	03/04/22 22:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/03/22 16:00*	*03/04/22 22:26*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/03/22 16:00*	*03/04/22 22:26*	*1*

Lab Sample ID: LCS 880-20798/1-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20798

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1113		mg/Kg		111	70 - 130		
Toluene			0.100	0.1072		mg/Kg		107	70 - 130		
Ethylbenzene			0.100	0.1029		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2112		mg/Kg		106	70 - 130		
o-Xylene			0.100	0.1033		mg/Kg		103	70 - 130		

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

Lab Sample ID: LCSD 880-20798/2-A
Matrix: Solid
Analysis Batch: 20854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20798

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1057		mg/Kg		106	70 - 130	5	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

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

Lab Sample ID: LCSD 880-20798/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20854 — **Prep Batch: 20798**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.1010		mg/Kg		101	70 - 130	6	35
Ethylbenzene			0.100	0.09622		mg/Kg		96	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1979		mg/Kg		99	70 - 130	7	35
o-Xylene			0.100	0.09729		mg/Kg		97	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-11985-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20854 — **Prep Batch: 20798**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U	0.0998	0.1124		mg/Kg		113	70 - 130
Toluene	<0.00201	U	0.0998	0.1082		mg/Kg		108	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.1038		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2143		mg/Kg		107	70 - 130
o-Xylene	<0.00201	U	0.0998	0.1049		mg/Kg		105	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-11985-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20854 — **Prep Batch: 20798**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.1039		mg/Kg		104	70 - 130	8	35
Toluene	<0.00201	U	0.0996	0.09983		mg/Kg		100	70 - 130	8	35
Ethylbenzene	<0.00201	U	0.0996	0.09542		mg/Kg		96	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1967		mg/Kg		99	70 - 130	9	35
o-Xylene	<0.00201	U	0.0996	0.09678		mg/Kg		97	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 880-20708/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20650 — **Prep Batch: 20708**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 03:56	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

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

Lab Sample ID: MB 880-20708/1-A
Matrix: Solid
Analysis Batch: 20650

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20708

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 03:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 03:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*03/02/22 15:27*	*03/03/22 03:56*	*1*
o-Terphenyl	*127*		*70 - 130*	*03/02/22 15:27*	*03/03/22 03:56*	*1*

Lab Sample ID: LCS 880-20708/2-A
Matrix: Solid
Analysis Batch: 20650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20708

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	911.8		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.5		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-20708/3-A
Matrix: Solid
Analysis Batch: 20650

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20708

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1167	*1	mg/Kg		117	70 - 130	25	20
Diesel Range Organics (Over C10-C28)			1000	1002		mg/Kg		100	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: 880-11895-A-1-D MS
Matrix: Solid
Analysis Batch: 20650

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20708

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 F1 F2	1000	<50.0	U F1	mg/Kg		-0.4	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	<50.0	U F1	mg/Kg		0	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16 SDG: 33.2624321, -103.0739899

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

Lab Sample ID: 880-11895-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 20650 — **Prep Batch: 20708**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1 F1 F2	998	<49.9	U F1 F2	mg/Kg		0.2	70 - 130	31	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	<49.9	U F1	mg/Kg		0	70 - 130	NC	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20588/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20893

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/07/22 14:27	1

Lab Sample ID: LCS 880-20588/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20893

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	268.8		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 880-20588/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20893

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	238.7		mg/Kg		95	90 - 110	12	20

Lab Sample ID: 880-11799-A-52-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20893

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	433		249	677.0		mg/Kg		98	90 - 110		

Lab Sample ID: 880-11799-A-52-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 20893

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	433		249	660.4		mg/Kg		91	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16 SDG: 33.2624321, -103.0739899

GC VOA

Prep Batch: 20668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-20668/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 20798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Total/NA	Solid	5035	
880-11802-2	FS02	Total/NA	Solid	5035	
880-11802-3	FS03	Total/NA	Solid	5035	
880-11802-4	FS04	Total/NA	Solid	5035	
MB 880-20798/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20798/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20798/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11985-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-11985-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Total/NA	Solid	8021B	20798
880-11802-2	FS02	Total/NA	Solid	8021B	20798
880-11802-3	FS03	Total/NA	Solid	8021B	20798
880-11802-4	FS04	Total/NA	Solid	8021B	20798
MB 880-20668/5-A	Method Blank	Total/NA	Solid	8021B	20668
MB 880-20798/5-A	Method Blank	Total/NA	Solid	8021B	20798
LCS 880-20798/1-A	Lab Control Sample	Total/NA	Solid	8021B	20798
LCSD 880-20798/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20798
880-11985-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	20798
880-11985-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20798

Analysis Batch: 20995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Total/NA	Solid	Total BTEX	
880-11802-2	FS02	Total/NA	Solid	Total BTEX	
880-11802-3	FS03	Total/NA	Solid	Total BTEX	
880-11802-4	FS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 20650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Total/NA	Solid	8015B NM	20708
880-11802-2	FS02	Total/NA	Solid	8015B NM	20708
880-11802-3	FS03	Total/NA	Solid	8015B NM	20708
880-11802-4	FS04	Total/NA	Solid	8015B NM	20708
MB 880-20708/1-A	Method Blank	Total/NA	Solid	8015B NM	20708
LCS 880-20708/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20708
LCSD 880-20708/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20708
880-11895-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	20708
880-11895-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20708

Prep Batch: 20708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16 SDG: 33.2624321, -103.0739899

GC Semi VOA (Continued)

Prep Batch: 20708 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-2	FS02	Total/NA	Solid	8015NM Prep	
880-11802-3	FS03	Total/NA	Solid	8015NM Prep	
880-11802-4	FS04	Total/NA	Solid	8015NM Prep	
MB 880-20708/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20708/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20708/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11895-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11895-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Total/NA	Solid	8015 NM	
880-11802-2	FS02	Total/NA	Solid	8015 NM	
880-11802-3	FS03	Total/NA	Solid	8015 NM	
880-11802-4	FS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Soluble	Solid	DI Leach	
880-11802-2	FS02	Soluble	Solid	DI Leach	
880-11802-3	FS03	Soluble	Solid	DI Leach	
880-11802-4	FS04	Soluble	Solid	DI Leach	
MB 880-20588/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20588/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20588/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11799-A-52-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11799-A-52-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11802-1	FS01	Soluble	Solid	300.0	20588
880-11802-2	FS02	Soluble	Solid	300.0	20588
880-11802-3	FS03	Soluble	Solid	300.0	20588
880-11802-4	FS04	Soluble	Solid	300.0	20588
MB 880-20588/1-A	Method Blank	Soluble	Solid	300.0	20588
LCS 880-20588/2-A	Lab Control Sample	Soluble	Solid	300.0	20588
LCSD 880-20588/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20588
880-11799-A-52-E MS	Matrix Spike	Soluble	Solid	300.0	20588
880-11799-A-52-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20588

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Client Sample ID: FS01

Lab Sample ID: 880-11802-1

Date Collected: 02/28/22 12:27
Matrix: Solid
Date Received: 03/01/22 08:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20798	03/04/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 00:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20995	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20794	03/03/22 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	20708	03/02/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20650	03/03/22 06:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20588	03/01/22 09:46	SC	XEN MID
Soluble	Analysis	300.0		1			20893	03/07/22 16:45	CH	XEN MID

Client Sample ID: FS02

Lab Sample ID: 880-11802-2

Date Collected: 02/28/22 12:31
Matrix: Solid
Date Received: 03/01/22 08:51

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	20798	03/04/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 00:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20995	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20794	03/03/22 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20708	03/02/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20650	03/03/22 06:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	20588	03/01/22 09:46	SC	XEN MID
Soluble	Analysis	300.0		1			20893	03/07/22 16:51	CH	XEN MID

Client Sample ID: FS03

Lab Sample ID: 880-11802-3

Date Collected: 02/28/22 13:36
Matrix: Solid
Date Received: 03/01/22 08:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	20798	03/04/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 00:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20995	03/06/22 20:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20794	03/03/22 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	20708	03/02/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20650	03/03/22 07:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	20588	03/01/22 09:46	SC	XEN MID
Soluble	Analysis	300.0		1			20893	03/07/22 16:57	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 880-11802-4

Date Collected: 02/28/22 12:41
Matrix: Solid
Date Received: 03/01/22 08:51

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	20798	03/04/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/05/22 01:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20995	03/06/22 20:58	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Client Sample ID: FS04
Date Collected: 02/28/22 12:41
Date Received: 03/01/22 08:51

Lab Sample ID: 880-11802-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			20794	03/03/22 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20708	03/02/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20650	03/03/22 07:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	20588	03/01/22 09:46	SC	XEN MID
Soluble	Analysis	300.0		1			20893	03/07/22 17:03	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Job ID: 880-11802-1
Project/Site: Trinity Bumas A60 Unit #16
SDG: 33.2624321, -103.0739899

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Trinity Bumas A60 Unit #16

Job ID: 880-11802-1
SDG: 33.2624321, -103.0739899

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-11802-1	FS01	Solid	02/28/22 12:27	03/01/22 08:51	1.5
880-11802-2	FS02	Solid	02/28/22 12:31	03/01/22 08:51	1.5
880-11802-3	FS03	Solid	02/28/22 13:36	03/01/22 08:51	1.5
880-11802-4	FS04	Solid	02/28/22 12:41	03/01/22 08:51	1.5

Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334
Midland TX (432) 704-5440 EL Paso, TX (915) 585-3443, Lubbock TX (806) 794-1296
Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701
Atlanta GA (770) 449-8800

Work Order No: 11802

www.xenco.com Page 1 of 1

Project Manager	Kalei Jennings	Bill to (if different)	Kalei Jennings
Company Name	WSP USA Inc	Company Name	WSP USA Inc
Address	3300 North A St, Bldg 1, Unit 222	Address	
City State ZIP	Midland, TX 79705	City State ZIP	
Phone	817-683-2503	Email	Kalei.Jennings@wsp.com

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project.
Reporting Level (II) Level II ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables EDD (✓) ADaPT ☐ Other

Project Name	Trinity Burrus Abo Unit #110	Turn Around	
Project Number	31403471.003	Routine	☒
Project Location	33.262871, -103.079899	Rush	☐
Sampler's Name	Hadlu Green	Due Date	5 DAY
PO #			

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	4.3/4.2	Thermometer ID	IR8
Received Intact	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

Preservative Codes

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

TAT starts the day recevied by the lab if received by 4 30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	BTEX (EPA 8021)	TPH (EPA 8015)	CHLORIDES (EPA 300)	Sample Comments
FS01	SL	2-28-22	12:27	1.5	1	X	X	X	
FS02	↓	↓	12:31	1.5	↓	↓	↓	↓	
FS03	↓	↓	12:36	1.5	↓	↓	↓	↓	
FS04	↓	↓	12:41	1.5	↓	↓	↓	↓	

880-11802 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** Hg

	Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1	Hadlu Green		3/1/22 8:51	2		
3				4		
5				6		

Revised Date101419 Rev 2019 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-11802-1
SDG Number: 33.2624321, -103.0739899

Login Number: 11802
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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 91942

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 91942
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	6/21/2022