

Incident ID	NAPP2123131376
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature:  Date: 11/02/2021

email: Adrian.Baker@exxonmobil.com Telephone: 432-263-3808

OCD Only

Received by: Robert Hamlet Date: 3/14/2022

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

Closure Approved by:  Date: 3/14/2022

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

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Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Shelby Pennington	Contact Telephone 281-723-9353
Contact email shelby.pennington@exxonmobil.com	Incident # (assigned by OCD)
Contact mailing address 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707	

Location of Release Source

Latitude 32.11862 Longitude -103.90859
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Tiger	Site Type Compressor Station
Date Release Discovered 08/07/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
E	20	25S	30E	Eddy

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) 7.24	Volume Recovered (bbls) 4.75
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Night mechanic responded to high-high alarm to find nipple below pressure relief valve releasing fluid both into containment and onto pad. A vac truck recovered standing fluids. A third-party contractor has been retained for remediation activities.

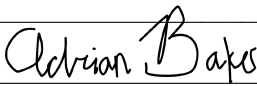
State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: NA	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: Adrian Baker	Title: SSHE Coordinator
Signature: 	Date: 8/20/21
email: adrian.baker@exxonmobil.com	Telephone: 432-236-3808
<u>OCD Only</u>	
Received by: Ramona Marcus	Date: 8/20/2021

NAPP2123231376

Location:	Tiger Compressor Station	
Spill Date:	8/7/2021	
Area 1		
Approximate Area =	26.67	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	4.75	bbls
Total Produced Water =	0.00	bbls
Area 2		
Approximate Area =	4974.70	sq. ft.
Average Saturation (or depth) of spill =	1.13	inches
Average Porosity Factor =		
0.03		
VOLUME OF LEAK		
Total Crude Oil =	2.49	bbls
Total Produced Water =	0.00	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	7.24	bbls
Total Produced Water =	0.00	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	4.75	bbls
Total Produced Water =	0.00	bbls

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Site Assessment/Characterization

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

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

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

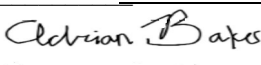
Characterization Report Checklist: *Each of the following items must be included in the report.*

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

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

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Printed Name: Adrian Baker Title: Environmental Coordinator
Signature:  Date: 11/02/2021
email: Adrain.Baker@exxonmobil.com Telephone: (432)-263-3808

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2123131376
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Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature:  Date: 11/02/2021

email: Adrian.Baker@exxonmobil.com Telephone: 432-263-3808

OCD 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: _____ Date: _____

Printed Name: _____ Title: _____



WSP USA

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

November 2, 2021

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

**RE: Closure Request
Tiger Compressor Station
Incident Number NAPP2123231376
Eddy County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Tiger Compressor Station (Site) in Unit E, Section 20, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following a release of condensate at the Site. Based on the excavation activities and soil sample laboratory analytical results, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2123231376.

RELEASE BACKGROUND

On August 7, 2021, a nipple below the pressure relief valve was found to be releasing fluid both into the lined containment and onto the pad. Approximately 7.24 barrels (bbls) of condensate were released. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 4.75 bbls of condensate were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 20, 2021. The release was assigned Incident Number NAPP2123231376.

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 greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During February 2020, WSP installed a soil boring (C-04394) within 0.5 miles of the Site utilizing a truck mounted hollow stem auger rig. Soil boring C-04394 was drilled to a depth of 110 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The Well Record and Log is included in Attachment 1. The location of the



borehole is approximately 0.5 miles southwest of the Site and is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with hydrated bentonite chips.

The closest continuously flowing water or significant watercourse to the Site is an intermittent riverine, located approximately 2,260 feet southeast 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)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On August 26, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected four preliminary assessment soil samples (SS01 through SS04) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the impacted soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

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



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

Laboratory analytical results for preliminary soil sample SS03 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for preliminary soil samples SS01, SS02, and SS04 indicated that BTEX and TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria. Based on visible staining in the release area and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between September 30, 2021 and October 8, 2021, WSP personnel were at the Site to oversee delineation activities as indicated by visual observations and laboratory analytical results for the preliminary soil samples.

Potholes PH01 through PH06 were advanced via backhoe to a depth of approximately 6 feet bgs within the release extent to further assess the lateral and vertical extent of impacted soil. Potholes PH04, and PH06 were advanced at the SS02 and SS03 preliminary soil sample locations, respectively. One borehole (BH01) was advanced via hand auger to a depth of approximately 4 feet bgs within the release extent. Delineation soil samples were collected from each pothole and borehole from depths ranging from 1-foot to 6 feet bgs. Soil from the potholes and borehole was field screened for volatile aromatic hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes and borehole were logged on lithologic/soil sampling logs, which are included in Attachment 2.

Additionally, WSP collected lateral delineation surface samples SS01 through SS07 around the release extent to confirm the lateral extent of the release. The pothole, borehole, and surface delineation soil sample locations are depicted on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Eurofins in Carlsbad, New Mexico.

Laboratory analytical results for the delineation soil samples collected from potholes PH01, PH02, PH04, PH05, and PH06 and borehole BH01 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Delineation soil sample PH03B, collected at 3 feet bgs from pothole PH03, indicated that TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria. Subsequent sample PH03C, collected at 4 feet bgs, was compliant with the Closure Criteria. Laboratory analytical results for surface delineation samples SS01 through SS07 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the laboratory analytical



results, the lateral and vertical extent of the release was successfully defined, and excavation activities were completed.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

During October 2021, WSP personnel directed excavation activities based on observed staining in the release area, field screening activities, and laboratory analytical results for preliminary soil samples SS01, SS02, and SS04 and delineation soil sample PH03B, collected at 3 feet bgs. Excavation activities were performed using a track-mounted backhoe and transport vehicle. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Following removal of impacted soil, WSP collected 5-point composite soil samples from the excavations. 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 soil samples FS01, FS03, and FS04 were collected from the floor of the excavations from a depth of approximately 1.5 feet bgs. Due to the shallow depth of the excavation in these areas, the soil samples represented the floor and sidewalls of the excavation. Floor sample FS02 was collected from the deeper portion of the excavation from a depth of approximately 4 feet bgs. Due to the depth of excavation in this area, composite samples SW01 and SW02 were collected from the sidewalls of the excavation from a depth of ground surface to 4 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extents and excavation soil sample locations are presented on Figure 4. Photographic documentation was conducted during the Site visits. A Photographic log is included in Attachment 3.

The excavations measured approximately 718 square feet. A total of approximately 16 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation areas were backfilled.

Laboratory analytical results for excavation floor samples FS01 through FS04 and excavation sidewall samples SW01 and SW02 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, 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.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the August 20, 2021 release of condensate. Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH06, borehole BH01, and surface delineation samples SS01 through SS07 defined the lateral and vertical extent of the release. Based on the laboratory analytical results from the site assessment activities, impacted soil was excavated.



District II
Page 5

Laboratory analytical results for excavation floor samples FS01 through FS04 and excavation sidewall samples SW01 through SW02, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and no further remediation was required. XTO backfilled the excavations with material purchased locally and recontoured the Site to match pre-existing site conditions.

Initial response efforts which included removal of freestanding fluids via hydrovac and excavation of impacted soil have mitigated impacts at this Site. Depth to groundwater is greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. WSP and XTO believe these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests no further action for Incident Number NAPP2123231376.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

A handwritten signature in black ink that reads "Kalei Jennings".

Kalei Jennings
Associate Consultant

A handwritten signature in black ink that reads "Ashley L. Ager".

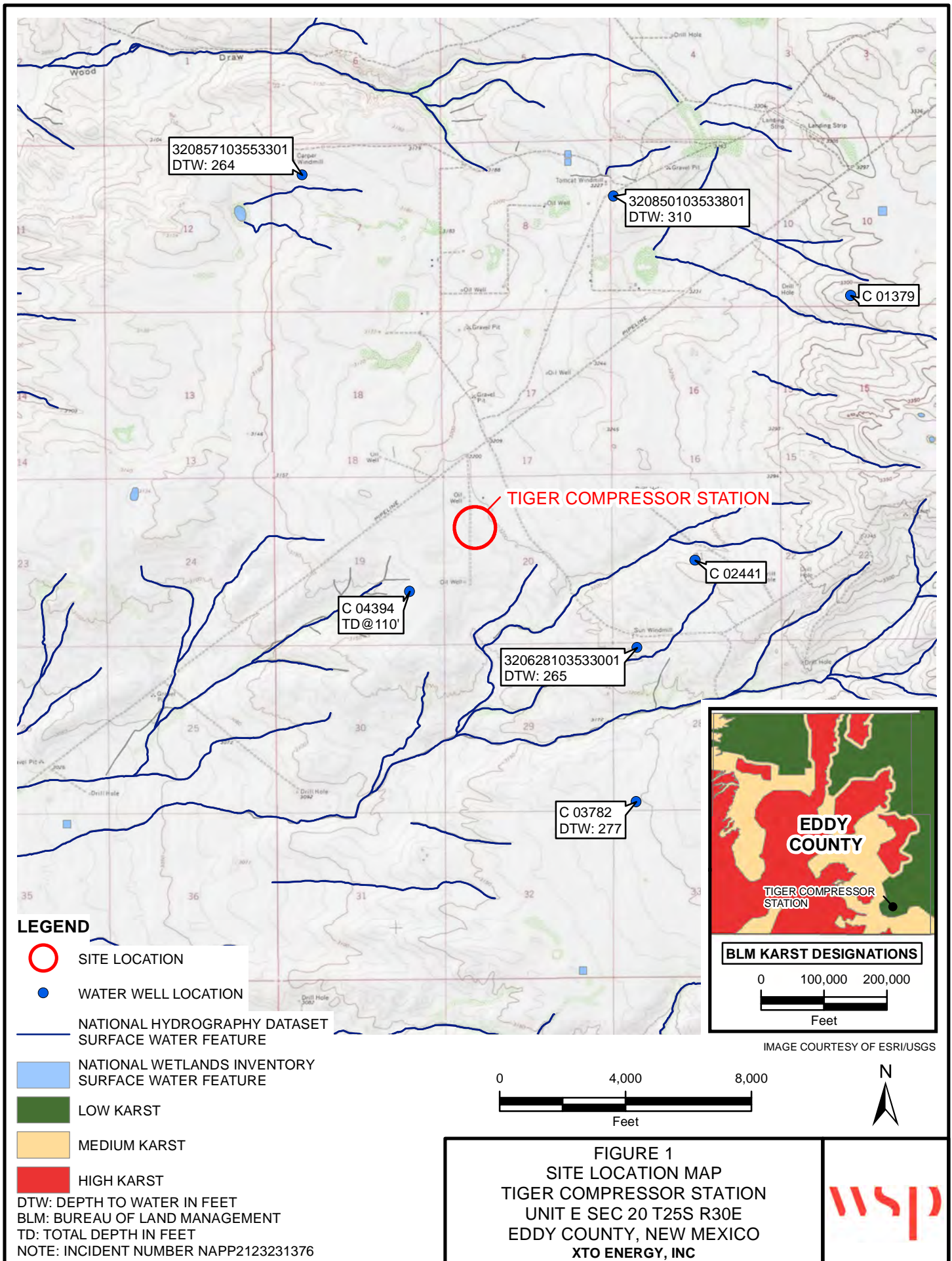
Ashley L. Ager, P.G.
Managing Director, Geologist

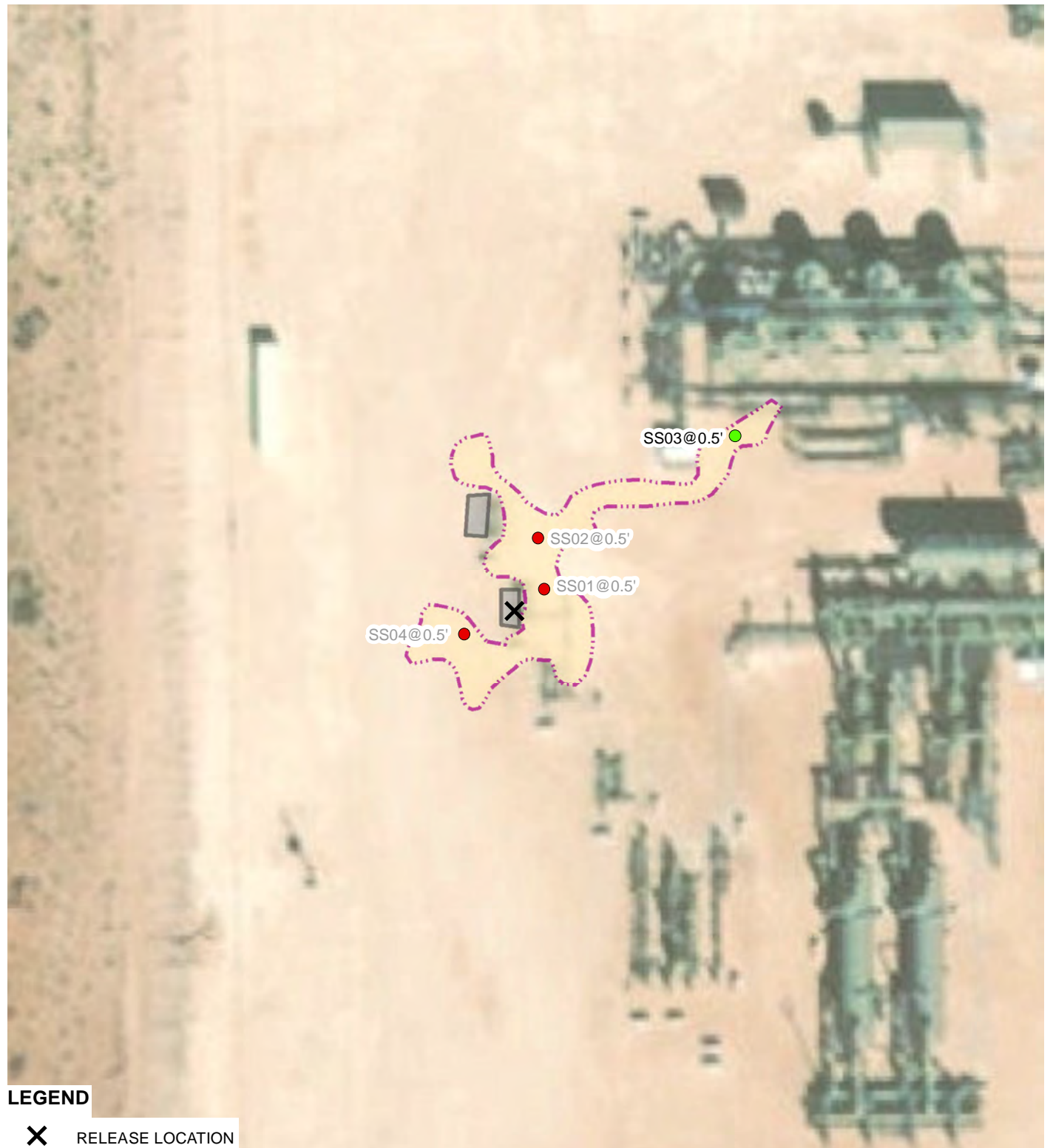
cc: Adrian Baker, XTO
Bureau of Land Management

Attachments:

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

FIGURES



**LEGEND**

RELEASE LOCATION

PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS
EXCEEDING APPLICABLE CLOSURE CRITERIAPRELIMINARY SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

RELEASE EXTENT



LINED CONTAINMENT

NOTE: INCIDENT NUMBER NAPP2123231376
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE
 THAT WAS REMOVED

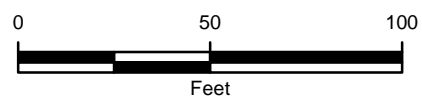
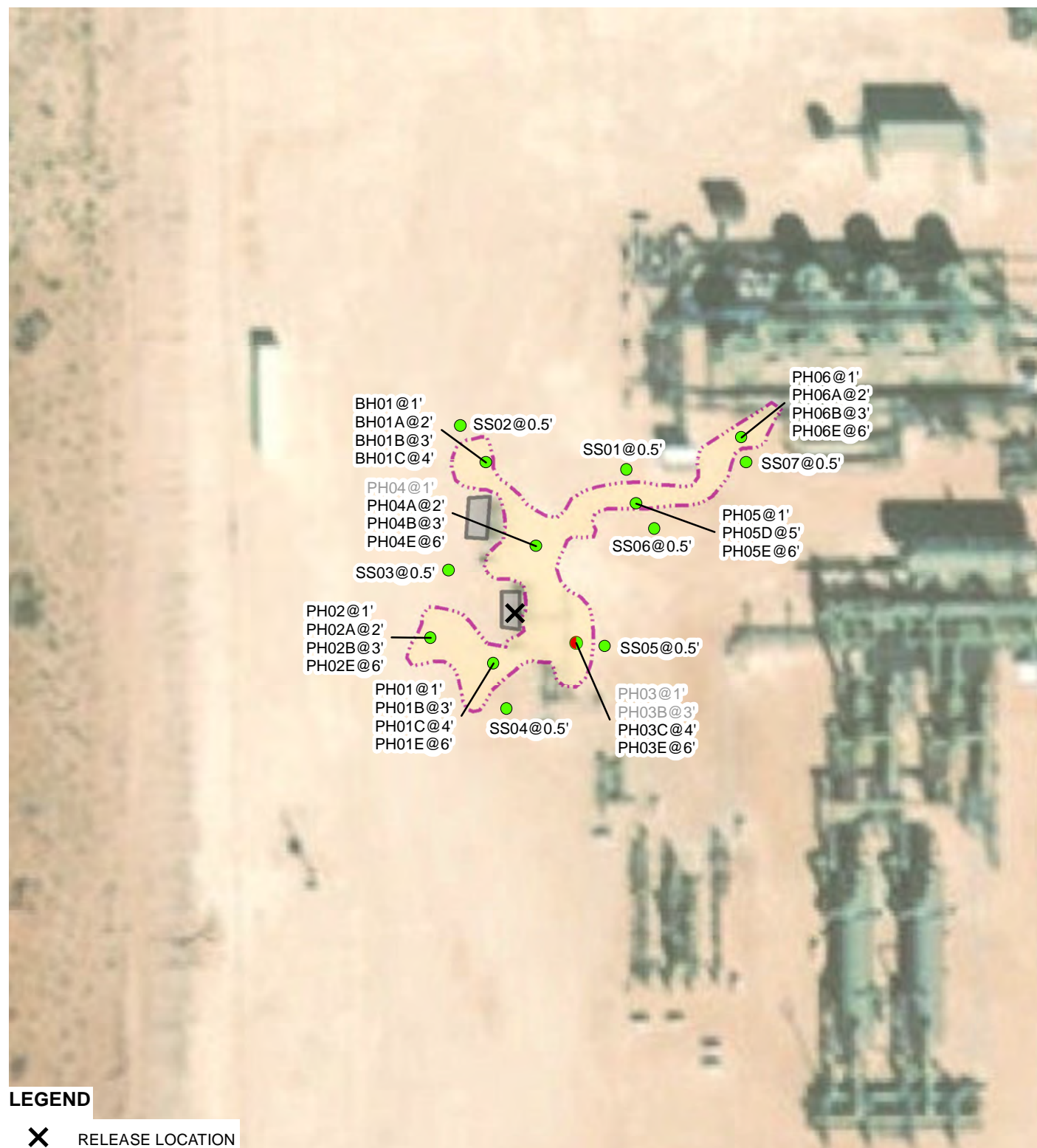


IMAGE COURTESY OF ESRI



FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
TIGER COMPRESSOR STATION
UNIT E SEC 20 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.





LEGEND



RELEASE LOCATION



DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA



DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



RELEASE EXTENT



LINED CONTAINMENT

NOTE: INCIDENT NUMBER NAPP2123231376
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

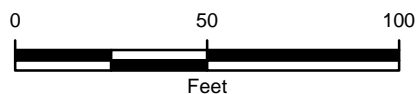


IMAGE COURTESY OF ESRI



FIGURE 3
 DELINEATION SOIL SAMPLE LOCATIONS
 TIGER COMPRESSOR STATION
 UNIT E SEC 20 T25S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



**LEGEND**

RELEASE LOCATION

FLOOR SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIASIDEWALL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

EXCAVATION EXTENT



LINED CONTAINMENT

NOTE: INCIDENT NUMBER NAPP2123231376
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

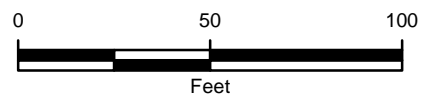


FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
TIGER COMPRESSOR STATION
UNIT E SEC 20 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



TABLES

Table 1

**Soil Analytical Results
Tiger Compressor Station
Incident Number NAPP2123231376
Eddy 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	1,000	2,500	20,000
Preliminary Assessment Samples										
SS01	08/26/2021	0.5	5.93	419	448	3,660	<50.0	4,108	4,110	<5.04
SS02	08/26/2021	0.5	5.34	253	283	1,710	<49.9	1,993	1,990	<5.00
SS03	08/26/2021	0.5	0.371	15	62	161	<49.8	223	223	<4.95
SS04	08/26/2021	0.5	5.31	260	254	2,130	<49.9	2,384	2,380	34.8
Delineation Soil Samples										
PH01	09/30/2021	1	<0.00199	0.288	287	299	<49.9	586	586	168
PH01B	09/30/2021	3	<0.00200	0.0825	<50.0	<50.0	<50.0	<50.0	<50.0	346
PH01C	09/30/2021	4	<0.00200	0.039	<49.9	<49.9	<49.9	<49.9	<50.0	174
PH01E	09/30/2021	6	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<50.0	39
PH02	09/30/2021	1	<0.00202	0.00456	<50.0	<50.0	<50.0	<50.0	<50.0	182
PH02A	09/30/2021	2	<0.00199	0.0153	<49.9	<49.9	<49.9	<49.9	<50.0	285
PH02B	09/30/2021	3	<0.00200	0.0157	<49.8	<49.8	<49.8	<49.8	<50.0	295
PH02E	09/30/2021	6	<0.00199	0.00697	<49.8	<49.8	<49.8	<49.8	<50.0	18.7
PH03	09/30/2021	1	<0.00199	0.378	214	147	<49.9	361	361	76.7
PH03B	09/30/2021	3	0.0283	10.5	655	1,360	<49.9	2,015	2,020	44
PH03C	09/30/2021	4	<0.00200	0.0194	<50.0	<50.0	<50.0	<50.0	<50.0	183
PH03E	09/30/2021	6	<0.00199	0.0116	<49.8	<49.8	<49.8	<49.8	<50.0	13.9
PH04	09/30/2021	1	<0.00198	0.0109	<49.8	<49.8	<49.8	<49.8	<50.0	12.9
PH04A	09/30/2021	2	<0.00199	0.00502	<49.9	<49.9	<49.9	<49.9	<50.0	23.1
PH04B	09/30/2021	3	<0.00199	<0.00200	<49.9	<49.9	<49.9	<49.9	<50.0	165
PH04E	09/30/2021	6	<0.00201	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	444

Table 1

**Soil Analytical Results
Tiger Compressor Station
Incident Number NAPP2123231376
Eddy 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	1,000	2,500	20,000
PH05	10/01/2021	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	37.3
PH05D	10/01/2021	5	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	14.1
PH05E	10/01/2021	6	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	14
PH06	10/01/2021	1	<0.00199	0.0476	<49.9	<49.9	<49.9	<49.9	<49.9	108
PH06A	10/01/2021	2	<0.00198	0.204	<49.8	<49.8	<49.8	<49.8	<49.8	58.9
PH06B	10/01/2021	3	<0.00198	0.006	<49.8	<49.8	<49.8	<49.8	<49.8	217
PH06E	10/01/2021	6	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	292
BH01	10/07/2021	1	<0.00199	0.044	124	<49.9	<49.9	124	124	111
BH01A	10/07/2021	2	<0.00200	0.00518	<49.8	<49.8	<49.8	<49.8	<49.8	210
BH01B	10/07/2021	3	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	147
BH01C	10/07/2021	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	417
Delineation Surface Soil Samples										
SS01	10/08/2021	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<50.0	12.2
SS02	10/08/2021	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	33.3
SS03	10/08/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	33.3
SS04	10/08/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	54.7
SS05	10/08/2021	0.5	<0.00201	<0.00402	58.6	<49.9	<49.9	58.6	58.6	29.4
SS06	10/08/2021	0.5	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	83.1
SS07	10/08/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	86.1
Excavation Floor Samples										
FS01	10/07/2021	1.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	30.7
FS02	10/07/2021	4	<0.00199	<0.00398	69.7	<50.0	<50.0	69.7	69.7	130
FS03	10/07/2021	1.5	<0.00202	0.0076	77.2	<49.8	<49.8	77.2	77.2	28.7

Table 1

**Soil Analytical Results
Tiger Compressor Station
Incident Number NAPP2123231376
Eddy 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	1,000	2,500	20,000
FS04	10/07/2021	1.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	56.1
Excavation Sidewall Samples										
SW01	10/07/2021	0-4	<0.00201	0.0638	86.7	<50.0	<50.0	86.7	86.7	115
SW02	10/07/2021	0-4	<0.00200	0.055	97.7	<49.8	<49.8	97.7	97.7	129

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: WELL RECORD AND LOG



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1		WELL TAG ID NO. NA		OSE FILE NO(S). C-04394			
	WELL OWNER NAME(S) XTO Energy, Inc.				PHONE (OPTIONAL) 432-221-7331			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Road				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 06	SECONDS 46.68	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	54	45.59	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Unit I Section 19, Township 25 South, Range 30 East, Eddy County, New Mexico								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1664		NAME OF LICENSED DRILLER			NAME OF WELL DRILLING COMPANY Cascade Drilling		
	DRILLING STARTED 2/4/2020		DRILLING ENDED 2/5/2020		DEPTH OF COMPLETED WELL (FT) NA	BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) NA	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) NA		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER – SPECIFY: Sonic							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	110	6.5	Soil Boring	NA	NA	NA	NA
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)


FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2


4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	2.5	2.5	SAND, dry, well graded, coarse-fine grain, light brown-tan	Y ✓ N	
	2.5	6	3.5	SAND, dry, poorly graded, light brown-brown, fine-very fine grain	Y ✓ N	
	6	9	3	SAND, dry, poorly graded, light brown-brown, fine-very fine grain	Y ✓ N	
	9	12	3	SAND, dry, poorly graded, light brown-brown, fine-very fine grain, some moder	Y ✓ N	
	12	16	4	SAND, dry, poorly graded, light brown-brown, fine-very fine grain, sandstone gr	Y ✓ N	
	16	27.5	11.5	SAND, dry, poorly graded, light brown-brown, fine-very fine grain	Y ✓ N	
	27.5	36	8.5	SAND, dry, light brown-tan, poorly graded, fine-very fine	Y ✓ N	
	36	44.5	8.5	SAND, light brown-tan, poorly graded, fine-very fine, some red-brown clay pock	Y ✓ N	
	44.5	59.5	15	SILTY sand, light brown-tan, no plasticity, non cohesive, trace high plasticity rec	Y ✓ N	
	59.5	71	11.5	SILTY sand, light brown-brown, moist, no plasticity, non cohesive	Y ✓ N	
	71	82	11	SILTY sand, dry, no plasticity, non cohesive, light brown-tan	Y ✓ N	
	82	85	3	CLAYSTONE, moist, brown-green gray, low plasticity, cohesive	Y ✓ N	
	85	87	2	SILTY sand, dry, light brown-brown, no plasticity, non cohesive	Y ✓ N	
	87	95	8	SILTSTONE, dry, light brown-brown, clay pockets, low plasticity	Y ✓ N	
	95	101	6	CLAY, moist, brown-dark brown, high plasticity, cohesive, some tan clay lamination	Y ✓ N	
	101	105	4	SANDSTONE, tan-light brown, dry, moderately consolidated, calcareous cemen	Y ✓ N	
	105	110	5	CLAY, moist, dark brown-brown, high plasticity, cohesive, trace tan sand, lamination	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER – SPECIFY: NA						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Soil boring backfilled with cuttings and hydrated bentonite chips. Log adapted from LTE on-site geologist.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.					
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE


FOR OSE INTERNAL USE


WR-20 WELL RECORD & LOG (Version 04/30/2019)


FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>		BH or PH Name: PH01		Date: 9-30-2021				
		Site Name: Tiger CS						
		RP or Incident Number: NAPP2123231376						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.11862, -103.90859		Field Screening: Hach chloride strips, PID		Logged By: BB Method: Backhoe Hole Diameter: N/A Total Depth: 6 Feet				
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
			Y			0	CCHE (FILL)	CALICHE, TAN-OFFWHITE, POORLY CONSOLIDATED, STONG H/C ODOR, LIGHT BRWON STAINING, FILL
						0.5		
M	476	15,000	N	PH01	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, STRONG H/C ODOR, NO STAINING
M	767	15,000	N	PH01A	2'	2	SP	SAA
M	588	1,755	N	PH01B	3'	3	SP	SAA
M	369	434	N	PH01C	4'	4	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, MILD H/C ODOR, NO STAINING
M	369	12	N	PH01D	5'	5	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, TRACE H/C ODOR, NO STAINING TRACE LOW PLASTICTY CLAY
M	<124	4.6	N	PH01E	6'	6	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, NO H/C ODOR, NO STAINING
TD @ 6 ft bgs								


 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>						BH or PH Name: PH02		Date: 9-30-2021	
						Site Name: Tiger CS			
						RP or Incident Number: NAPP2123231376			
						WSP Job Number: 31403236.022.0129			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: BB		Method: Backhoe	
Lat/Long: 32.11862, -103.90859			Field Screening: Hach chloride strips, PID			Hole Diameter: N/A		Total Depth: 6 Feet	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0	CCHE (FILL)	CALICHE, TAN-OFFWHITE, POORLY CONSOLIDATED, TRACE H/C ODOR	
						0.5			
M	<120	1.2	N	PH02	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, NO ODOR	
M	526	3.0	N	PH02A	2'	2	SP	SAA	
M	644	1.9	N	PH02B	3'	3	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, NO ODOR	
M	<120	1.0	N	PH02C	4'	4	SP	SAA	
M	<120	1.2	N	PH02D	5'	5	SP	SAA	
								TRACE LOW PLASTICTY CLAY	
M	<120	2.5	N	PH02E	6'	6	SP	SAA	
TD @ 6 ft bgs									

 <div style="display: inline-block; vertical-align: middle;"> <p>WSP USA</p> <p>508 West Stevens Street Carlsbad, New Mexico 88220</p> </div>						BH or PH Name: PH03		Date: 9-30-2021	
						Site Name: Tiger CS			
						RP or Incident Number: NAPP2123231376			
						WSP Job Number: 31403236.022.0129			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: BB		Method: Backhoe	
Lat/Long: 32.11862, -103.90859				Field Screening: Hach chloride strips, PID		Hole Diameter: N/A		Total Depth: 7 Feet	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
			Y			0	CCHE (FILL)	CALICHE, TAN-OFFWHITE, POORLY CONSOLIDATED, STRONG H/C ODOR, LIGHT BROWN STAINING, FILL	
						0.5			
M	<120	1,562	N	PH03	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, STRONG H/C ODOR	
M	<120	1,800	N	PH03A	2'	2	SP	SAA	
M	<120	1,800	N	PH03B	3'	3	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, STRONG H/C ODOR	
M	<120	46.5	N	PH03C	4'	4	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, MILD H/C ODOR	
M	<120	101.4	N	PH03D	5'	5	SP	SAA	
M	<120	113.6	N	PH03E	6'	6	SP	SAA	
								CALICHE, OFF WHITE, WELL CONSOLIDATED, NO ODOR	
M	<120	10.6	N	PH03F	7'	7	CCHE	SAA	
TD @ 7 ft bgs									

 <div> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name: PH04		Date: 10-01-2021	
Site Name: Tiger CS											
RP or Incident Number: NAPP2123231376											
WSP Job Number: 31403236.022.0129											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.11862, -103.90859				Field Screening: Hach chloride strips, PID		Hole Diameter: N/A		Total Depth: 7 Feet			
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
			Y			0	CCHE (FILL)	CALICHE, TAN-OFFWHITE, POORLY CONSOLIDATED, STRONG H/C ODOR, LIGHT BROWN STAINING, FILL			
						0.5					
M	<120	425	N	PH04	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE ROOTS, STRONG H/C ODOR			
M	<120	210	N	PH04A	2'	2	SP	SAA			
M	268	25.4	N	PH04B	3'	3	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, MILD H/C ODOR			
M	588	35.2	N	PH04C	4'	4	SP	SAA			
M	476	20	N	PH04D	5'	5	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, TRACE H/C ODOR			
M	644	103.1	N	PH04E	6'	6	CCHE	CALICHE, OFF WHITE, MODERATELY CONSOLIDATED, MILD H/C ODOR			
M	<120	8.7	N	PH04F	7'	7	CCHE	CALICHE, OFF WHITE, MODERATELY CONSOLIDATED, NO ODOR			
TD @ 7 ft bgs											

 <div> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name: PH05		Date: 10-01-2021	
Site Name: Tiger CS											
RP or Incident Number: NAPP2123231376											
WSP Job Number: 31403236.022.0129											
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: BB		Method: Backhoe			
Lat/Long: 32.11862, -103.90859				Field Screening: Hach chloride strips, PID		Hole Diameter: N/A		Total Depth: 6 Feet			
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
			Y			0	CCHE (FILL)	CALICHE, TAN-OFFWHITE, POORLY CONSOLIDATED, TRACE H/C ODOR, TRACE LIGHT BROWN STAINING			
M	319	0.8	N	PH05	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, NO ODOR			
M	319	4.7	N	PH05A	2'	2	SP	SAA			
M	319	4.1	N	PH05B	3'	3	SP	SAA			
M	319	9.7	N	PH05C	4'	4	SP	SAA			
M	<120	15.7	N	PH05D	5'	5	SP	SAA			
M	<120	4.8	N	PH05E	6'	6	CCHE	CALICHE, OFF WHITE, MODERATELY CONSOLIDATED, NO ODOR			
							CCHE	SAA			
TD @ 6 ft bgs											

<p style="margin: 0;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>						BH or PH Name: PH06		Date: 10-01-2021			
						Site Name: Tiger CS					
						RP or Incident Number: NAPP2123231376					
						WSP Job Number: 31403236.022.0129					
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: BB		Method: Backhoe	
Lat/Long: 32.11862, -103.90859				Field Screening: Hach chloride strips, PID				Hole Diameter: N/A		Total Depth: 7 Feet	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
			Y			0	CCHE (FILL)	CALICHE, TAN-OFFWHITE, POORLY CONSOLIDATED, STRONG H/C ODOR, TRACE LIGHT BROWN STAINING			
						0.5					
M	369	1433	N	PH06	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, STRONG H/C ODOR			
M	470	1660	N	PH06A	2'	2	SP	SAA			
M	705	371	N	PH06B	3'	3	SP	SAA			
M	476	33.4	N	PH06C	4'	4	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, MILD H/C ODOR			
M	<120	23.9	N	PH06D	5'	5	SP	SAA			
M	<120	36	N	PH06E	6'	6	CCHE	CALICHE, OFF WHITE, MODERATELY CONSOLIDATED, TRACE H/C ODOR			
M	<120	16.4	N	PH06F	7'	7	CCHE	SAA			
M	<120	16.4	N	PH06F	7'	7	CCHE	CALICHE, OFF WHITE, MODERATELY CONSOLIDATED, NO ODOR			
TD @ 7 ft bgs											

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>								BH or PH Name: BH01		Date: 10-07-2021	
								Site Name: Tiger CS			
								RP or Incident Number: NAPP2123231376			
								WSP Job Number: 31403236.022.0129			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: BB, PB		Method: Hand Auger	
Lat/Long: 32.11862, -103.90859				Field Screening: Hach chloride strips, PID				Hole Diameter: 3.5"		Total Depth: 4 Feet	
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			
			N			0	CCHE (FILL)	CALICHE, TAN, POORLY CONSOLIDATED, MILD H/C ODOR			
						0.5					
M	157	500	N	BH01	1'	1	SP	SAND, BROWN-DARK BROWN, FINE GRAINED, POORLY-GRADED, MILD H/C ODOR			
M	190	123	N	BH01A	2'	2	SP	SAA			
								TRACE CLAY			
M	308	251	N	BH01B	3'	3	SP	SAA, TRACE CLAY			
M	454	249	N	BH01C	4'	4	SP	SAA			
TD @ 4 ft bgs											

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG		
XTO Energy, INC.	TIGER COMPRESSOR STATION Eddy County, New Mexico	NAPP2123231376



Photo No.	Date	
1	August 26, 2021	
Photo from initial site visit after release was discovered. The release was caused by a nipple below the pressure relief valve releasing fluid onto pad surface.		

Photo No.	Date	
2	August 26, 2021	
Photo from initial site visit after release was discovered. The release was caused by a nipple below the pressure relief valve releasing fluid onto pad surface.		



PHOTOGRAPHIC LOG		
XTO Energy, INC.	TIGER COMPRESSOR STATION Eddy County, New Mexico	NAPP2123231376



Photo No.	Date	
3	October 6, 2021	
West facing photo near release point during delineation activities.		

Photo No.	Date	
4	February 15-17, 2020	
Northwest facing photo from the south side of the site during delineation activities.		

**PHOTOGRAPHIC LOG****XTO Energy, INC.****TIGER COMPRESSOR STATION
Eddy County, New Mexico****NAPP2123231376**


Photo No.	Date	
5	October 7, 2021	
East facing photo of excavation near pothole PH02.		

Photo No.	Date	
6	October 7, 2021	
Northwest facing photo of excavation near pothole PH03.		

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1190-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Tiger CS

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

Attn: Dan Moir

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

Authorized for release by:
9/2/2021 3:14:44 PM

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

LINKS

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1190-1
SDG: Eddy County

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Job ID: 890-1190-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1190-1****Receipt**

The samples were received on 8/27/2021 4:20 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 1.4°C

GC VOA

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SS01 (890-1190-1), SS02 (890-1190-2), SS03 (890-1190-3) and SS04 (890-1190-4) at 20.0, 20.0, 20.0 and 20.0. Elevated reporting limits (RLs) are provided.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7288 and analytical batch 880-7310 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7363 and analytical batch 880-7359 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Client Sample ID: SS01

Lab Sample ID: 890-1190-1

Date Collected: 08/26/21 15:30

Matrix: Solid

Date Received: 08/27/21 16:20

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.93		0.0399	mg/Kg		08/31/21 08:55	08/31/21 16:17	20
Toluene	112		0.994	mg/Kg		09/01/21 09:00	09/01/21 15:21	500
Ethylbenzene	16.8		0.994	mg/Kg		09/01/21 09:00	09/01/21 15:21	500
m-Xylene & p-Xylene	247		1.99	mg/Kg		09/01/21 09:00	09/01/21 15:21	500
o-Xylene	42.9		0.994	mg/Kg		09/01/21 09:00	09/01/21 15:21	500
Xylenes, Total	290		1.99	mg/Kg		09/01/21 09:00	09/01/21 15:21	500
Total BTEX	419		1.99	mg/Kg		09/01/21 09:00	09/01/21 15:21	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	08/31/21 08:55	08/31/21 16:17	20
1,4-Difluorobenzene (Surr)	347	S1+	70 - 130	08/31/21 08:55	08/31/21 16:17	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3660	F1	50.0	mg/Kg		09/01/21 08:19	09/01/21 12:44	1
Diesel Range Organics (Over C10-C28)	448		50.0	mg/Kg		09/01/21 08:19	09/01/21 12:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/21 08:19	09/01/21 12:44	1
Total TPH	4110	F1	50.0	mg/Kg		09/01/21 08:19	09/01/21 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	09/01/21 08:19	09/01/21 12:44	1
o-Terphenyl	74		70 - 130	09/01/21 08:19	09/01/21 12:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04	mg/Kg			08/31/21 16:47	1

Client Sample ID: SS02

Lab Sample ID: 890-1190-2

Date Collected: 08/26/21 15:35

Matrix: Solid

Date Received: 08/27/21 16:20

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.34		0.0398	mg/Kg		08/31/21 08:55	08/31/21 16:37	20
Toluene	63.4		0.396	mg/Kg		09/01/21 09:00	09/01/21 15:42	200
Ethylbenzene	10.8		0.396	mg/Kg		09/01/21 09:00	09/01/21 15:42	200
m-Xylene & p-Xylene	150		0.792	mg/Kg		09/01/21 09:00	09/01/21 15:42	200
o-Xylene	27.7		0.396	mg/Kg		09/01/21 09:00	09/01/21 15:42	200
Xylenes, Total	178		0.792	mg/Kg		09/01/21 09:00	09/01/21 15:42	200
Total BTEX	253		0.792	mg/Kg		09/01/21 09:00	09/01/21 15:42	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130	08/31/21 08:55	08/31/21 16:37	20
1,4-Difluorobenzene (Surr)	313	S1+	70 - 130	08/31/21 08:55	08/31/21 16:37	20

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Client Sample ID: SS02

Lab Sample ID: 890-1190-2

Date Collected: 08/26/21 15:35

Matrix: Solid

Date Received: 08/27/21 16:20

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1710		49.9	mg/Kg		09/01/21 08:19	09/01/21 13:48	1
Diesel Range Organics (Over C10-C28)	283		49.9	mg/Kg		09/01/21 08:19	09/01/21 13:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/01/21 08:19	09/01/21 13:48	1
Total TPH	1990		49.9	mg/Kg		09/01/21 08:19	09/01/21 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	09/01/21 08:19	09/01/21 13:48	1
o-Terphenyl	82		70 - 130	09/01/21 08:19	09/01/21 13:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			08/31/21 16:52	1

Client Sample ID: SS03

Lab Sample ID: 890-1190-3

Date Collected: 08/26/21 16:15

Matrix: Solid

Date Received: 08/27/21 16:20

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.371		0.0396	mg/Kg		08/31/21 08:55	08/31/21 16:58	20
Toluene	0.883		0.0396	mg/Kg		08/31/21 08:55	08/31/21 16:58	20
Ethylbenzene	1.62		0.0396	mg/Kg		08/31/21 08:55	08/31/21 16:58	20
m-Xylene & p-Xylene	9.71		0.0792	mg/Kg		08/31/21 08:55	08/31/21 16:58	20
o-Xylene	2.44		0.0396	mg/Kg		08/31/21 08:55	08/31/21 16:58	20
Xylenes, Total	12.2		0.0792	mg/Kg		08/31/21 08:55	08/31/21 16:58	20
Total BTEX	15.0		0.0792	mg/Kg		08/31/21 08:55	08/31/21 16:58	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	08/31/21 08:55	08/31/21 16:58	20
1,4-Difluorobenzene (Surr)	116		70 - 130	08/31/21 08:55	08/31/21 16:58	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	161		49.8	mg/Kg		09/01/21 08:19	09/01/21 14:09	1
Diesel Range Organics (Over C10-C28)	62.0		49.8	mg/Kg		09/01/21 08:19	09/01/21 14:09	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/01/21 08:19	09/01/21 14:09	1
Total TPH	223		49.8	mg/Kg		09/01/21 08:19	09/01/21 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	09/01/21 08:19	09/01/21 14:09	1
o-Terphenyl	78		70 - 130	09/01/21 08:19	09/01/21 14:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95	mg/Kg			08/31/21 16:57	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Client Sample ID: SS04

Lab Sample ID: 890-1190-4

Date Collected: 08/26/21 16:20

Matrix: Solid

Date Received: 08/27/21 16:20

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.31		0.0403	mg/Kg		08/31/21 08:55	08/31/21 17:18	20
Toluene	78.6		0.397	mg/Kg		09/01/21 09:00	09/01/21 16:03	200
Ethylbenzene	10.7		0.397	mg/Kg		09/01/21 09:00	09/01/21 16:03	200
m-Xylene & p-Xylene	144		0.794	mg/Kg		09/01/21 09:00	09/01/21 16:03	200
o-Xylene	24.8		0.397	mg/Kg		09/01/21 09:00	09/01/21 16:03	200
Xylenes, Total	169		0.794	mg/Kg		09/01/21 09:00	09/01/21 16:03	200
Total BTEX	260		0.794	mg/Kg		09/01/21 09:00	09/01/21 16:03	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	212	S1+	70 - 130	08/31/21 08:55	08/31/21 17:18	20
1,4-Difluorobenzene (Surr)	364	S1+	70 - 130	08/31/21 08:55	08/31/21 17:18	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2130		49.9	mg/Kg		09/01/21 08:19	09/01/21 14:30	1
Diesel Range Organics (Over C10-C28)	254		49.9	mg/Kg		09/01/21 08:19	09/01/21 14:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/01/21 08:19	09/01/21 14:30	1
Total TPH	2380		49.9	mg/Kg		09/01/21 08:19	09/01/21 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	09/01/21 08:19	09/01/21 14:30	1
o-Terphenyl	81		70 - 130	09/01/21 08:19	09/01/21 14:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.8		5.00	mg/Kg			08/31/21 17:03	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-5629-A-1-D MS	Matrix Spike	96	96
880-5629-A-1-E MSD	Matrix Spike Duplicate	114	68 S1-
890-1187-A-1-E MS	Matrix Spike	182 S1+	93
890-1187-A-1-F MSD	Matrix Spike Duplicate	157 S1+	103
890-1190-1	SS01	139 S1+	347 S1+
890-1190-2	SS02	145 S1+	313 S1+
890-1190-3	SS03	133 S1+	116
890-1190-4	SS04	212 S1+	364 S1+
LCS 880-7262/1-A	Lab Control Sample	104	77
LCS 880-7288/1-A	Lab Control Sample	107	109
LCSD 880-7262/2-A	Lab Control Sample Dup	109	86
LCSD 880-7288/2-A	Lab Control Sample Dup	109	108
MB 880-7262/5-A	Method Blank	105	100
MB 880-7288/5-A	Method Blank	105	102
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1190-1	SS01	87	74
890-1190-1 MS	SS01	89	69 S1-
890-1190-1 MSD	SS01	91	72
890-1190-2	SS02	87	82
890-1190-3	SS03	74	78
890-1190-4	SS04	85	81
LCS 880-7363/2-A	Lab Control Sample	126	141 S1+
LCSD 880-7363/3-A	Lab Control Sample Dup	87	96
MB 880-7363/1-A	Method Blank	67 S1-	67 S1-
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7262/5-A

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7262

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/01/21 09:00	09/01/21 12:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/01/21 09:00	09/01/21 12:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/01/21 09:00	09/01/21 12:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/01/21 09:00	09/01/21 12:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/01/21 09:00	09/01/21 12:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/01/21 09:00	09/01/21 12:55	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/01/21 09:00	09/01/21 12:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/01/21 09:00	09/01/21 12:55	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/01/21 09:00	09/01/21 12:55	1

Lab Sample ID: LCS 880-7262/1-A

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07243		mg/Kg		72	70 - 130
Toluene	0.100	0.1000		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.1008		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.1893		mg/Kg		95	70 - 130
o-Xylene	0.100	0.08763		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: LCSD 880-7262/2-A

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7262

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07059		mg/Kg		71	70 - 130	3	35
Toluene	0.100	0.08551		mg/Kg		86	70 - 130	16	35
Ethylbenzene	0.100	0.09127		mg/Kg		91	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.1691		mg/Kg		85	70 - 130	11	35
o-Xylene	0.100	0.08001		mg/Kg		80	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: 880-5629-A-1-D MS

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0998	0.04812	F1	mg/Kg		48	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

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

Lab Sample ID: 880-5629-A-1-D MS

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U F1	0.0998	0.06939	F1	mg/Kg		69	70 - 130
Ethylbenzene	<0.00200	U F1	0.0998	0.06915	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1322	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00200	U F1	0.0998	0.06388	F1	mg/Kg		63	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	96		70 - 130						
1,4-Difluorobenzene (Surr)	96		70 - 130						

Lab Sample ID: 880-5629-A-1-E MSD

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7262

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.101	0.05315	F1	mg/Kg		53	70 - 130	10	35
Toluene	<0.00200	U F1	0.101	0.07792		mg/Kg		77	70 - 130	12	35
Ethylbenzene	<0.00200	U F1	0.101	0.08067		mg/Kg		79	70 - 130	15	35
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.1589		mg/Kg		79	70 - 130	18	35
o-Xylene	<0.00200	U F1	0.101	0.07367		mg/Kg		72	70 - 130	14	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	114		70 - 130								
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130								

Lab Sample ID: MB 880-7288/5-A

Matrix: Solid

Analysis Batch: 7310

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7288

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		08/31/21 08:55	08/31/21 12:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			08/31/21 08:55	08/31/21 12:45	1
1,4-Difluorobenzene (Surr)	102		70 - 130			08/31/21 08:55	08/31/21 12:45	1

Lab Sample ID: LCS 880-7288/1-A

Matrix: Solid

Analysis Batch: 7310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08465		mg/Kg		85	70 - 130
Toluene	0.100	0.08005		mg/Kg		80	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

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

Lab Sample ID: LCS 880-7288/1-A

Matrix: Solid

Analysis Batch: 7310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.07981		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1630		mg/Kg		82	70 - 130
o-Xylene	0.100	0.08289		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-7288/2-A

Matrix: Solid

Analysis Batch: 7310

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7288

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08632		mg/Kg		86	70 - 130	2	35
Toluene	0.100	0.08065		mg/Kg		81	70 - 130	1	35
Ethylbenzene	0.100	0.08073		mg/Kg		81	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1661		mg/Kg		83	70 - 130	2	35
o-Xylene	0.100	0.08411		mg/Kg		84	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-1187-A-1-E MS

Matrix: Solid

Analysis Batch: 7310

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7288

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U F1	0.100	0.05518	F1	mg/Kg		55	70 - 130
Toluene	<0.00202	U F1	0.100	0.04081	F1	mg/Kg		40	70 - 130
Ethylbenzene	0.0105	F1	0.100	0.04669	F1	mg/Kg		36	70 - 130
m-Xylene & p-Xylene	0.0247	F1	0.200	0.1601	F1	mg/Kg		68	70 - 130
o-Xylene	0.0159	F1	0.100	0.08001	F1	mg/Kg		64	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	182	S1+	70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-1187-A-1-F MSD

Matrix: Solid

Analysis Batch: 7310

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7288

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00202	U F1	0.100	0.05962	F1	mg/Kg		59	70 - 130	8	35
Toluene	<0.00202	U F1	0.100	0.04353	F1	mg/Kg		43	70 - 130	6	35
Ethylbenzene	0.0105	F1	0.100	0.05419	F1	mg/Kg		44	70 - 130	15	35
m-Xylene & p-Xylene	0.0247	F1	0.201	0.1898		mg/Kg		82	70 - 130	17	35
o-Xylene	0.0159	F1	0.100	0.09155		mg/Kg		75	70 - 130	13	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

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

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	157	S1+	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-7363/1-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7363

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/01/21 08:19	09/01/21 11:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/01/21 08:19	09/01/21 11:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/21 08:19	09/01/21 11:41	1
Total TPH	<50.0	U	50.0	mg/Kg		09/01/21 08:19	09/01/21 11:41	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	67	S1-	70 - 130	09/01/21 08:19	09/01/21 11:41	1
o-Terphenyl	67	S1-	70 - 130	09/01/21 08:19	09/01/21 11:41	1

Lab Sample ID: LCS 880-7363/2-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7363

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	853.0		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1213		mg/Kg		121	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	126		70 - 130
o-Terphenyl	141	S1+	70 - 130

Lab Sample ID: LCSD 880-7363/3-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7363

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	864.0		mg/Kg		86	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1068		mg/Kg		107	70 - 130	13	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	87		70 - 130
o-Terphenyl	96		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

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

Lab Sample ID: 890-1190-1 MS

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 7363

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	3660	F1	995	5638	F1	mg/Kg		199	70 - 130
Diesel Range Organics (Over C10-C28)	448		995	1239		mg/Kg		79	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	69	S1-	70 - 130						

Lab Sample ID: 890-1190-1 MSD

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 7363

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	3660	F1	998	5715	F1	mg/Kg		206	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	448		998	1276		mg/Kg		83	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	91		70 - 130								
o-Terphenyl	72		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7257/1-A

Matrix: Solid

Analysis Batch: 7344

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			08/31/21 15:44	1

Lab Sample ID: LCS 880-7257/2-A

Matrix: Solid

Analysis Batch: 7344

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	264.7		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-7257/3-A

Matrix: Solid

Analysis Batch: 7344

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	264.2		mg/Kg		106	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1187-A-1-C MS

Matrix: Solid

Analysis Batch: 7344

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	98.8		249	366.4		mg/Kg		107	90 - 110		

Lab Sample ID: 890-1187-A-1-D MSD

Matrix: Solid

Analysis Batch: 7344

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	98.8		249	363.7		mg/Kg		106	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

GC VOA

Prep Batch: 7262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Total/NA	Solid	5035	
890-1190-2	SS02	Total/NA	Solid	5035	
890-1190-4	SS04	Total/NA	Solid	5035	
MB 880-7262/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7262/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7262/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5629-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-5629-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 7288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Total/NA	Solid	5035	
890-1190-2	SS02	Total/NA	Solid	5035	
890-1190-3	SS03	Total/NA	Solid	5035	
890-1190-4	SS04	Total/NA	Solid	5035	
MB 880-7288/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7288/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7288/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1187-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-1187-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 7310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Total/NA	Solid	8021B	7288
890-1190-2	SS02	Total/NA	Solid	8021B	7288
890-1190-3	SS03	Total/NA	Solid	8021B	7288
890-1190-4	SS04	Total/NA	Solid	8021B	7288
MB 880-7288/5-A	Method Blank	Total/NA	Solid	8021B	7288
LCS 880-7288/1-A	Lab Control Sample	Total/NA	Solid	8021B	7288
LCSD 880-7288/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7288
890-1187-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	7288
890-1187-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	7288

Analysis Batch: 7384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Total/NA	Solid	8021B	7262
890-1190-2	SS02	Total/NA	Solid	8021B	7262
890-1190-4	SS04	Total/NA	Solid	8021B	7262
MB 880-7262/5-A	Method Blank	Total/NA	Solid	8021B	7262
LCS 880-7262/1-A	Lab Control Sample	Total/NA	Solid	8021B	7262
LCSD 880-7262/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7262
880-5629-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	7262
880-5629-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	7262

GC Semi VOA

Analysis Batch: 7359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Total/NA	Solid	8015B NM	7363
890-1190-2	SS02	Total/NA	Solid	8015B NM	7363
890-1190-3	SS03	Total/NA	Solid	8015B NM	7363

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 7359 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-4	SS04	Total/NA	Solid	8015B NM	7363
MB 880-7363/1-A	Method Blank	Total/NA	Solid	8015B NM	7363
LCS 880-7363/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7363
LCSD 880-7363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7363
890-1190-1 MS	SS01	Total/NA	Solid	8015B NM	7363
890-1190-1 MSD	SS01	Total/NA	Solid	8015B NM	7363

Prep Batch: 7363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Total/NA	Solid	8015NM Prep	
890-1190-2	SS02	Total/NA	Solid	8015NM Prep	
890-1190-3	SS03	Total/NA	Solid	8015NM Prep	
890-1190-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-7363/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7363/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1190-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-1190-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Soluble	Solid	DI Leach	
890-1190-2	SS02	Soluble	Solid	DI Leach	
890-1190-3	SS03	Soluble	Solid	DI Leach	
890-1190-4	SS04	Soluble	Solid	DI Leach	
MB 880-7257/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7257/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7257/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1187-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1187-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 7344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-1	SS01	Soluble	Solid	300.0	7257
890-1190-2	SS02	Soluble	Solid	300.0	7257
890-1190-3	SS03	Soluble	Solid	300.0	7257
890-1190-4	SS04	Soluble	Solid	300.0	7257
MB 880-7257/1-A	Method Blank	Soluble	Solid	300.0	7257
LCS 880-7257/2-A	Lab Control Sample	Soluble	Solid	300.0	7257
LCSD 880-7257/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7257
890-1187-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	7257
890-1187-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7257

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Client Sample ID: SS01

Lab Sample ID: 890-1190-1

Date Collected: 08/26/21 15:30

Matrix: Solid

Date Received: 08/27/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7262	09/01/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		500	7384	09/01/21 15:21	KL	XEN MID
Total/NA	Prep	5035			7288	08/31/21 08:55	KL	XEN MID
Total/NA	Analysis	8021B		20	7310	08/31/21 16:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			7363	09/01/21 08:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7359	09/01/21 12:44	AJ	XEN MID
Soluble	Leach	DI Leach			7257	08/31/21 13:50	CH	XEN MID
Soluble	Analysis	300.0		1	7344	08/31/21 16:47	SC	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1190-2

Date Collected: 08/26/21 15:35

Matrix: Solid

Date Received: 08/27/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7262	09/01/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		200	7384	09/01/21 15:42	KL	XEN MID
Total/NA	Prep	5035			7288	08/31/21 08:55	KL	XEN MID
Total/NA	Analysis	8021B		20	7310	08/31/21 16:37	KL	XEN MID
Total/NA	Prep	8015NM Prep			7363	09/01/21 08:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7359	09/01/21 13:48	AJ	XEN MID
Soluble	Leach	DI Leach			7257	08/31/21 13:50	CH	XEN MID
Soluble	Analysis	300.0		1	7344	08/31/21 16:52	SC	XEN MID

Client Sample ID: SS03

Lab Sample ID: 890-1190-3

Date Collected: 08/26/21 16:15

Matrix: Solid

Date Received: 08/27/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7288	08/31/21 08:55	KL	XEN MID
Total/NA	Analysis	8021B		20	7310	08/31/21 16:58	KL	XEN MID
Total/NA	Prep	8015NM Prep			7363	09/01/21 08:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7359	09/01/21 14:09	AJ	XEN MID
Soluble	Leach	DI Leach			7257	08/31/21 13:50	CH	XEN MID
Soluble	Analysis	300.0		1	7344	08/31/21 16:57	SC	XEN MID

Client Sample ID: SS04

Lab Sample ID: 890-1190-4

Date Collected: 08/26/21 16:20

Matrix: Solid

Date Received: 08/27/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7262	09/01/21 09:00	MR	XEN MID
Total/NA	Analysis	8021B		200	7384	09/01/21 16:03	KL	XEN MID
Total/NA	Prep	5035			7288	08/31/21 08:55	KL	XEN MID
Total/NA	Analysis	8021B		20	7310	08/31/21 17:18	KL	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Client Sample ID: SS04
Date Collected: 08/26/21 16:20
Date Received: 08/27/21 16:20

Lab Sample ID: 890-1190-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			7363	09/01/21 08:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7359	09/01/21 14:30	AJ	XEN MID
Soluble	Leach	DI Leach			7257	08/31/21 13:50	CH	XEN MID
Soluble	Analysis	300.0		1	7344	08/31/21 17:03	SC	XEN MID

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1190-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1190-1	SS01	Solid	08/26/21 15:30	08/27/21 16:20	0.5
890-1190-2	SS02	Solid	08/26/21 15:35	08/27/21 16:20	0.5
890-1190-3	SS03	Solid	08/26/21 16:15	08/27/21 16:20	0.5
890-1190-4	SS04	Solid	08/26/21 16:20	08/27/21 16:20	0.5

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Environment Testing

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3364
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199

Chain of Custody

Work Order No.:

www.xenco.com Page 1 of 1

Project Manager:	Katei Jennings	Bill to: (if different)	XTO Adrian Bakken
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3382 N A Street	Address:	3184 N Greene St
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	Carlsbad, NM 88218
Phone:	817-683-2583	Email:	anna.byers@wsp.com

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

Project Name:	Tracer CS	Turn Around	Press. Code	ANALYSIS REQUEST										Preservative Codes			
Project Number:	314183236-022-0129	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush													None: NO	DI Water: H ₂ O	
Project Location:	Edgely County	Due Date:													Cool: Cool	MeOH: Me	
Sampler's Name:	Anna Rivers	TAT starts the day received by the lab, if received by 4:30pm													HCL: HC	HNO ₃ : HN	
PO#:	2822031021														H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											H ₃ PO ₄ : HP		
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	11111111												NaHSO ₄ : NABIS		
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2												Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	1.4												Zn Acetate+NaOH: Zn		
Total Containers:	4	Corrected Temperature:	1.7												NaOH+Ascorbic Acid: SACP		

[illegible]

Total	200.7 / 6010	200.8 / 6020:
8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
TCLP / SPLP 6010- 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Hg: 1631 / 245.1 / 7470 / 7471	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Linne Myers</i>	<i>Care Leaf</i>	8-27-21 1420 ²			
3		4			
5		6			

Revised Date: 08/25/2020 Rev. 2020

Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1190-1

SDG Number: Eddy County

Login Number: 1190

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1190-1

SDG Number: Eddy County

Login Number: 1190

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 08/31/21 01:22 PM

Creator: Copeland, Tatiana

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2 / 2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1349-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger cs

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/5/2021 4:43:26 PM

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

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results through

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

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

Client: WSP USA Inc.
Project/Site: Tiger cs

Laboratory Job ID: 890-1349-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Job ID: 890-1349-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1349-1

Receipt

The samples were received on 10/1/2021 4:40 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 5.0°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-6736-A-61-F). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH03B (890-1349-15) and (880-6736-A-61-E MSD). 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.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: PH03C (890-1349-16) and PH04B (890-1349-22). 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 880-8857 and 880-8857 and analytical batch 880-8879 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: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH01

Lab Sample ID: 890-1349-1

Date Collected: 09/30/21 11:00

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 00:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 00:50	1
Ethylbenzene	0.104		0.00199	mg/Kg		10/04/21 09:44	10/05/21 00:50	1
m-Xylene & p-Xylene	0.0370		0.00398	mg/Kg		10/04/21 09:44	10/05/21 00:50	1
o-Xylene	0.147		0.00199	mg/Kg		10/04/21 09:44	10/05/21 00:50	1
Xylenes, Total	0.184		0.00398	mg/Kg		10/04/21 09:44	10/05/21 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	201	S1+	70 - 130	10/04/21 09:44	10/05/21 00:50	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/04/21 09:44	10/05/21 00:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.288		0.00200	mg/Kg			10/04/21 15:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	586		50.0	mg/Kg			10/05/21 10:03	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	299		49.9	mg/Kg		10/04/21 13:45	10/04/21 22:34	1
Diesel Range Organics (Over C10-C28)	287		49.9	mg/Kg		10/04/21 13:45	10/04/21 22:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/04/21 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	10/04/21 13:45	10/04/21 22:34	1
o-Terphenyl	124		70 - 130	10/04/21 13:45	10/04/21 22:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168	*-	4.95	mg/Kg			10/05/21 08:52	1

Client Sample ID: PH01B

Lab Sample ID: 890-1349-3

Date Collected: 09/30/21 11:40

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:10	1
Toluene	0.00301		0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:10	1
Ethylbenzene	0.00439		0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:10	1
m-Xylene & p-Xylene	0.0459		0.00400	mg/Kg		10/04/21 09:44	10/05/21 01:10	1
o-Xylene	0.0292		0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:10	1
Xylenes, Total	0.0751		0.00400	mg/Kg		10/04/21 09:44	10/05/21 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	10/04/21 09:44	10/05/21 01:10	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH01B

Lab Sample ID: 890-1349-3

Date Collected: 09/30/21 11:40

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	76		70 - 130	10/04/21 09:44	10/05/21 01:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0825		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:03	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		10/04/21 13:45	10/04/21 23:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/04/21 23:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/04/21 23:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			10/04/21 13:45	10/04/21 23:38	1
o-Terphenyl	127		70 - 130			10/04/21 13:45	10/04/21 23:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	346	*-	5.04	mg/Kg			10/05/21 09:14	1

Client Sample ID: PH01C

Lab Sample ID: 890-1349-4

Date Collected: 09/30/21 11:50

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:31	1
m-Xylene & p-Xylene	0.0264		0.00399	mg/Kg		10/04/21 09:44	10/05/21 01:31	1
o-Xylene	0.0126		0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:31	1
Xylenes, Total	0.0390		0.00399	mg/Kg		10/04/21 09:44	10/05/21 01:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	10/04/21 09:44	10/05/21 01:31	1
1,4-Difluorobenzene (Surr)	75		70 - 130	10/04/21 09:44	10/05/21 01:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0390		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH01C

Lab Sample ID: 890-1349-4

Date Collected: 09/30/21 11:50

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 4

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		10/04/21 13:45	10/04/21 23:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/04/21 23:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/04/21 23:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			10/04/21 13:45	10/04/21 23:59	1
o-Terphenyl	125		70 - 130			10/04/21 13:45	10/04/21 23:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	174	*-	4.98	mg/Kg			10/05/21 09:21	1

Client Sample ID: PH01E

Lab Sample ID: 890-1349-6

Date Collected: 09/30/21 12:20

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/21 09:44	10/05/21 01:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 01:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/21 09:44	10/05/21 01:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130			10/04/21 09:44	10/05/21 01:51	1
1,4-Difluorobenzene (Surr)	78		70 - 130			10/04/21 09:44	10/05/21 01:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 00:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 00:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 00:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			10/04/21 13:45	10/05/21 00:20	1
o-Terphenyl	122		70 - 130			10/04/21 13:45	10/05/21 00:20	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH01E

Date Collected: 09/30/21 12:20

Date Received: 10/01/21 16:40

Sample Depth: 6

Lab Sample ID: 890-1349-6

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.0	*-	4.95	mg/Kg			10/05/21 09:28	1

Client Sample ID: PH02

Date Collected: 09/30/21 12:40

Date Received: 10/01/21 16:40

Sample Depth: 1

Lab Sample ID: 890-1349-7

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/04/21 09:44	10/05/21 02:12	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/04/21 09:44	10/05/21 02:12	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/04/21 09:44	10/05/21 02:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/04/21 09:44	10/05/21 02:12	1
o-Xylene	0.00456		0.00202	mg/Kg		10/04/21 09:44	10/05/21 02:12	1
Xylenes, Total	0.00456		0.00403	mg/Kg		10/04/21 09:44	10/05/21 02:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130			10/04/21 09:44	10/05/21 02:12	1
1,4-Difluorobenzene (Surr)	80		70 - 130			10/04/21 09:44	10/05/21 02:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00456		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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		10/04/21 13:45	10/05/21 00:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/05/21 00:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/05/21 00:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			10/04/21 13:45	10/05/21 00:41	1
o-Terphenyl	120		70 - 130			10/04/21 13:45	10/05/21 00:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	182	*-	4.97	mg/Kg			10/05/21 09:35	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH02A

Lab Sample ID: 890-1349-8

Date Collected: 09/30/21 13:00

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 02:32	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 02:32	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 02:32	1
m-Xylene & p-Xylene	0.0103		0.00398	mg/Kg		10/04/21 09:44	10/05/21 02:32	1
o-Xylene	0.00500		0.00199	mg/Kg		10/04/21 09:44	10/05/21 02:32	1
Xylenes, Total	0.0153		0.00398	mg/Kg		10/04/21 09:44	10/05/21 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	10/04/21 09:44	10/05/21 02:32	1
1,4-Difluorobenzene (Surr)	75		70 - 130	10/04/21 09:44	10/05/21 02:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0153		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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		10/04/21 13:45	10/05/21 01:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/05/21 01:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/05/21 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	10/04/21 13:45	10/05/21 01:02	1
o-Terphenyl	123		70 - 130	10/04/21 13:45	10/05/21 01:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	285	*-	4.99	mg/Kg			10/05/21 09:57	1

Client Sample ID: PH02B

Lab Sample ID: 890-1349-9

Date Collected: 09/30/21 13:20

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 02:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 02:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 02:53	1
m-Xylene & p-Xylene	0.00951		0.00400	mg/Kg		10/04/21 09:44	10/05/21 02:53	1
o-Xylene	0.00616		0.00200	mg/Kg		10/04/21 09:44	10/05/21 02:53	1
Xylenes, Total	0.0157		0.00400	mg/Kg		10/04/21 09:44	10/05/21 02:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	10/04/21 09:44	10/05/21 02:53	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH02B

Lab Sample ID: 890-1349-9

Date Collected: 09/30/21 13:20

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	75		70 - 130	10/04/21 09:44	10/05/21 02:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0157		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 01:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 01:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 01:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			10/04/21 13:45	10/05/21 01:23	1
o-Terphenyl	127		70 - 130			10/04/21 13:45	10/05/21 01:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	295	*-	4.98	mg/Kg			10/05/21 10:04	1

Client Sample ID: PH02E

Lab Sample ID: 890-1349-12

Date Collected: 09/30/21 14:15

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:13	1
m-Xylene & p-Xylene	0.00415		0.00398	mg/Kg		10/04/21 09:44	10/05/21 03:13	1
o-Xylene	0.00282		0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:13	1
Xylenes, Total	0.00697		0.00398	mg/Kg		10/04/21 09:44	10/05/21 03:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	10/04/21 09:44	10/05/21 03:13	1
1,4-Difluorobenzene (Surr)	78		70 - 130	10/04/21 09:44	10/05/21 03:13	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00697		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH02E

Date Collected: 09/30/21 14:15

Date Received: 10/01/21 16:40

Sample Depth: 6

Lab Sample ID: 890-1349-12

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	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 01:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 01:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/04/21 13:45	10/05/21 01:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			10/04/21 13:45	10/05/21 01:44	1
o-Terphenyl	131	S1+	70 - 130			10/04/21 13:45	10/05/21 01:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.7	*-	5.00	mg/Kg			10/05/21 10:33	1

Client Sample ID: PH03

Date Collected: 09/30/21 14:30

Date Received: 10/01/21 16:40

Sample Depth: 1

Lab Sample ID: 890-1349-13

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		10/04/21 09:44	10/05/21 03:33	1
Toluene	0.00605		0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:33	1
Ethylbenzene	0.119		0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:33	1
m-Xylene & p-Xylene	0.0839		0.00398	mg/Kg		10/04/21 09:44	10/05/21 03:33	1
o-Xylene	0.169		0.00199	mg/Kg		10/04/21 09:44	10/05/21 03:33	1
Xylenes, Total	0.253		0.00398	mg/Kg		10/04/21 09:44	10/05/21 03:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	190	S1+	70 - 130			10/04/21 09:44	10/05/21 03:33	1
1,4-Difluorobenzene (Surr)	79		70 - 130			10/04/21 09:44	10/05/21 03:33	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.378		0.00200	mg/Kg			10/04/21 15:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	361		50.0	mg/Kg			10/05/21 10:19	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	147		49.9	mg/Kg		10/04/21 13:45	10/05/21 02:06	1
Diesel Range Organics (Over C10-C28)	214		49.9	mg/Kg		10/04/21 13:45	10/05/21 02:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/05/21 02:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130			10/04/21 13:45	10/05/21 02:06	1
o-Terphenyl	126		70 - 130			10/04/21 13:45	10/05/21 02:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH03

Lab Sample ID: 890-1349-13

Date Collected: 09/30/21 14:30

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.7	*-	5.00	mg/Kg			10/05/21 10:40	1

Client Sample ID: PH03B

Lab Sample ID: 890-1349-15

Date Collected: 09/30/21 15:00

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0283		0.00201	mg/Kg		10/04/21 09:44	10/05/21 03:54	1
Toluene	0.384		0.200	mg/Kg		10/04/21 13:33	10/05/21 15:29	100
Ethylbenzene	5.17		0.200	mg/Kg		10/04/21 13:33	10/05/21 15:29	100
m-Xylene & p-Xylene	0.648		0.00402	mg/Kg		10/04/21 09:44	10/05/21 03:54	1
o-Xylene	4.26		0.200	mg/Kg		10/04/21 13:33	10/05/21 15:29	100
Xylenes, Total	20.4		0.399	mg/Kg		10/04/21 13:33	10/05/21 15:29	100
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	503	S1+	70 - 130			10/04/21 09:44	10/05/21 03:54	1
1,4-Difluorobenzene (Surr)	119		70 - 130			10/04/21 09:44	10/05/21 03:54	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	10.5		0.00200	mg/Kg			10/04/21 15:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2020		50.0	mg/Kg			10/05/21 10:19	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	1360		49.9	mg/Kg		10/04/21 13:45	10/05/21 02:27	1
Diesel Range Organics (Over C10-C28)	655		49.9	mg/Kg		10/04/21 13:45	10/05/21 02:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 13:45	10/05/21 02:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130			10/04/21 13:45	10/05/21 02:27	1
o-Terphenyl	128		70 - 130			10/04/21 13:45	10/05/21 02:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.0	*-	4.98	mg/Kg			10/05/21 10:47	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH03C

Lab Sample ID: 890-1349-16

Date Collected: 09/30/21 15:10

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 05:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 05:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 05:15	1
m-Xylene & p-Xylene	0.0138		0.00399	mg/Kg		10/04/21 09:44	10/05/21 05:15	1
o-Xylene	0.00564		0.00200	mg/Kg		10/04/21 09:44	10/05/21 05:15	1
Xylenes, Total	0.0194		0.00399	mg/Kg		10/04/21 09:44	10/05/21 05:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/04/21 09:44	10/05/21 05:15	1
1,4-Difluorobenzene (Surr)	72		70 - 130	10/04/21 09:44	10/05/21 05:15	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0194		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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		10/04/21 08:38	10/04/21 19:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 08:38	10/04/21 19:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 08:38	10/04/21 19:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130			10/04/21 08:38	10/04/21 19:00	1
o-Terphenyl	134	S1+	70 - 130			10/04/21 08:38	10/04/21 19:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	183	*-	4.99	mg/Kg			10/05/21 10:54	1

Client Sample ID: PH03E

Lab Sample ID: 890-1349-18

Date Collected: 09/30/21 15:45

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 05:36	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 05:36	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 05:36	1
m-Xylene & p-Xylene	0.00929		0.00398	mg/Kg		10/04/21 09:44	10/05/21 05:36	1
o-Xylene	0.00226		0.00199	mg/Kg		10/04/21 09:44	10/05/21 05:36	1
Xylenes, Total	0.0116		0.00398	mg/Kg		10/04/21 09:44	10/05/21 05:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	10/04/21 09:44	10/05/21 05:36	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH03E

Lab Sample ID: 890-1349-18

Date Collected: 09/30/21 15:45

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	76		70 - 130	10/04/21 09:44	10/05/21 05:36	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0116		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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	<49.8	U	49.8	mg/Kg		10/04/21 08:38	10/04/21 19:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/04/21 08:38	10/04/21 19:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/04/21 08:38	10/04/21 19:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			10/04/21 08:38	10/04/21 19:21	1
o-Terphenyl	120		70 - 130			10/04/21 08:38	10/04/21 19:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.9	*-	5.05	mg/Kg			10/05/21 11:15	1

Client Sample ID: PH04

Lab Sample ID: 890-1349-20

Date Collected: 10/01/21 09:30

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/04/21 09:44	10/05/21 05:56	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/04/21 09:44	10/05/21 05:56	1
Ethylbenzene	0.00324		0.00198	mg/Kg		10/04/21 09:44	10/05/21 05:56	1
m-Xylene & p-Xylene	0.00454		0.00397	mg/Kg		10/04/21 09:44	10/05/21 05:56	1
o-Xylene	0.00307		0.00198	mg/Kg		10/04/21 09:44	10/05/21 05:56	1
Xylenes, Total	0.00761		0.00397	mg/Kg		10/04/21 09:44	10/05/21 05:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/04/21 09:44	10/05/21 05:56	1
1,4-Difluorobenzene (Surr)	70		70 - 130	10/04/21 09:44	10/05/21 05:56	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0109		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH04

Lab Sample ID: 890-1349-20

Date Collected: 10/01/21 09:30

Matrix: Solid

Date Received: 10/01/21 16:40

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	<49.8	U	49.8	mg/Kg		10/04/21 08:38	10/04/21 19:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/04/21 08:38	10/04/21 19:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/04/21 08:38	10/04/21 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			10/04/21 08:38	10/04/21 19:43	1
o-Terphenyl	125		70 - 130			10/04/21 08:38	10/04/21 19:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.9	*	5.01	mg/Kg			10/05/21 11:23	1

Client Sample ID: PH04A

Lab Sample ID: 890-1349-21

Date Collected: 10/01/21 09:45

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:17	1
m-Xylene & p-Xylene	0.00502		0.00398	mg/Kg		10/04/21 09:44	10/05/21 06:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:17	1
Xylenes, Total	0.00502		0.00398	mg/Kg		10/04/21 09:44	10/05/21 06:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130			10/04/21 09:44	10/05/21 06:17	1
1,4-Difluorobenzene (Surr)	76		70 - 130			10/04/21 09:44	10/05/21 06:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00502		0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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		10/04/21 08:38	10/04/21 20:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/04/21 08:38	10/04/21 20:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 08:38	10/04/21 20:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			10/04/21 08:38	10/04/21 20:05	1
o-Terphenyl	125		70 - 130			10/04/21 08:38	10/04/21 20:05	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH04A

Lab Sample ID: 890-1349-21

Date Collected: 10/01/21 09:45

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.1	*-	4.97	mg/Kg			10/05/21 11:44	1

Client Sample ID: PH04B

Lab Sample ID: 890-1349-22

Date Collected: 10/01/21 10:00

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/04/21 09:44	10/05/21 06:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/04/21 09:44	10/05/21 06:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/04/21 09:44	10/05/21 06:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			10/04/21 09:44	10/05/21 06:37	1
1,4-Difluorobenzene (Surr)	75		70 - 130			10/04/21 09:44	10/05/21 06:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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		10/04/21 08:38	10/04/21 20:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/04/21 08:38	10/04/21 20:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/04/21 08:38	10/04/21 20:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			10/04/21 08:38	10/04/21 20:26	1
o-Terphenyl	143	S1+	70 - 130			10/04/21 08:38	10/04/21 20:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	165	*-	4.95	mg/Kg			10/05/21 11:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH04E

Lab Sample ID: 890-1349-25

Date Collected: 10/01/21 11:15

Matrix: Solid

Date Received: 10/01/21 16:40

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/04/21 09:44	10/05/21 06:58	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/04/21 09:44	10/05/21 06:58	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/04/21 09:44	10/05/21 06:58	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/04/21 09:44	10/05/21 06:58	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/04/21 09:44	10/05/21 06:58	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/04/21 09:44	10/05/21 06:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/04/21 09:44	10/05/21 06:58	1
1,4-Difluorobenzene (Surr)	78		70 - 130	10/04/21 09:44	10/05/21 06:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200	mg/Kg			10/04/21 15:27	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			10/05/21 10:19	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		10/04/21 08:38	10/04/21 20:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 08:38	10/04/21 20:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 08:38	10/04/21 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	10/04/21 08:38	10/04/21 20:47	1
o-Terphenyl	121		70 - 130	10/04/21 08:38	10/04/21 20:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	444	*-	4.98	mg/Kg			10/05/21 11:59	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-6736-A-61-D MS	Matrix Spike	125	77
880-6736-A-61-E MSD	Matrix Spike Duplicate	138 S1+	75
890-1349-1	PH01	201 S1+	79
890-1349-1 MS	PH01	253 S1+	84
890-1349-1 MSD	PH01	252 S1+	80
890-1349-3	PH01B	123	76
890-1349-4	PH01C	131 S1+	75
890-1349-6	PH01E	133 S1+	78
890-1349-7	PH02	135 S1+	80
890-1349-8	PH02A	133 S1+	75
890-1349-9	PH02B	130	75
890-1349-12	PH02E	133 S1+	78
890-1349-13	PH03	190 S1+	79
890-1349-15	PH03B	503 S1+	119
890-1349-16	PH03C	127	72
890-1349-18	PH03E	135 S1+	76
890-1349-20	PH04	127	70
890-1349-21	PH04A	127	76
890-1349-22	PH04B	122	75
890-1349-25	PH04E	127	78
LCS 880-8788/1-A	Lab Control Sample	109	86
LCS 880-8800/1-A	Lab Control Sample	113	80
LCSD 880-8788/2-A	Lab Control Sample Dup	118	86
LCSD 880-8800/2-A	Lab Control Sample Dup	113	84
MB 880-8787/5-A	Method Blank	110	78
MB 880-8788/5-A	Method Blank	112	79
MB 880-8800/5-A	Method Blank	116	85

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-6736-A-61-B MS	Matrix Spike	115	111
880-6736-A-61-C MSD	Matrix Spike Duplicate	107	103
890-1349-1	PH01	120	124
890-1349-1 MS	PH01	120	110
890-1349-1 MSD	PH01	122	113
890-1349-3	PH01B	114	127
890-1349-4	PH01C	115	125
890-1349-6	PH01E	112	122
890-1349-7	PH02	109	120
890-1349-8	PH02A	111	123
890-1349-9	PH02B	115	127
890-1349-12	PH02E	120	131 S1+

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.

Job ID: 890-1349-1

Project/Site: Tiger cs

SDG: 31403236.022.0129

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)
Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1349-13	PH03	117	126
890-1349-15	PH03B	138 S1+	128
890-1349-16	PH03C	121	134 S1+
890-1349-18	PH03E	114	120
890-1349-20	PH04	118	125
890-1349-21	PH04A	116	125
890-1349-22	PH04B	132 S1+	143 S1+
890-1349-25	PH04E	111	121
LCS 880-8781/2-A	Lab Control Sample	125	124
LCS 880-8829/2-A	Lab Control Sample	113	117
LCSD 880-8781/3-A	Lab Control Sample Dup	113	109
LCSD 880-8829/3-A	Lab Control Sample Dup	108	111
MB 880-8781/1-A	Method Blank	112	121
MB 880-8829/1-A	Method Blank	122	128

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8787/5-A

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8787

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:41	10/04/21 13:35	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:41	10/04/21 13:35	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:41	10/04/21 13:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/21 09:41	10/04/21 13:35	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:41	10/04/21 13:35	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/21 09:41	10/04/21 13:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	10/04/21 09:41	10/04/21 13:35	1
1,4-Difluorobenzene (Surr)	78		70 - 130	10/04/21 09:41	10/04/21 13:35	1

Lab Sample ID: MB 880-8788/5-A

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8788

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 00:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 00:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 00:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/21 09:44	10/05/21 00:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/21 09:44	10/05/21 00:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/21 09:44	10/05/21 00:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/04/21 09:44	10/05/21 00:29	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/04/21 09:44	10/05/21 00:29	1

Lab Sample ID: LCS 880-8788/1-A

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09716		mg/Kg		97	70 - 130
Toluene	0.100	0.09892		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.09741		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2010		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1000		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: LCSD 880-8788/2-A

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8788

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	9	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8788/2-A

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8788

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1073		mg/Kg		107	70 - 130	8	35
Ethylbenzene	0.100	0.1075		mg/Kg		108	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2226		mg/Kg		111	70 - 130	10	35
o-Xylene	0.100	0.1104		mg/Kg		110	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: 890-1349-1 MS

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 8788

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	253	S1+	70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: 890-1349-1 MSD

Matrix: Solid

Analysis Batch: 8791

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 8788

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.05974		mg/Kg					
Toluene	<0.00199	U	0.100	0.05418		mg/Kg					
Ethylbenzene	0.104		0.100	0.2124		mg/Kg					
m-Xylene & p-Xylene	0.0370		0.200	0.1299		mg/Kg					
o-Xylene	0.147		0.100	0.2979		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	252	S1+	70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: MB 880-8800/5-A

Matrix: Solid

Analysis Batch: 8885

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8800

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:33	10/05/21 12:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:33	10/05/21 12:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:33	10/05/21 12:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/21 13:33	10/05/21 12:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:33	10/05/21 12:03	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/21 13:33	10/05/21 12:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	10/04/21 13:33	10/05/21 12:03	1
1,4-Difluorobenzene (Surr)	85		70 - 130	10/04/21 13:33	10/05/21 12:03	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8800/1-A

Matrix: Solid

Analysis Batch: 8885

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09960		mg/Kg		100	70 - 130
Toluene	0.100	0.1020		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1040		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2162		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: LCSD 880-8800/2-A

Matrix: Solid

Analysis Batch: 8885

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8800

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1033		mg/Kg		103	70 - 130	4	35
Toluene	0.100	0.1035		mg/Kg		104	70 - 130	1	35
Ethylbenzene	0.100	0.1032		mg/Kg		103	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2140		mg/Kg		107	70 - 130	1	35
o-Xylene	0.100	0.1060		mg/Kg		106	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: 880-6736-A-61-D MS

Matrix: Solid

Analysis Batch: 8885

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8800

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.100	0.04776	F1	mg/Kg		48	70 - 130
Toluene	<0.00198	U F1	0.100	0.05476	F1	mg/Kg		55	70 - 130
Ethylbenzene	<0.00198	U F1	0.100	0.05541	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.200	0.1177	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00198	U F1	0.100	0.05820	F1	mg/Kg		58	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 880-6736-A-61-E MSD

Matrix: Solid

Analysis Batch: 8885

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.0994	0.04596	F1	mg/Kg		46	70 - 130	4	35
Toluene	<0.00198	U F1	0.0994	0.05476	F1	mg/Kg		55	70 - 130	0	35
Ethylbenzene	<0.00198	U F1	0.0994	0.05686	F1	mg/Kg		57	70 - 130	3	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Lab Sample ID: 880-6736-A-61-E MSD

Matrix: Solid

Analysis Batch: 8885

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.199	0.05660	F1 F2	mg/Kg		28	70 - 130	70	35
o-Xylene	<0.00198	U F1	0.0994	0.05975	F1	mg/Kg		60	70 - 130	3	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	75		70 - 130								

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

Lab Sample ID: MB 880-8781/1-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8781

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		10/04/21 08:38	10/04/21 11:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 08:38	10/04/21 11:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 08:38	10/04/21 11:30	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			10/04/21 08:38	10/04/21 11:30	1
o-Terphenyl	121		70 - 130			10/04/21 08:38	10/04/21 11:30	1

Lab Sample ID: LCS 880-8781/2-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	982.3		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1230		mg/Kg		123	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	125		70 - 130						
o-Terphenyl	124		70 - 130						

Lab Sample ID: LCSD 880-8781/3-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8781

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	961.6		mg/Kg		96	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1059		mg/Kg		106	70 - 130	15	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-8781/3-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8781

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 880-6736-A-61-B MS

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8781

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	995	890.7		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	995	1007		mg/Kg		101	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	115		70 - 130						
o-Terphenyl	111		70 - 130						

Lab Sample ID: 880-6736-A-61-C MSD

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8781

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	997	803.0		mg/Kg		78	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	947.5		mg/Kg		95	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	107		70 - 130								
o-Terphenyl	103		70 - 130								

Lab Sample ID: MB 880-8829/1-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8829

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		10/04/21 13:45	10/04/21 21:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/04/21 21:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/21 13:45	10/04/21 21:30	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			10/04/21 13:45	10/04/21 21:30	1
o-Terphenyl	128		70 - 130			10/04/21 13:45	10/04/21 21:30	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-8829/2-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8829

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	968.3		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1131		mg/Kg		113	70 - 130		

Lab Sample ID: LCSD 880-8829/3-A

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8829

Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
			Added	Result	Qualifier				Limits		Limit
Gasoline Range Organics (GRO)-C6-C10			1000	910.6		mg/Kg		91	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1069		mg/Kg		107	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
1-Chlorooctane	108		70 - 130								
o-Terphenyl	111		70 - 130								

Lab Sample ID: 890-1349-1 MS

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 8829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	299		995	1030		mg/Kg		73	70 - 130		
Diesel Range Organics (Over C10-C28)	287		995	1341		mg/Kg		106	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	120		70 - 130								
o-Terphenyl	110		70 - 130								

Lab Sample ID: 890-1349-1 MSD

Matrix: Solid

Analysis Batch: 8775

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 8829

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	299		997	1121		mg/Kg	-	82	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	287		997	1374		mg/Kg		109	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	122		70 - 130								

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1349-1 MSD
Matrix: Solid
Analysis Batch: 8775

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 8829

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	113		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-8857/1-A
Matrix: Solid
Analysis Batch: 8879

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			10/05/21 08:31	1

Lab Sample ID: LCS 880-8857/2-A
Matrix: Solid
Analysis Batch: 8879

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Chloride	250	259.5		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-8857/3-A
Matrix: Solid
Analysis Batch: 8879

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD
	Added	Result	Qualifier				Limits	Limit
Chloride	250	215.7	*-	mg/Kg		86	90 - 110	18 20

Lab Sample ID: 890-1349-1 MS
Matrix: Solid
Analysis Batch: 8879

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Chloride	168	*-	248	392.4		mg/Kg		90	90 - 110

Lab Sample ID: 890-1349-1 MSD
Matrix: Solid
Analysis Batch: 8879

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	Limit
Chloride	168	*-	248	392.1		mg/Kg		90	90 - 110	0 20

Lab Sample ID: 890-1349-16 MS
Matrix: Solid
Analysis Batch: 8879

Client Sample ID: PH03C
Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Chloride	183	*-	250	450.5		mg/Kg		107	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1349-16 MSD

Matrix: Solid

Analysis Batch: 8879

Client Sample ID: PH03C

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	183	*-	250	448.7		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8787/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 8788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Total/NA	Solid	5035	
890-1349-3	PH01B	Total/NA	Solid	5035	
890-1349-4	PH01C	Total/NA	Solid	5035	
890-1349-6	PH01E	Total/NA	Solid	5035	
890-1349-7	PH02	Total/NA	Solid	5035	
890-1349-8	PH02A	Total/NA	Solid	5035	
890-1349-9	PH02B	Total/NA	Solid	5035	
890-1349-12	PH02E	Total/NA	Solid	5035	
890-1349-13	PH03	Total/NA	Solid	5035	
890-1349-15	PH03B	Total/NA	Solid	5035	
890-1349-16	PH03C	Total/NA	Solid	5035	
890-1349-18	PH03E	Total/NA	Solid	5035	
890-1349-20	PH04	Total/NA	Solid	5035	
890-1349-21	PH04A	Total/NA	Solid	5035	
890-1349-22	PH04B	Total/NA	Solid	5035	
890-1349-25	PH04E	Total/NA	Solid	5035	
MB 880-8788/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8788/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8788/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1349-1 MS	PH01	Total/NA	Solid	5035	
890-1349-1 MSD	PH01	Total/NA	Solid	5035	

Analysis Batch: 8791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Total/NA	Solid	8021B	8788
890-1349-3	PH01B	Total/NA	Solid	8021B	8788
890-1349-4	PH01C	Total/NA	Solid	8021B	8788
890-1349-6	PH01E	Total/NA	Solid	8021B	8788
890-1349-7	PH02	Total/NA	Solid	8021B	8788
890-1349-8	PH02A	Total/NA	Solid	8021B	8788
890-1349-9	PH02B	Total/NA	Solid	8021B	8788
890-1349-12	PH02E	Total/NA	Solid	8021B	8788
890-1349-13	PH03	Total/NA	Solid	8021B	8788
890-1349-15	PH03B	Total/NA	Solid	8021B	8788
890-1349-16	PH03C	Total/NA	Solid	8021B	8788
890-1349-18	PH03E	Total/NA	Solid	8021B	8788
890-1349-20	PH04	Total/NA	Solid	8021B	8788
890-1349-21	PH04A	Total/NA	Solid	8021B	8788
890-1349-22	PH04B	Total/NA	Solid	8021B	8788
890-1349-25	PH04E	Total/NA	Solid	8021B	8788
MB 880-8787/5-A	Method Blank	Total/NA	Solid	8021B	8787
MB 880-8788/5-A	Method Blank	Total/NA	Solid	8021B	8788
LCS 880-8788/1-A	Lab Control Sample	Total/NA	Solid	8021B	8788
LCSD 880-8788/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8788
890-1349-1 MS	PH01	Total/NA	Solid	8021B	8788
890-1349-1 MSD	PH01	Total/NA	Solid	8021B	8788

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-15	PH03B	Total/NA	Solid	5035	
MB 880-8800/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8800/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8800/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6736-A-61-D MS	Matrix Spike	Total/NA	Solid	5035	
880-6736-A-61-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 8859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Total/NA	Solid	Total BTEX	
890-1349-3	PH01B	Total/NA	Solid	Total BTEX	
890-1349-4	PH01C	Total/NA	Solid	Total BTEX	
890-1349-6	PH01E	Total/NA	Solid	Total BTEX	
890-1349-7	PH02	Total/NA	Solid	Total BTEX	
890-1349-8	PH02A	Total/NA	Solid	Total BTEX	
890-1349-9	PH02B	Total/NA	Solid	Total BTEX	
890-1349-12	PH02E	Total/NA	Solid	Total BTEX	
890-1349-13	PH03	Total/NA	Solid	Total BTEX	
890-1349-15	PH03B	Total/NA	Solid	Total BTEX	
890-1349-16	PH03C	Total/NA	Solid	Total BTEX	
890-1349-18	PH03E	Total/NA	Solid	Total BTEX	
890-1349-20	PH04	Total/NA	Solid	Total BTEX	
890-1349-21	PH04A	Total/NA	Solid	Total BTEX	
890-1349-22	PH04B	Total/NA	Solid	Total BTEX	
890-1349-25	PH04E	Total/NA	Solid	Total BTEX	

Analysis Batch: 8885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-15	PH03B	Total/NA	Solid	8021B	8800
MB 880-8800/5-A	Method Blank	Total/NA	Solid	8021B	8800
LCS 880-8800/1-A	Lab Control Sample	Total/NA	Solid	8021B	8800
LCSD 880-8800/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8800
880-6736-A-61-D MS	Matrix Spike	Total/NA	Solid	8021B	8800
880-6736-A-61-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8800

GC Semi VOA

Analysis Batch: 8775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Total/NA	Solid	8015B NM	8829
890-1349-3	PH01B	Total/NA	Solid	8015B NM	8829
890-1349-4	PH01C	Total/NA	Solid	8015B NM	8829
890-1349-6	PH01E	Total/NA	Solid	8015B NM	8829
890-1349-7	PH02	Total/NA	Solid	8015B NM	8829
890-1349-8	PH02A	Total/NA	Solid	8015B NM	8829
890-1349-9	PH02B	Total/NA	Solid	8015B NM	8829
890-1349-12	PH02E	Total/NA	Solid	8015B NM	8829
890-1349-13	PH03	Total/NA	Solid	8015B NM	8829
890-1349-15	PH03B	Total/NA	Solid	8015B NM	8829
890-1349-16	PH03C	Total/NA	Solid	8015B NM	8781
890-1349-18	PH03E	Total/NA	Solid	8015B NM	8781

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 8775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-20	PH04	Total/NA	Solid	8015B NM	8781
890-1349-21	PH04A	Total/NA	Solid	8015B NM	8781
890-1349-22	PH04B	Total/NA	Solid	8015B NM	8781
890-1349-25	PH04E	Total/NA	Solid	8015B NM	8781
MB 880-8781/1-A	Method Blank	Total/NA	Solid	8015B NM	8781
MB 880-8829/1-A	Method Blank	Total/NA	Solid	8015B NM	8829
LCS 880-8781/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8781
LCS 880-8829/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	8829
LCSD 880-8781/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8781
LCSD 880-8829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	8829
880-6736-A-61-B MS	Matrix Spike	Total/NA	Solid	8015B NM	8781
880-6736-A-61-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	8781
890-1349-1 MS	PH01	Total/NA	Solid	8015B NM	8829
890-1349-1 MSD	PH01	Total/NA	Solid	8015B NM	8829

Prep Batch: 8781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-16	PH03C	Total/NA	Solid	8015NM Prep	
890-1349-18	PH03E	Total/NA	Solid	8015NM Prep	
890-1349-20	PH04	Total/NA	Solid	8015NM Prep	
890-1349-21	PH04A	Total/NA	Solid	8015NM Prep	
890-1349-22	PH04B	Total/NA	Solid	8015NM Prep	
890-1349-25	PH04E	Total/NA	Solid	8015NM Prep	
MB 880-8781/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8781/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8781/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6736-A-61-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6736-A-61-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 8829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Total/NA	Solid	8015NM Prep	
890-1349-3	PH01B	Total/NA	Solid	8015NM Prep	
890-1349-4	PH01C	Total/NA	Solid	8015NM Prep	
890-1349-6	PH01E	Total/NA	Solid	8015NM Prep	
890-1349-7	PH02	Total/NA	Solid	8015NM Prep	
890-1349-8	PH02A	Total/NA	Solid	8015NM Prep	
890-1349-9	PH02B	Total/NA	Solid	8015NM Prep	
890-1349-12	PH02E	Total/NA	Solid	8015NM Prep	
890-1349-13	PH03	Total/NA	Solid	8015NM Prep	
890-1349-15	PH03B	Total/NA	Solid	8015NM Prep	
MB 880-8829/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-8829/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-8829/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1349-1 MS	PH01	Total/NA	Solid	8015NM Prep	
890-1349-1 MSD	PH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 8889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Total/NA	Solid	8015 NM	
890-1349-3	PH01B	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 8889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-4	PH01C	Total/NA	Solid	8015 NM	

Analysis Batch: 8890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-6	PH01E	Total/NA	Solid	8015 NM	
890-1349-7	PH02	Total/NA	Solid	8015 NM	
890-1349-8	PH02A	Total/NA	Solid	8015 NM	
890-1349-9	PH02B	Total/NA	Solid	8015 NM	
890-1349-12	PH02E	Total/NA	Solid	8015 NM	
890-1349-13	PH03	Total/NA	Solid	8015 NM	
890-1349-15	PH03B	Total/NA	Solid	8015 NM	
890-1349-16	PH03C	Total/NA	Solid	8015 NM	
890-1349-18	PH03E	Total/NA	Solid	8015 NM	
890-1349-20	PH04	Total/NA	Solid	8015 NM	
890-1349-21	PH04A	Total/NA	Solid	8015 NM	
890-1349-22	PH04B	Total/NA	Solid	8015 NM	
890-1349-25	PH04E	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 8857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Soluble	Solid	DI Leach	
890-1349-3	PH01B	Soluble	Solid	DI Leach	
890-1349-4	PH01C	Soluble	Solid	DI Leach	
890-1349-6	PH01E	Soluble	Solid	DI Leach	
890-1349-7	PH02	Soluble	Solid	DI Leach	
890-1349-8	PH02A	Soluble	Solid	DI Leach	
890-1349-9	PH02B	Soluble	Solid	DI Leach	
890-1349-12	PH02E	Soluble	Solid	DI Leach	
890-1349-13	PH03	Soluble	Solid	DI Leach	
890-1349-15	PH03B	Soluble	Solid	DI Leach	
890-1349-16	PH03C	Soluble	Solid	DI Leach	
890-1349-18	PH03E	Soluble	Solid	DI Leach	
890-1349-20	PH04	Soluble	Solid	DI Leach	
890-1349-21	PH04A	Soluble	Solid	DI Leach	
890-1349-22	PH04B	Soluble	Solid	DI Leach	
890-1349-25	PH04E	Soluble	Solid	DI Leach	
MB 880-8857/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-8857/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-8857/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1349-1 MS	PH01	Soluble	Solid	DI Leach	
890-1349-1 MSD	PH01	Soluble	Solid	DI Leach	
890-1349-16 MS	PH03C	Soluble	Solid	DI Leach	
890-1349-16 MSD	PH03C	Soluble	Solid	DI Leach	

Analysis Batch: 8879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-1	PH01	Soluble	Solid	300.0	8857
890-1349-3	PH01B	Soluble	Solid	300.0	8857
890-1349-4	PH01C	Soluble	Solid	300.0	8857

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Analysis Batch: 8879 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1349-6	PH01E	Soluble	Solid	300.0	8857
890-1349-7	PH02	Soluble	Solid	300.0	8857
890-1349-8	PH02A	Soluble	Solid	300.0	8857
890-1349-9	PH02B	Soluble	Solid	300.0	8857
890-1349-12	PH02E	Soluble	Solid	300.0	8857
890-1349-13	PH03	Soluble	Solid	300.0	8857
890-1349-15	PH03B	Soluble	Solid	300.0	8857
890-1349-16	PH03C	Soluble	Solid	300.0	8857
890-1349-18	PH03E	Soluble	Solid	300.0	8857
890-1349-20	PH04	Soluble	Solid	300.0	8857
890-1349-21	PH04A	Soluble	Solid	300.0	8857
890-1349-22	PH04B	Soluble	Solid	300.0	8857
890-1349-25	PH04E	Soluble	Solid	300.0	8857
MB 880-8857/1-A	Method Blank	Soluble	Solid	300.0	8857
LCS 880-8857/2-A	Lab Control Sample	Soluble	Solid	300.0	8857
LCSD 880-8857/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	8857
890-1349-1 MS	PH01	Soluble	Solid	300.0	8857
890-1349-1 MSD	PH01	Soluble	Solid	300.0	8857
890-1349-16 MS	PH03C	Soluble	Solid	300.0	8857
890-1349-16 MSD	PH03C	Soluble	Solid	300.0	8857

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH01

Lab Sample ID: 890-1349-1

Date Collected: 09/30/21 11:00

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 00:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8889	10/05/21 10:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 22:34	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 08:52	CH	XEN MID

Client Sample ID: PH01B

Lab Sample ID: 890-1349-3

Date Collected: 09/30/21 11:40

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 01:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8889	10/05/21 10:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 23:38	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 09:14	CH	XEN MID

Client Sample ID: PH01C

Lab Sample ID: 890-1349-4

Date Collected: 09/30/21 11:50

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 01:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8889	10/05/21 10:03	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 23:59	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 09:21	CH	XEN MID

Client Sample ID: PH01E

Lab Sample ID: 890-1349-6

Date Collected: 09/30/21 12:20

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 01:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH01E

Lab Sample ID: 890-1349-6

Date Collected: 09/30/21 12:20

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 00:20	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 09:28	CH	XEN MID

Client Sample ID: PH02

Lab Sample ID: 890-1349-7

Date Collected: 09/30/21 12:40

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 02:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 00:41	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 09:35	CH	XEN MID

Client Sample ID: PH02A

Lab Sample ID: 890-1349-8

Date Collected: 09/30/21 13:00

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 02:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 01:02	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 09:57	CH	XEN MID

Client Sample ID: PH02B

Lab Sample ID: 890-1349-9

Date Collected: 09/30/21 13:20

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 02:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 01:23	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH02B

Lab Sample ID: 890-1349-9

Date Collected: 09/30/21 13:20

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 10:04	CH	XEN MID

Client Sample ID: PH02E

Lab Sample ID: 890-1349-12

Date Collected: 09/30/21 14:15

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 03:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 01:44	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 10:33	CH	XEN MID

Client Sample ID: PH03

Lab Sample ID: 890-1349-13

Date Collected: 09/30/21 14:30

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 03:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 02:06	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 10:40	CH	XEN MID

Client Sample ID: PH03B

Lab Sample ID: 890-1349-15

Date Collected: 09/30/21 15:00

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 03:54	KL	XEN MID
Total/NA	Prep	5035			8800	10/04/21 13:33	KL	XEN MID
Total/NA	Analysis	8021B		100	8885	10/05/21 15:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8829	10/04/21 13:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/05/21 02:27	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH03B

Lab Sample ID: 890-1349-15

Date Collected: 09/30/21 15:00

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 10:47	CH	XEN MID

Client Sample ID: PH03C

Lab Sample ID: 890-1349-16

Date Collected: 09/30/21 15:10

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 05:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8781	10/04/21 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 19:00	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 10:54	CH	XEN MID

Client Sample ID: PH03E

Lab Sample ID: 890-1349-18

Date Collected: 09/30/21 15:45

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 05:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8781	10/04/21 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 19:21	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 11:15	CH	XEN MID

Client Sample ID: PH04

Lab Sample ID: 890-1349-20

Date Collected: 10/01/21 09:30

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 05:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8781	10/04/21 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 19:43	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 11:23	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Client Sample ID: PH04A

Lab Sample ID: 890-1349-21

Date Collected: 10/01/21 09:45

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 06:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8781	10/04/21 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 20:05	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 11:44	CH	XEN MID

Client Sample ID: PH04B

Lab Sample ID: 890-1349-22

Date Collected: 10/01/21 10:00

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 06:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8781	10/04/21 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 20:26	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 11:51	CH	XEN MID

Client Sample ID: PH04E

Lab Sample ID: 890-1349-25

Date Collected: 10/01/21 11:15

Matrix: Solid

Date Received: 10/01/21 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8788	10/04/21 09:44	KL	XEN MID
Total/NA	Analysis	8021B		1	8791	10/05/21 06:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	8859	10/04/21 15:27	KL	XEN MID
Total/NA	Analysis	8015 NM		1	8890	10/05/21 10:19	AJ	XEN MID
Total/NA	Prep	8015NM Prep			8781	10/04/21 08:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1	8775	10/04/21 20:47	AJ	XEN MID
Soluble	Leach	DI Leach			8857	10/04/21 14:53	CH	XEN MID
Soluble	Analysis	300.0		1	8879	10/05/21 11:59	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

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

Eurofins Xenco, Carlsbad

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger cs

Job ID: 890-1349-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1349-1	PH01	Solid	09/30/21 11:00	10/01/21 16:40	1
890-1349-3	PH01B	Solid	09/30/21 11:40	10/01/21 16:40	3
890-1349-4	PH01C	Solid	09/30/21 11:50	10/01/21 16:40	4
890-1349-6	PH01E	Solid	09/30/21 12:20	10/01/21 16:40	6
890-1349-7	PH02	Solid	09/30/21 12:40	10/01/21 16:40	1
890-1349-8	PH02A	Solid	09/30/21 13:00	10/01/21 16:40	2
890-1349-9	PH02B	Solid	09/30/21 13:20	10/01/21 16:40	3
890-1349-12	PH02E	Solid	09/30/21 14:15	10/01/21 16:40	6
890-1349-13	PH03	Solid	09/30/21 14:30	10/01/21 16:40	1
890-1349-15	PH03B	Solid	09/30/21 15:00	10/01/21 16:40	3
890-1349-16	PH03C	Solid	09/30/21 15:10	10/01/21 16:40	4
890-1349-18	PH03E	Solid	09/30/21 15:45	10/01/21 16:40	6
890-1349-20	PH04	Solid	10/01/21 09:30	10/01/21 16:40	1
890-1349-21	PH04A	Solid	10/01/21 09:45	10/01/21 16:40	2
890-1349-22	PH04B	Solid	10/01/21 10:00	10/01/21 16:40	3
890-1349-25	PH04E	Solid	10/01/21 11:15	10/01/21 16:40	6



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)

Chain of Custody

Work Order No: _____

Project Manager:	WSP	Bill to: (if different)	Adrian Baker
Company Name:	WSP	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	ben.beill@wsp.com

Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Unperturbed State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:	Turn CS	Turn Around	<input type="checkbox"/> Routine <input type="checkbox"/>
Project Number:	31403236.022.0124	Rush:	24HR
P.O. Number:	NAPD 212323 1376	Due Date:	
Sampler's Name:	Benjamin Beill		

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Temperature (°C):	5.2	Thermometer ID	5.0
	Received In tact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2
	Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
Pt01	S	9/30/21	11:20	1'	1	X	X	X		Hold samples until PM notifies
Pt01A			11:20	2'						
Pt01B			11:40	3'						
Pt01C			11:50	4'						
Pt01D			12:00	5'						
Pt01E			12:20	6'						
Pt02			12:40	1'						
Pt02A			13:00	2'						
Pt02B			13:20	3'						
Pt02C			13:40	4'						

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg			
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		
1		10/1/21 @ 1640	2				
3			4				
5			6				



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)

Chain of Custody

Work Order No: _____

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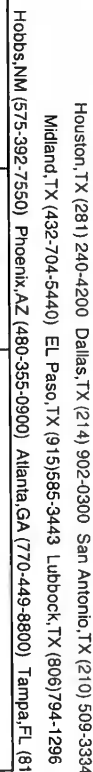
Page 2 of 3

Project Manager:	Kali Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E. Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	ben.belill@wsp.com

Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund State of Project:	
Reporting Level: I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:	Tiger CS	Turn Around	ANALYSIS REQUEST																Work Order Notes		
Project Number:	31403236, 022.0129	Routine																	164# 2027031001		
P.O. Number:	NHP 2123231376	Rush: 24 HR																			
Sampler's Name:	Benjamin Belli	Due Date:																			
SAMPLE RECEIPT		Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																		
Temperature (°C):	5.2 / 5.0	Thermometer ID																			
Received In tact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:																			
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total Containers:																			
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers																Sample Comments
PH02D	S	9/30/21	1400	5'	TPH (EPA 8015)																Hold Samples
PH02E					BTX (EPA 0-8021)																
PH03					Chloride (EPA 300.0)																
PH03A					HOLD																
PH03B																					
PH03C																					
PH03D																					
PH03E																					
PH03F																					
PH04																					

Total 200.7 / 6010 200.8 / 6020:		8RCRA 13PPM Texas 11		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/1/21 1640			



Chain of Custody

Work Order No:

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Page 2 of 10

Project Manager:	Kaci Tenhays		Bill to: (if different)	Adrian Baker
Company Name:	WSP	Company Name:	XTO Energy	
Address:	3300 North A Street	Address:	3104 E Green Street	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220	
Phone:	432.236.3849	Email:	ben.beill@wsp.com	

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

Project Name:	<i>Tiger LS</i>	Turn Around
Project Number:	<i>31453236.0220124</i>	Routine <input type="checkbox"/>
P.O. Number:	<i>NAPP 2123231376</i>	Rush: <i>244HR</i>
Sampler's Name:	Benjamin Beill	Due Date:



SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	<i>52/5.0</i>			Thermometer ID		
Received intact:	<i>(Yes) No</i>					
Cooler Custody Seals:	Yes No			Correction Factor:	<i>-0.2</i>	
Sample Custody Seals:	Yes No			Total Containers:		

Number of Containers	
PA 8015)	
EPA 0=8021)	
le (EPA 300.0)	
HOLD	
TAT starts the day received by the lab. If received by 4:30pm	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (%)	BTEX (%)	Chloride
PH04 A	S	10/1/21	0945	2'	✓	X	X	X
PH04 B	✓		1000	3'	✓	✓	✓	✓
PH04 C	✓		1030	4'	✓	✓	✓	✓
PH04 D	✓		1100	5'	✓	✓	✓	✓
PH04 E	✓		1115	6'	✓	✓	✓	✓
PH04 F	✓		1130	7'	✓	✓	✓	✓

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 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
		10/17/2014			

Revised Data 05/18 Rev 2018

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	CCC No:																																																																																																																																		
Client Contact:	Phone:	Jessica Kramer	Jessica.kramer@eurofins.com	New Mexico	890-442-1																																																																																																																																		
Shipping/Receiving	E-Mail:				Page 1 of 2																																																																																																																																		
Company:	Accreditations Required (See note):	NELAP - Louisiana NELAP - Texas			Job #:																																																																																																																																		
Eurofins Xenco					890-1349-1																																																																																																																																		
Address:	Due Date Requested	Analysis Requested																																																																																																																																					
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Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Soil, O=Other, M=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note																																																																																																																											
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PH01C (890-1349-4)	9/30/21	11 50	Mountain	Solid	X	X	X	X	X	X	1																																																																																																																												
PH01E (890-1349-6)	9/30/21	12 20	Mountain	Solid	X	X	X	X	X	X	1																																																																																																																												
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<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>																																																																																																																																							
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested I, II, III, IV Other (specify) _____</p> <p>Primary Deliverable Rank: 2</p>																																																																																																																																							
<p>Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____</p> <p>Relinquished by: <i>[Signature]</i> Date/Time: 10/4/21 Company: _____ Received by: <i>[Signature]</i> Date/Time: 10/4/21 Company: _____</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: 10/13/21 Company: _____</p> <p>Custody Seals Intact: _____ Custody Seal No: _____ Cooler Temperature(s) °C and Other Remarks: 3.2/3.7</p>																																																																																																																																							

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Chain of Custody Record

airrofin

Environment Testing

**1089 N Canal St
Carlsbad NM 88220
Phone: 575 888 3100 Fax: 575 888 3100**

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1349-1

SDG Number: 31403236.022.0129

Login Number: 1349**List Number: 1****Creator: Olivas, Nathaniel****List Source: Eurofins Xenco, Carlsbad**

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1349-1
SDG Number: 31403236.022.0129

Login Number: 1349

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland

List Creation: 10/04/21 12:14 PM

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	3.2/3.7
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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1363-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger C

For:

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

Attn: Kalei Jennings

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

Authorized for release by:
10/13/2021 4:30:23 PM

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

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

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: Tiger C

Laboratory Job ID: 890-1363-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Job ID: 890-1363-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1363-1

Receipt

The samples were received on 10/5/2021 2:43 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 1.0°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH06A (890-1363-8). 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.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-7011-A-21-D). 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: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH05

Lab Sample ID: 890-1363-1

Date Collected: 10/01/21 11:40

Matrix: Solid

Date Received: 10/05/21 14:43

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		10/12/21 16:16	10/13/21 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 13:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/12/21 16:16	10/13/21 13:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 13:44	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/12/21 16:16	10/13/21 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	10/12/21 16:16	10/13/21 13:44	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/12/21 16:16	10/13/21 13:44	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			10/13/21 13:00	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			10/11/21 09:42	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		10/09/21 12:20	10/10/21 17:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/09/21 12:20	10/10/21 17:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/09/21 12:20	10/10/21 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	10/09/21 12:20	10/10/21 17:04	1
o-Terphenyl	118		70 - 130	10/09/21 12:20	10/10/21 17:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.3		4.97	mg/Kg			10/12/21 22:33	1

Client Sample ID: PH05D

Lab Sample ID: 890-1363-5

Date Collected: 10/01/21 12:40

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 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		10/12/21 16:16	10/13/21 14:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 14:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 14:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/12/21 16:16	10/13/21 14:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 14:04	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/12/21 16:16	10/13/21 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/12/21 16:16	10/13/21 14:04	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH05D

Lab Sample ID: 890-1363-5

Date Collected: 10/01/21 12:40

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	80		70 - 130	10/12/21 16:16	10/13/21 14:04	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			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/11/21 09:42	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	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 17:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 17:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 17:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			10/09/21 12:20	10/10/21 17:25	1
o-Terphenyl	129		70 - 130			10/09/21 12:20	10/10/21 17:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.1		5.00	mg/Kg			10/12/21 22:39	1

Client Sample ID: PH05E

Lab Sample ID: 890-1363-6

Date Collected: 10/01/21 12:50

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/12/21 16:16	10/13/21 14:25	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/12/21 16:16	10/13/21 14:25	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/12/21 16:16	10/13/21 14:25	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		10/12/21 16:16	10/13/21 14:25	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/12/21 16:16	10/13/21 14:25	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		10/12/21 16:16	10/13/21 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	10/12/21 16:16	10/13/21 14:25	1
1,4-Difluorobenzene (Surr)	87		70 - 130	10/12/21 16:16	10/13/21 14:25	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			10/13/21 13:00	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			10/11/21 09:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH05E

Lab Sample ID: 890-1363-6

Date Collected: 10/01/21 12:50

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 6

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		10/09/21 12:20	10/10/21 17:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/09/21 12:20	10/10/21 17:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/09/21 12:20	10/10/21 17:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/09/21 12:20	10/10/21 17:47	1
o-Terphenyl	110		70 - 130			10/09/21 12:20	10/10/21 17:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.0		5.02	mg/Kg			10/12/21 22:44	1

Client Sample ID: PH06

Lab Sample ID: 890-1363-7

Date Collected: 10/01/21 13:00

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/12/21 16:16	10/13/21 14:45	1
Toluene	0.00293		0.00199	mg/Kg		10/12/21 16:16	10/13/21 14:45	1
Ethylbenzene	0.0115		0.00199	mg/Kg		10/12/21 16:16	10/13/21 14:45	1
m-Xylene & p-Xylene	0.0182		0.00398	mg/Kg		10/12/21 16:16	10/13/21 14:45	1
o-Xylene	0.0150		0.00199	mg/Kg		10/12/21 16:16	10/13/21 14:45	1
Xylenes, Total	0.0332		0.00398	mg/Kg		10/12/21 16:16	10/13/21 14:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			10/12/21 16:16	10/13/21 14:45	1
1,4-Difluorobenzene (Surr)	82		70 - 130			10/12/21 16:16	10/13/21 14:45	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0476		0.00398	mg/Kg			10/13/21 13:00	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			10/11/21 09:49	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		10/09/21 12:20	10/10/21 18:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/09/21 12:20	10/10/21 18:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/09/21 12:20	10/10/21 18:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/09/21 12:20	10/10/21 18:08	1
o-Terphenyl	117		70 - 130			10/09/21 12:20	10/10/21 18:08	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH06

Lab Sample ID: 890-1363-7

Date Collected: 10/01/21 13:00

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		5.02	mg/Kg			10/12/21 02:55	1

Client Sample ID: PH06A

Lab Sample ID: 890-1363-8

Date Collected: 10/01/21 13:15

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:06	1
Toluene	0.0145		0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:06	1
Ethylbenzene	0.0525		0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:06	1
m-Xylene & p-Xylene	0.0936		0.00397	mg/Kg		10/12/21 16:16	10/13/21 15:06	1
o-Xylene	0.0436		0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:06	1
Xylenes, Total	0.137		0.00397	mg/Kg		10/12/21 16:16	10/13/21 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	157	S1+	70 - 130			10/12/21 16:16	10/13/21 15:06	1
1,4-Difluorobenzene (Surr)	80		70 - 130			10/12/21 16:16	10/13/21 15:06	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.204		0.00397	mg/Kg			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.5		49.8	mg/Kg			10/11/21 09:49	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	55.5		49.8	mg/Kg		10/09/21 12:20	10/10/21 18:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 18:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 18:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			10/09/21 12:20	10/10/21 18:30	1
o-Terphenyl	119		70 - 130			10/09/21 12:20	10/10/21 18:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.9		4.99	mg/Kg			10/12/21 03:01	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH06B

Lab Sample ID: 890-1363-9

Date Collected: 10/01/21 13:30

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:26	1
Toluene	0.00600		0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:26	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:26	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		10/12/21 16:16	10/13/21 15:26	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/12/21 16:16	10/13/21 15:26	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		10/12/21 16:16	10/13/21 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	10/12/21 16:16	10/13/21 15:26	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/12/21 16:16	10/13/21 15:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00600		0.00397	mg/Kg			10/13/21 13:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/11/21 09:49	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	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 18:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 18:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/09/21 12:20	10/10/21 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	10/09/21 12:20	10/10/21 18:51	1
o-Terphenyl	113		70 - 130	10/09/21 12:20	10/10/21 18:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	217		5.05	mg/Kg			10/12/21 03:18	1

Client Sample ID: PH06E

Lab Sample ID: 890-1363-12

Date Collected: 10/01/21 13:50

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/12/21 16:16	10/13/21 15:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/12/21 16:16	10/13/21 15:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/12/21 16:16	10/13/21 15:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/12/21 16:16	10/13/21 15:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/12/21 16:16	10/13/21 15:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/12/21 16:16	10/13/21 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	10/12/21 16:16	10/13/21 15:47	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH06E

Lab Sample ID: 890-1363-12

Date Collected: 10/01/21 13:50

Matrix: Solid

Date Received: 10/05/21 14:43

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	80		70 - 130	10/12/21 16:16	10/13/21 15:47	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			10/13/21 13:00	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			10/11/21 09:49	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		10/09/21 12:20	10/10/21 19:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/09/21 12:20	10/10/21 19:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/09/21 12:20	10/10/21 19:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			10/09/21 12:20	10/10/21 19:13	1
o-Terphenyl	119		70 - 130			10/09/21 12:20	10/10/21 19:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	292		4.97	mg/Kg			10/12/21 03:23	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1363-1	PH05	107	80
890-1363-5	PH05D	127	80
890-1363-6	PH05E	124	87
890-1363-7	PH06	126	82
890-1363-8	PH06A	157 S1+	80
890-1363-9	PH06B	121	79
890-1363-12	PH06E	116	80
890-1374-A-1-G MSD	Matrix Spike Duplicate	113	81
890-1374-A-1-I MS	Matrix Spike	121	85
LCS 880-9327/1-A	Lab Control Sample	112	85
LCSD 880-9327/2-A	Lab Control Sample Dup	118	83
MB 880-9327/5-A	Method Blank	110	71
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-7011-A-21-E MS	Matrix Spike	92	101
880-7011-A-21-F MSD	Matrix Spike Duplicate	99	109
890-1363-1	PH05	106	118
890-1363-5	PH05D	120	129
890-1363-6	PH05E	101	110
890-1363-7	PH06	107	117
890-1363-8	PH06A	108	119
890-1363-9	PH06B	102	113
890-1363-12	PH06E	109	119
LCS 880-9163/2-A	Lab Control Sample	97	96
LCSD 880-9163/3-A	Lab Control Sample Dup	102	101
MB 880-9163/1-A	Method Blank	109	121
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-9327/5-A

Matrix: Solid

Analysis Batch: 9368

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9327

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 12:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 12:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 12:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/12/21 16:16	10/13/21 12:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/12/21 16:16	10/13/21 12:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/12/21 16:16	10/13/21 12:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	10/12/21 16:16	10/13/21 12:41	1
1,4-Difluorobenzene (Surr)	71		70 - 130	10/12/21 16:16	10/13/21 12:41	1

Lab Sample ID: LCS 880-9327/1-A

Matrix: Solid

Analysis Batch: 9368

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9327

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08846		mg/Kg		88	70 - 130
Toluene	0.100	0.08931		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09418		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1960		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09808		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: LCSD 880-9327/2-A

Matrix: Solid

Analysis Batch: 9368

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9327

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09373		mg/Kg		94	70 - 130	6	35
Toluene	0.100	0.09698		mg/Kg		97	70 - 130	8	35
Ethylbenzene	0.100	0.1013		mg/Kg		101	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2116		mg/Kg		106	70 - 130	8	35
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: 890-1374-A-1-G MSD

Matrix: Solid

Analysis Batch: 9368

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0990	0.09429		mg/Kg		95	70 - 130	11	35
Toluene	<0.00198	U	0.0990	0.09461		mg/Kg		96	70 - 130	6	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1374-A-1-G MSD

Matrix: Solid

Analysis Batch: 9368

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9327

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00198	U	0.0990	0.09854		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene	<0.00396	U	0.198	0.2040		mg/Kg		103	70 - 130	1	35
o-Xylene	<0.00198	U	0.0990	0.1031		mg/Kg		104	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

Lab Sample ID: 890-1374-A-1-I MS

Matrix: Solid

Analysis Batch: 9368

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9327

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U	0.100	0.08471		mg/Kg		84	70 - 130
Toluene	<0.00198	U	0.100	0.08921		mg/Kg		89	70 - 130
Ethylbenzene	<0.00198	U	0.100	0.09814		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.201	0.2025		mg/Kg		101	70 - 130
o-Xylene	<0.00198	U	0.100	0.1018		mg/Kg		101	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

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

Lab Sample ID: MB 880-9163/1-A

Matrix: Solid

Analysis Batch: 9173

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9163

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		10/09/21 12:20	10/10/21 10:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/09/21 12:20	10/10/21 10:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/09/21 12:20	10/10/21 10:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	10/09/21 12:20	10/10/21 10:34	1
o-Terphenyl	121		70 - 130	10/09/21 12:20	10/10/21 10:34	1

Lab Sample ID: LCS 880-9163/2-A

Matrix: Solid

Analysis Batch: 9173

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	895.2		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1051		mg/Kg		105	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9163/2-A

Matrix: Solid

Analysis Batch: 9173

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9163

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-9163/3-A

Matrix: Solid

Analysis Batch: 9173

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9163

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	908.6		mg/Kg		91	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1041		mg/Kg		104	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-7011-A-21-E MS

Matrix: Solid

Analysis Batch: 9173

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9163

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	109.6	F1	mg/Kg		11	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	997	95.37	F1	mg/Kg		10	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-7011-A-21-F MSD

Matrix: Solid

Analysis Batch: 9173

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9163

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	127.3	F1	mg/Kg		13	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	102.3	F1	mg/Kg		10	70 - 130	7	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	109		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9130/1-A

Matrix: Solid

Analysis Batch: 9244

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			10/12/21 01:03	1

Lab Sample ID: LCS 880-9130/2-A

Matrix: Solid

Analysis Batch: 9244

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	245.7		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-9130/3-A

Matrix: Solid

Analysis Batch: 9244

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	247.0		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-6823-A-8-B MS

Matrix: Solid

Analysis Batch: 9244

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	1500		1250	2767		mg/Kg		102	90 - 110

Lab Sample ID: 880-6823-A-8-C MSD

Matrix: Solid

Analysis Batch: 9244

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	1500		1250	2771		mg/Kg		102	90 - 110	0	20

Lab Sample ID: MB 880-9136/1-A

Matrix: Solid

Analysis Batch: 9315

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			10/12/21 21:20	1

Lab Sample ID: LCS 880-9136/2-A

Matrix: Solid

Analysis Batch: 9315

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	247.6		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-9136/3-A

Matrix: Solid

Analysis Batch: 9315

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	248.7		mg/Kg		99	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1361-A-14-D MS

Matrix: Solid

Analysis Batch: 9315

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	154		253	409.9		mg/Kg		101	90 - 110

Lab Sample ID: 890-1361-A-14-E MSD

Matrix: Solid

Analysis Batch: 9315

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	154		253	410.0		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 9327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Total/NA	Solid	5035	
890-1363-5	PH05D	Total/NA	Solid	5035	
890-1363-6	PH05E	Total/NA	Solid	5035	
890-1363-7	PH06	Total/NA	Solid	5035	
890-1363-8	PH06A	Total/NA	Solid	5035	
890-1363-9	PH06B	Total/NA	Solid	5035	
890-1363-12	PH06E	Total/NA	Solid	5035	
MB 880-9327/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9327/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9327/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1374-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1374-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 9368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Total/NA	Solid	8021B	9327
890-1363-5	PH05D	Total/NA	Solid	8021B	9327
890-1363-6	PH05E	Total/NA	Solid	8021B	9327
890-1363-7	PH06	Total/NA	Solid	8021B	9327
890-1363-8	PH06A	Total/NA	Solid	8021B	9327
890-1363-9	PH06B	Total/NA	Solid	8021B	9327
890-1363-12	PH06E	Total/NA	Solid	8021B	9327
MB 880-9327/5-A	Method Blank	Total/NA	Solid	8021B	9327
LCS 880-9327/1-A	Lab Control Sample	Total/NA	Solid	8021B	9327
LCSD 880-9327/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9327
890-1374-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	9327
890-1374-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	9327

Analysis Batch: 9374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Total/NA	Solid	Total BTEX	
890-1363-5	PH05D	Total/NA	Solid	Total BTEX	
890-1363-6	PH05E	Total/NA	Solid	Total BTEX	
890-1363-7	PH06	Total/NA	Solid	Total BTEX	
890-1363-8	PH06A	Total/NA	Solid	Total BTEX	
890-1363-9	PH06B	Total/NA	Solid	Total BTEX	
890-1363-12	PH06E	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 9163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Total/NA	Solid	8015NM Prep	
890-1363-5	PH05D	Total/NA	Solid	8015NM Prep	
890-1363-6	PH05E	Total/NA	Solid	8015NM Prep	
890-1363-7	PH06	Total/NA	Solid	8015NM Prep	
890-1363-8	PH06A	Total/NA	Solid	8015NM Prep	
890-1363-9	PH06B	Total/NA	Solid	8015NM Prep	
890-1363-12	PH06E	Total/NA	Solid	8015NM Prep	
MB 880-9163/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9163/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Prep Batch: 9163 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-9163/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7011-A-21-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7011-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Total/NA	Solid	8015B NM	9163
890-1363-5	PH05D	Total/NA	Solid	8015B NM	9163
890-1363-6	PH05E	Total/NA	Solid	8015B NM	9163
890-1363-7	PH06	Total/NA	Solid	8015B NM	9163
890-1363-8	PH06A	Total/NA	Solid	8015B NM	9163
890-1363-9	PH06B	Total/NA	Solid	8015B NM	9163
890-1363-12	PH06E	Total/NA	Solid	8015B NM	9163
MB 880-9163/1-A	Method Blank	Total/NA	Solid	8015B NM	9163
LCS 880-9163/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9163
LCS 880-9163/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9163
880-7011-A-21-E MS	Matrix Spike	Total/NA	Solid	8015B NM	9163
880-7011-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9163

Analysis Batch: 9187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Total/NA	Solid	8015 NM	
890-1363-5	PH05D	Total/NA	Solid	8015 NM	
890-1363-6	PH05E	Total/NA	Solid	8015 NM	
890-1363-7	PH06	Total/NA	Solid	8015 NM	
890-1363-8	PH06A	Total/NA	Solid	8015 NM	
890-1363-9	PH06B	Total/NA	Solid	8015 NM	
890-1363-12	PH06E	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-7	PH06	Soluble	Solid	DI Leach	
890-1363-8	PH06A	Soluble	Solid	DI Leach	
890-1363-9	PH06B	Soluble	Solid	DI Leach	
890-1363-12	PH06E	Soluble	Solid	DI Leach	
MB 880-9130/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9130/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-9130/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6823-A-8-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6823-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 9136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Soluble	Solid	DI Leach	
890-1363-5	PH05D	Soluble	Solid	DI Leach	
890-1363-6	PH05E	Soluble	Solid	DI Leach	
MB 880-9136/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9136/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 880-9136/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9136 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1361-A-14-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1361-A-14-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-7	PH06	Soluble	Solid	300.0	9130
890-1363-8	PH06A	Soluble	Solid	300.0	9130
890-1363-9	PH06B	Soluble	Solid	300.0	9130
890-1363-12	PH06E	Soluble	Solid	300.0	9130
MB 880-9130/1-A	Method Blank	Soluble	Solid	300.0	9130
LCS 880-9130/2-A	Lab Control Sample	Soluble	Solid	300.0	9130
LCSD 880-9130/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9130
880-6823-A-8-B MS	Matrix Spike	Soluble	Solid	300.0	9130
880-6823-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9130

Analysis Batch: 9315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1363-1	PH05	Soluble	Solid	300.0	9136
890-1363-5	PH05D	Soluble	Solid	300.0	9136
890-1363-6	PH05E	Soluble	Solid	300.0	9136
MB 880-9136/1-A	Method Blank	Soluble	Solid	300.0	9136
LCS 880-9136/2-A	Lab Control Sample	Soluble	Solid	300.0	9136
LCSD 880-9136/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9136
890-1361-A-14-D MS	Matrix Spike	Soluble	Solid	300.0	9136
890-1361-A-14-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9136

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH05

Lab Sample ID: 890-1363-1

Date Collected: 10/01/21 11:40

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 13:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 17:04	AJ	XEN MID
Soluble	Leach	DI Leach			9136	10/08/21 15:55	CH	XEN MID
Soluble	Analysis	300.0		1	9315	10/12/21 22:33	CH	XEN MID

Client Sample ID: PH05D

Lab Sample ID: 890-1363-5

Date Collected: 10/01/21 12:40

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 14:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:42	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			9136	10/08/21 15:55	CH	XEN MID
Soluble	Analysis	300.0		1	9315	10/12/21 22:39	CH	XEN MID

Client Sample ID: PH05E

Lab Sample ID: 890-1363-6

Date Collected: 10/01/21 12:50

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 14:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 17:47	AJ	XEN MID
Soluble	Leach	DI Leach			9136	10/08/21 15:55	CH	XEN MID
Soluble	Analysis	300.0		1	9315	10/12/21 22:44	CH	XEN MID

Client Sample ID: PH06

Lab Sample ID: 890-1363-7

Date Collected: 10/01/21 13:00

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 14:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH06

Lab Sample ID: 890-1363-7

Date Collected: 10/01/21 13:00

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 18:08	AJ	XEN MID
Soluble	Leach	DI Leach			9130	10/08/21 15:42	CH	XEN MID
Soluble	Analysis	300.0		1	9244	10/12/21 02:55	CH	XEN MID

Client Sample ID: PH06A

Lab Sample ID: 890-1363-8

Date Collected: 10/01/21 13:15

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 15:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 18:30	AJ	XEN MID
Soluble	Leach	DI Leach			9130	10/08/21 15:42	CH	XEN MID
Soluble	Analysis	300.0		1	9244	10/12/21 03:01	CH	XEN MID

Client Sample ID: PH06B

Lab Sample ID: 890-1363-9

Date Collected: 10/01/21 13:30

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 15:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 18:51	AJ	XEN MID
Soluble	Leach	DI Leach			9130	10/08/21 15:42	CH	XEN MID
Soluble	Analysis	300.0		1	9244	10/12/21 03:18	CH	XEN MID

Client Sample ID: PH06E

Lab Sample ID: 890-1363-12

Date Collected: 10/01/21 13:50

Matrix: Solid

Date Received: 10/05/21 14:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9327	10/12/21 16:16	KL	XEN MID
Total/NA	Analysis	8021B		1	9368	10/13/21 15:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9374	10/13/21 13:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9163	10/09/21 12:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9173	10/10/21 19:13	AJ	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Client Sample ID: PH06E
Date Collected: 10/01/21 13:50
Date Received: 10/05/21 14:43

Lab Sample ID: 890-1363-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9130	10/08/21 15:42	CH	XEN MID
Soluble	Analysis	300.0		1	9244	10/12/21 03:23	CH	XEN MID

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

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Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger C

Job ID: 890-1363-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1363-1	PH05	Solid	10/01/21 11:40	10/05/21 14:43	1
890-1363-5	PH05D	Solid	10/01/21 12:40	10/05/21 14:43	5
890-1363-6	PH05E	Solid	10/01/21 12:50	10/05/21 14:43	6
890-1363-7	PH06	Solid	10/01/21 13:00	10/05/21 14:43	1
890-1363-8	PH06A	Solid	10/01/21 13:15	10/05/21 14:43	2
890-1363-9	PH06B	Solid	10/01/21 13:30	10/05/21 14:43	3
890-1363-12	PH06E	Solid	10/01/21 13:50	10/05/21 14:43	6



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

Chain of Custody

Work Order No: _____

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Page 1 of 2

Project Manager:	Kali Tenniss	Bill to: (if different)	Adrian Baker
Company Name:	WSP	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	ben.beill@wsp.com

Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Vel IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____		Work Order Comments
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	----------------------------

Project Name:	Tiger CS	Tum Around	<input checked="" type="checkbox"/>
Project Number:	31403236.022.0124	Routine	<input checked="" type="checkbox"/>
P.O. Number:	NAP 212 323 1376	Rush:	
Sampler's Name:	Benjamin Beill	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	1.2 / 1.0	Thermometer ID		
Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:		
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			



890-1363 Chain of Custody

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST																Work Order Notes	
PH05	S	10/1/21	11:17	1'	TPH (EPA 8015)	X	BTEX (EPA 0-8021)	X	Chloride (EPA 300.0)	X	HOLD										2027031001	
PH05 A			1200	2'							X										HOLD samples	
PH05 B			1210	3'							X										Lat 1 PM as 4:15 PM	
PH05 C			1220	4'							X											
PH05 D			1240	5'								X										
PH05 E			1250	6'									X									
PH06			1300	1'										X								
PH06 A			1315	2'											X							
PH06 B			1330	3'												X						
PH06 C			1340	4'													X					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
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 Ti 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
<i>[Signature]</i>	<i>[Signature]</i>	10/5/21 1435	<i>[Signature]</i>	<i>[Signature]</i>	10/5/21 2:43



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) 281-1111

Chain of Custody

Work Order No:

Project Manager:	Kalei Ternowsky		Bill to: (if different)	Adrian Baker
Company Name:	WSP		Company Name:	XTO Energy
Address:	3300 North A Street		Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705		City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849		Email:	ben.bellill@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PAP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level: II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:	

[illegible]

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed

8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U																															
1631 / 245.1 / 7470 / 74																															

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.

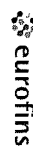
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>Anna Byers</i>	10/5/21 1435	2 <i>Anna Byers</i>	<i>[Signature]</i>	10/5/21 2:24
3		4			
5		6			

Download Date: 05/11/19 9:01 AM 2018

Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1363-1

SDG Number: 31403236.022.0129

Login Number: 1363

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1363-1

SDG Number: 31403236.022.0129

Login Number: 1363

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 10/06/21 11:32 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	2.1 / 2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1382-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

For:

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

Attn: Dan Moir

Authorized for release by:
10/13/2021 9:32:43 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1382-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

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
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Job ID: 890-1382-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1382-1****Receipt**

The samples were received on 10/8/2021 8:47 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH01 (890-1382-1) and SW02 (890-1382-8). 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.

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: BH01

Lab Sample ID: 890-1382-1

Date Collected: 10/07/21 12:37

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 13:24	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 13:24	1
Ethylbenzene	0.0114		0.00199	mg/Kg		10/11/21 16:18	10/12/21 13:24	1
m-Xylene & p-Xylene	0.00511		0.00398	mg/Kg		10/11/21 16:18	10/12/21 13:24	1
o-Xylene	0.0275		0.00199	mg/Kg		10/11/21 16:18	10/12/21 13:24	1
Xylenes, Total	0.0326		0.00398	mg/Kg		10/11/21 16:18	10/12/21 13:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130	10/11/21 16:18	10/12/21 13:24	1
1,4-Difluorobenzene (Surr)	70		70 - 130	10/11/21 16:18	10/12/21 13:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0440		0.00398	mg/Kg			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	124		49.9	mg/Kg			10/11/21 10:26	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 F1	49.9	mg/Kg		10/12/21 14:04	10/12/21 21:04	1
Diesel Range Organics (Over C10-C28)	124		49.9	mg/Kg		10/12/21 14:04	10/12/21 21:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/12/21 21:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/12/21 14:04	10/12/21 21:04	1
o-Terphenyl	121		70 - 130	10/12/21 14:04	10/12/21 21:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		5.04	mg/Kg			10/11/21 14:42	1

Client Sample ID: BH01A

Lab Sample ID: 890-1382-2

Date Collected: 10/07/21 12:39

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:44	1
o-Xylene	0.00518		0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:44	1
Xylenes, Total	0.00518		0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	10/11/21 16:18	10/12/21 13:44	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: BH01A

Lab Sample ID: 890-1382-2

Date Collected: 10/07/21 12:39

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	10/11/21 16:18	10/12/21 13:44	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00518		0.00400	mg/Kg			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/11/21 10:26	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	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/12/21 22:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/12/21 22:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/12/21 22:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			10/12/21 14:04	10/12/21 22:07	1
o-Terphenyl	118		70 - 130			10/12/21 14:04	10/12/21 22:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		4.99	mg/Kg			10/11/21 14:49	1

Client Sample ID: BH01B

Lab Sample ID: 890-1382-3

Date Collected: 10/07/21 12:42

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 14:05	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 14:05	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 14:05	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/11/21 16:18	10/12/21 14:05	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 14:05	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/11/21 16:18	10/12/21 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	10/11/21 16:18	10/12/21 14:05	1
1,4-Difluorobenzene (Surr)	84		70 - 130	10/11/21 16:18	10/12/21 14:05	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			10/12/21 10:57	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			10/11/21 10:26	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: BH01B

Lab Sample ID: 890-1382-3

Date Collected: 10/07/21 12:42

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 3

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		10/12/21 14:04	10/12/21 22:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/12/21 22:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/12/21 22:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			10/12/21 14:04	10/12/21 22:28	1
o-Terphenyl	122		70 - 130			10/12/21 14:04	10/12/21 22:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	147		4.97	mg/Kg			10/11/21 14:57	1

Client Sample ID: BH01C

Lab Sample ID: 890-1382-4

Date Collected: 10/07/21 12:43

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 14:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 14:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 14:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/11/21 16:18	10/12/21 14:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 14:25	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/11/21 16:18	10/12/21 14:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130			10/11/21 16:18	10/12/21 14:25	1
1,4-Difluorobenzene (Surr)	80		70 - 130			10/11/21 16:18	10/12/21 14:25	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			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/11/21 10:26	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	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/12/21 22:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/12/21 22:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/12/21 22:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			10/12/21 14:04	10/12/21 22:49	1
o-Terphenyl	122		70 - 130			10/12/21 14:04	10/12/21 22:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: BH01C

Lab Sample ID: 890-1382-4

Date Collected: 10/07/21 12:43

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	417		4.95	mg/Kg			10/11/21 15:04	1

Client Sample ID: FS01

Lab Sample ID: 890-1382-5

Date Collected: 10/07/21 11:40

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 1 - 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		10/11/21 16:18	10/12/21 14:58	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/11/21 16:18	10/12/21 14:58	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/11/21 16:18	10/12/21 14:58	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/11/21 16:18	10/12/21 14:58	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/11/21 16:18	10/12/21 14:58	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		10/11/21 16:18	10/12/21 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130			10/11/21 16:18	10/12/21 14:58	1
1,4-Difluorobenzene (Surr)	83		70 - 130			10/11/21 16:18	10/12/21 14:58	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			10/12/21 10:57	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			10/11/21 10:26	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		10/12/21 14:04	10/12/21 23:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/12/21 23:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/12/21 23:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/12/21 14:04	10/12/21 23:10	1
o-Terphenyl	121		70 - 130			10/12/21 14:04	10/12/21 23:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.7		5.05	mg/Kg			10/11/21 15:25	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: FS02

Lab Sample ID: 890-1382-6

Date Collected: 10/07/21 13:50

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 15:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 15:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 15:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/11/21 16:18	10/12/21 15:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 15:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/11/21 16:18	10/12/21 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	10/11/21 16:18	10/12/21 15:18	1
1,4-Difluorobenzene (Surr)	75		70 - 130	10/11/21 16:18	10/12/21 15:18	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			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	69.7		50.0	mg/Kg			10/11/21 10:26	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		10/12/21 14:04	10/12/21 23:31	1
Diesel Range Organics (Over C10-C28)	69.7		50.0	mg/Kg		10/12/21 14:04	10/12/21 23:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	10/12/21 14:04	10/12/21 23:31	1
o-Terphenyl	122		70 - 130	10/12/21 14:04	10/12/21 23:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		4.98	mg/Kg			10/11/21 15:33	1

Client Sample ID: SW01

Lab Sample ID: 890-1382-7

Date Collected: 10/07/21 14:00

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/11/21 16:18	10/12/21 15:39	1
Toluene	0.0339		0.00201	mg/Kg		10/11/21 16:18	10/12/21 15:39	1
Ethylbenzene	0.0107		0.00201	mg/Kg		10/11/21 16:18	10/12/21 15:39	1
m-Xylene & p-Xylene	0.00429		0.00402	mg/Kg		10/11/21 16:18	10/12/21 15:39	1
o-Xylene	0.0149		0.00201	mg/Kg		10/11/21 16:18	10/12/21 15:39	1
Xylenes, Total	0.0192		0.00402	mg/Kg		10/11/21 16:18	10/12/21 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	10/11/21 16:18	10/12/21 15:39	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: SW01

Lab Sample ID: 890-1382-7

Date Collected: 10/07/21 14:00

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	80		70 - 130	10/11/21 16:18	10/12/21 15:39	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0638		0.00402	mg/Kg			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.7		50.0	mg/Kg			10/11/21 10:26	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		10/12/21 14:04	10/12/21 23:52	1
Diesel Range Organics (Over C10-C28)	86.7		50.0	mg/Kg		10/12/21 14:04	10/12/21 23:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			10/12/21 14:04	10/12/21 23:52	1
o-Terphenyl	115		70 - 130			10/12/21 14:04	10/12/21 23:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		4.95	mg/Kg			10/11/21 15:40	1

Client Sample ID: SW02

Lab Sample ID: 890-1382-8

Date Collected: 10/07/21 14:15

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 15:59	1
Toluene	0.0114		0.00200	mg/Kg		10/11/21 16:18	10/12/21 15:59	1
Ethylbenzene	0.00951		0.00200	mg/Kg		10/11/21 16:18	10/12/21 15:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 15:59	1
o-Xylene	0.0341		0.00200	mg/Kg		10/11/21 16:18	10/12/21 15:59	1
Xylenes, Total	0.0341		0.00400	mg/Kg		10/11/21 16:18	10/12/21 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	10/11/21 16:18	10/12/21 15:59	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/11/21 16:18	10/12/21 15:59	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0550		0.00400	mg/Kg			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	97.7		49.8	mg/Kg			10/11/21 10:26	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: SW02

Lab Sample ID: 890-1382-8

Date Collected: 10/07/21 14:15

Matrix: Solid

Date Received: 10/08/21 08:47

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 00:13	1
Diesel Range Organics (Over C10-C28)	97.7		49.8	mg/Kg		10/12/21 14:04	10/13/21 00:13	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 00:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/12/21 14:04	10/13/21 00:13	1
o-Terphenyl	118		70 - 130			10/12/21 14:04	10/13/21 00:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.95	mg/Kg			10/11/21 15:47	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1382-1	BH01	142 S1+	70
890-1382-1 MS	BH01	119	77
890-1382-1 MSD	BH01	118	88
890-1382-2	BH01A	123	85
890-1382-3	BH01B	108	84
890-1382-4	BH01C	120	80
890-1382-5	FS01	123	83
890-1382-6	FS02	121	75
890-1382-7	SW01	125	80
890-1382-8	SW02	135 S1+	80
LCS 880-8942/1-A	Lab Control Sample	112	88
LCSD 880-8942/2-A	Lab Control Sample Dup	116	76
MB 880-8942/5-B	Method Blank	112	79
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-1	BH01	110	121
890-1382-1 MS	BH01	118	115
890-1382-1 MSD	BH01	118	113
890-1382-2	BH01A	106	118
890-1382-3	BH01B	108	122
890-1382-4	BH01C	108	122
890-1382-5	FS01	107	121
890-1382-6	FS02	109	122
890-1382-7	SW01	105	115
890-1382-8	SW02	107	118
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8942/5-B

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8942

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 16:18	10/12/21 13:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/11/21 16:18	10/12/21 13:02	1

Lab Sample ID: LCS 880-8942/1-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09008		mg/Kg		90	70 - 130
Toluene	0.100	0.09025		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09403		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09732		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-8942/2-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08283		mg/Kg		83	70 - 130	8	35
Toluene	0.100	0.08609		mg/Kg		86	70 - 130	5	35
Ethylbenzene	0.100	0.09041		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1906		mg/Kg		95	70 - 130	3	35
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-1382-1 MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0990	0.08900		mg/Kg		89	70 - 130
Toluene	<0.00199	U	0.0990	0.09358		mg/Kg		94	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1382-1 MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.0114		0.0990	0.1000		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.00511		0.198	0.2115		mg/Kg		104	70 - 130
o-Xylene	0.0275		0.0990	0.1061		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 890-1382-1 MSD

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0992	0.09504		mg/Kg		95	70 - 130	7	35
Toluene	<0.00199	U	0.0992	0.09440		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.0114		0.0992	0.09963		mg/Kg		89	70 - 130	0	35
m-Xylene & p-Xylene	0.00511		0.198	0.2082		mg/Kg		102	70 - 130	2	35
o-Xylene	0.0275		0.0992	0.1047		mg/Kg		78	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-1382-1 MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 890-1382-1 MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	113		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9194/1-A

Matrix: Solid

Analysis Batch: 9216

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			10/11/21 13:59	1

Lab Sample ID: LCS 880-9194/2-A

Matrix: Solid

Analysis Batch: 9216

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	241.0		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-9194/3-A

Matrix: Solid

Analysis Batch: 9216

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	243.8		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-6899-A-22-C MS

Matrix: Solid

Analysis Batch: 9216

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	42.4		250	266.4		mg/Kg		90	90 - 110

Lab Sample ID: 880-6899-A-22-D MSD

Matrix: Solid

Analysis Batch: 9216

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	42.4		250	275.8		mg/Kg		93	90 - 110	3	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Total/NA	Solid	5035	
890-1382-2	BH01A	Total/NA	Solid	5035	
890-1382-3	BH01B	Total/NA	Solid	5035	
890-1382-4	BH01C	Total/NA	Solid	5035	
890-1382-5	FS01	Total/NA	Solid	5035	
890-1382-6	FS02	Total/NA	Solid	5035	
890-1382-7	SW01	Total/NA	Solid	5035	
890-1382-8	SW02	Total/NA	Solid	5035	
MB 880-8942/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1382-1 MS	BH01	Total/NA	Solid	5035	
890-1382-1 MSD	BH01	Total/NA	Solid	5035	

Analysis Batch: 9282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Total/NA	Solid	8021B	8942
890-1382-2	BH01A	Total/NA	Solid	8021B	8942
890-1382-3	BH01B	Total/NA	Solid	8021B	8942
890-1382-4	BH01C	Total/NA	Solid	8021B	8942
890-1382-5	FS01	Total/NA	Solid	8021B	8942
890-1382-6	FS02	Total/NA	Solid	8021B	8942
890-1382-7	SW01	Total/NA	Solid	8021B	8942
890-1382-8	SW02	Total/NA	Solid	8021B	8942
MB 880-8942/5-B	Method Blank	Total/NA	Solid	8021B	8942
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	8021B	8942
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8942
890-1382-1 MS	BH01	Total/NA	Solid	8021B	8942
890-1382-1 MSD	BH01	Total/NA	Solid	8021B	8942

Analysis Batch: 9297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Total/NA	Solid	Total BTEX	
890-1382-2	BH01A	Total/NA	Solid	Total BTEX	
890-1382-3	BH01B	Total/NA	Solid	Total BTEX	
890-1382-4	BH01C	Total/NA	Solid	Total BTEX	
890-1382-5	FS01	Total/NA	Solid	Total BTEX	
890-1382-6	FS02	Total/NA	Solid	Total BTEX	
890-1382-7	SW01	Total/NA	Solid	Total BTEX	
890-1382-8	SW02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Total/NA	Solid	8015 NM	
890-1382-2	BH01A	Total/NA	Solid	8015 NM	
890-1382-3	BH01B	Total/NA	Solid	8015 NM	
890-1382-4	BH01C	Total/NA	Solid	8015 NM	
890-1382-5	FS01	Total/NA	Solid	8015 NM	
890-1382-6	FS02	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 9189 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-7	SW01	Total/NA	Solid	8015 NM	
890-1382-8	SW02	Total/NA	Solid	8015 NM	

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Total/NA	Solid	8015B NM	9312
890-1382-2	BH01A	Total/NA	Solid	8015B NM	9312
890-1382-3	BH01B	Total/NA	Solid	8015B NM	9312
890-1382-4	BH01C	Total/NA	Solid	8015B NM	9312
890-1382-5	FS01	Total/NA	Solid	8015B NM	9312
890-1382-6	FS02	Total/NA	Solid	8015B NM	9312
890-1382-7	SW01	Total/NA	Solid	8015B NM	9312
890-1382-8	SW02	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-1 MS	BH01	Total/NA	Solid	8015B NM	9312
890-1382-1 MSD	BH01	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Total/NA	Solid	8015NM Prep	
890-1382-2	BH01A	Total/NA	Solid	8015NM Prep	
890-1382-3	BH01B	Total/NA	Solid	8015NM Prep	
890-1382-4	BH01C	Total/NA	Solid	8015NM Prep	
890-1382-5	FS01	Total/NA	Solid	8015NM Prep	
890-1382-6	FS02	Total/NA	Solid	8015NM Prep	
890-1382-7	SW01	Total/NA	Solid	8015NM Prep	
890-1382-8	SW02	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-1382-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 9194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Soluble	Solid	DI Leach	
890-1382-2	BH01A	Soluble	Solid	DI Leach	
890-1382-3	BH01B	Soluble	Solid	DI Leach	
890-1382-4	BH01C	Soluble	Solid	DI Leach	
890-1382-5	FS01	Soluble	Solid	DI Leach	
890-1382-6	FS02	Soluble	Solid	DI Leach	
890-1382-7	SW01	Soluble	Solid	DI Leach	
890-1382-8	SW02	Soluble	Solid	DI Leach	
MB 880-9194/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9194/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9194/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6899-A-22-C MS	Matrix Spike	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9194 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6899-A-22-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1382-1	BH01	Soluble	Solid	300.0	9194
890-1382-2	BH01A	Soluble	Solid	300.0	9194
890-1382-3	BH01B	Soluble	Solid	300.0	9194
890-1382-4	BH01C	Soluble	Solid	300.0	9194
890-1382-5	FS01	Soluble	Solid	300.0	9194
890-1382-6	FS02	Soluble	Solid	300.0	9194
890-1382-7	SW01	Soluble	Solid	300.0	9194
890-1382-8	SW02	Soluble	Solid	300.0	9194
MB 880-9194/1-A	Method Blank	Soluble	Solid	300.0	9194
LCS 880-9194/2-A	Lab Control Sample	Soluble	Solid	300.0	9194
LCSD 880-9194/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9194
880-6899-A-22-C MS	Matrix Spike	Soluble	Solid	300.0	9194
880-6899-A-22-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9194

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: BH01

Lab Sample ID: 890-1382-1

Date Collected: 10/07/21 12:37

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 13:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 21:04	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 14:42	SC	XEN MID

Client Sample ID: BH01A

Lab Sample ID: 890-1382-2

Date Collected: 10/07/21 12:39

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 13:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 22:07	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 14:49	SC	XEN MID

Client Sample ID: BH01B

Lab Sample ID: 890-1382-3

Date Collected: 10/07/21 12:42

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 14:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 22:28	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 14:57	SC	XEN MID

Client Sample ID: BH01C

Lab Sample ID: 890-1382-4

Date Collected: 10/07/21 12:43

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 14:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: BH01C

Lab Sample ID: 890-1382-4

Date Collected: 10/07/21 12:43

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 22:49	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 15:04	SC	XEN MID

Client Sample ID: FS01

Lab Sample ID: 890-1382-5

Date Collected: 10/07/21 11:40

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 14:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 23:10	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 15:25	SC	XEN MID

Client Sample ID: FS02

Lab Sample ID: 890-1382-6

Date Collected: 10/07/21 13:50

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 15:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 23:31	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 15:33	SC	XEN MID

Client Sample ID: SW01

Lab Sample ID: 890-1382-7

Date Collected: 10/07/21 14:00

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 15:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/12/21 23:52	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Client Sample ID: SW01

Lab Sample ID: 890-1382-7

Date Collected: 10/07/21 14:00

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 15:40	SC	XEN MID

Client Sample ID: SW02

Lab Sample ID: 890-1382-8

Date Collected: 10/07/21 14:15

Matrix: Solid

Date Received: 10/08/21 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 15:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 00:13	AJ	XEN MID
Soluble	Leach	DI Leach			9194	10/11/21 11:17	CH	XEN MID
Soluble	Analysis	300.0		1	9216	10/11/21 15:47	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

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:

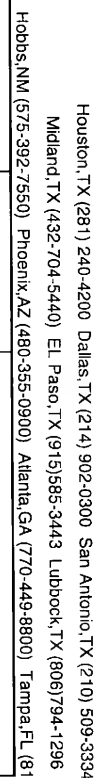
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1382-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1382-1	BH01	Solid	10/07/21 12:37	10/08/21 08:47	1
890-1382-2	BH01A	Solid	10/07/21 12:39	10/08/21 08:47	2
890-1382-3	BH01B	Solid	10/07/21 12:42	10/08/21 08:47	3
890-1382-4	BH01C	Solid	10/07/21 12:43	10/08/21 08:47	4
890-1382-5	FS01	Solid	10/07/21 11:40	10/08/21 08:47	1 - 1.5
890-1382-6	FS02	Solid	10/07/21 13:50	10/08/21 08:47	4
890-1382-7	SW01	Solid	10/07/21 14:00	10/08/21 08:47	0 - 4
890-1382-8	SW02	Solid	10/07/21 14:15	10/08/21 08:47	0 - 4



Chain of Custody

Work Order No.:

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO
Address:	3300 North A Street Bldg 1, Unit 222	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com, payton.bennet@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> \$perfund <input type="checkbox"/> State of Project: Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> TT/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible][illegible]

Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010	200.8 / 6020:
8RCRA 13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr 11 Sn U V Zn
TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	Ag Ti 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 \$7500 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 <i>p b l m m l l</i>	<i>Cue Cup</i>	10/5/21 @ 0847	2		
3			4		
5			6		

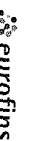
Rev/used Date: 651418 Rev 2018

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Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No									
Client Contact:		Phone	Kramer Jessica		890-454 1									
Shipping/Receiving			E-Mail	State of Origin:	Page									
Company			Jessica.Kramer@eurofins.com	New Mexico	1 of 1									
Eurofins Xenco			Accreditations Required (See note):		Job #									
Address		Due Date Requested	NELAP - Louisiana NELAP - Texas		890-1382-1									
1211 W Florida Ave		10/12/2021												
City		TAT Requested (days):	Analysis Requested											
Midland														
State Zip:														
TX, 79701														
Phone:		PO #												
432-704-5440(Tel)		W/O #												
Email		Project #												
		89000004												
Project Name		SSOW#												
Tiger CS														
Site														
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=oil, B=BT-Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total BTEX_GCV	Total Number of containers	Special Instructions/Note:
BH01 (890-1382-1)	10/7/21	12 37	Mountain	Solid	X	X	X	X	X	X	X	X	1	
BH01A (890-1382-2)	10/7/21	12 39	Mountain	Solid	X	X	X	X	X	X	X	X	1	
BH01B (890-1382-3)	10/7/21	12 42	Mountain	Solid	X	X	X	X	X	X	X	X	1	
BH01C (890-1382-4)	10/7/21	12 43	Mountain	Solid	X	X	X	X	X	X	X	X	1	
FS01 (890-1382-5)	10/7/21	11 40	Mountain	Solid	X	X	X	X	X	X	X	X	1	
FS02 (890-1382-6)	10/7/21	13 50	Mountain	Solid	X	X	X	X	X	X	X	X	1	
SW01 (890-1382-7)	10/7/21	14 00	Mountain	Solid	X	X	X	X	X	X	X	X	1	
SW02 (890-1382-8)	10/7/21	14 15	Mountain	Solid	X	X	X	X	X	X	X	X	1	
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/method being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.</p>														
Possible Hazard Identification														
Unconfirmed														
Deliverable Requested I II III IV Other (specify)														
Primary Deliverable Rank: 2														
Special Instructions/QC Requirements														
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months														
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)														
Empty Kit Relinquished by														
Relinquished by														
Date/Time: 10/6/21														
Company														
Relinquished by														
Date/Time														
Company														
Relinquished by														
Date/Time														
Company														
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No														
Custody Seal No														
Cooler Temperature(s) °C and Other Remarks														
2.4/29														

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1382-1

SDG Number: 31403236.022.0129

Login Number: 1382

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1382-1

SDG Number: 31403236.022.0129

Login Number: 1382

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland

List Creation: 10/11/21 08:46 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	2.4/2.9
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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1395-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/13/2021 4:23:10 PM

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

LINKS

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1395-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Job ID: 890-1395-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-1395-1**

Receipt

The samples were received on 10/8/2021 3:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8975 and analytical batch 880-9324 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9210 and analytical batch 880-9307 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Client Sample ID: FS03

Lab Sample ID: 890-1395-1

Date Collected: 10/08/21 10:58

Matrix: Solid

Date Received: 10/08/21 15:50

Sample Depth: 0 - 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		10/11/21 11:00	10/12/21 21:37	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/11/21 11:00	10/12/21 21:37	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/11/21 11:00	10/12/21 21:37	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/11/21 11:00	10/12/21 21:37	1
o-Xylene	0.00760		0.00202	mg/Kg		10/11/21 11:00	10/12/21 21:37	1
Xylenes, Total	0.00760		0.00403	mg/Kg		10/11/21 11:00	10/12/21 21:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	10/11/21 11:00	10/12/21 21:37	1
1,4-Difluorobenzene (Surr)	83		70 - 130	10/11/21 11:00	10/12/21 21:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00760		0.00403	mg/Kg			10/13/21 08:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	77.2		49.8	mg/Kg			10/13/21 15:09	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	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 03:41	1
Diesel Range Organics (Over C10-C28)	77.2		49.8	mg/Kg		10/12/21 14:04	10/13/21 03:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 03:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			10/12/21 14:04	10/13/21 03:41	1
o-Terphenyl	123		70 - 130			10/12/21 14:04	10/13/21 03:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.7		4.95	mg/Kg			10/12/21 16:47	1

Client Sample ID: FS04

Lab Sample ID: 890-1395-2

Date Collected: 10/08/21 11:18

Matrix: Solid

Date Received: 10/08/21 15:50

Sample Depth: 0 - 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		10/11/21 11:00	10/12/21 21:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:00	10/12/21 21:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:00	10/12/21 21:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/11/21 11:00	10/12/21 21:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:00	10/12/21 21:58	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/11/21 11:00	10/12/21 21:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	10/11/21 11:00	10/12/21 21:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Client Sample ID: FS04

Lab Sample ID: 890-1395-2

Date Collected: 10/08/21 11:18

Matrix: Solid

Date Received: 10/08/21 15:50

Sample Depth: 0 - 1.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	10/11/21 11:00	10/12/21 21:58	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			10/13/21 08:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 15:09	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	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 04:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 04:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 04:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			10/12/21 14:04	10/13/21 04:02	1
o-Terphenyl	123		70 - 130			10/12/21 14:04	10/13/21 04:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.1		5.00	mg/Kg			10/12/21 15:56	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1390-A-1-B MSD	Matrix Spike Duplicate	90	96
890-1390-A-1-F MS	Matrix Spike	74	89
890-1395-1	FS03	111	83
890-1395-2	FS04	92	85
LCS 880-8975/1-A	Lab Control Sample	96	101
LCSD 880-8975/2-A	Lab Control Sample Dup	82	93
MB 880-8975/5-A	Method Blank	113	109
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1395-1	FS03	109	123
890-1395-2	FS04	110	123
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8975/5-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8975

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/11/21 11:00	10/12/21 19:53	1
1,4-Difluorobenzene (Surr)	109		70 - 130	10/11/21 11:00	10/12/21 19:53	1

Lab Sample ID: LCS 880-8975/1-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08714		mg/Kg		87	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1005		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08029		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-8975/2-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08186		mg/Kg		82	70 - 130	6	35
Toluene	0.100	0.09746		mg/Kg		97	70 - 130	4	35
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1547		mg/Kg		77	70 - 130	10	35
o-Xylene	0.100	0.07544		mg/Kg		75	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-1390-A-1-B MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.06752	F1	mg/Kg		68	70 - 130	28	35
Toluene	<0.00199	U F1	0.100	0.08128		mg/Kg		81	70 - 130	21	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1390-A-1-B MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00199	U F1	0.100	0.07810		mg/Kg		78	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1340	F1	mg/Kg		67	70 - 130	16	35
o-Xylene	<0.00199	U F1	0.100	0.06389	F1	mg/Kg		64	70 - 130	14	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-1390-A-1-F MS

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.100	0.05117	F1	mg/Kg		51	70 - 130
Toluene	<0.00199	U F1	0.100	0.06554	F1	mg/Kg		65	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.06790	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1146	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05541	F1	mg/Kg		55	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	74		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	115		70 - 130								

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	113		70 - 130								

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9281/1-A

Matrix: Solid

Analysis Batch: 9303

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			10/12/21 12:50	1

Lab Sample ID: LCS 880-9281/2-A

Matrix: Solid

Analysis Batch: 9303

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.8		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-9281/3-A

Matrix: Solid

Analysis Batch: 9303

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	254.3		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 880-7069-A-10-E MS

Matrix: Solid

Analysis Batch: 9303

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	20.5		497	547.9		mg/Kg		106	90 - 110

Lab Sample ID: 880-7069-A-10-F MSD

Matrix: Solid

Analysis Batch: 9303

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	20.5		497	548.0		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-9210/1-A

Matrix: Solid

Analysis Batch: 9307

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			10/12/21 13:31	1

Lab Sample ID: LCS 880-9210/2-A

Matrix: Solid

Analysis Batch: 9307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9210/3-A

Matrix: Solid

Analysis Batch: 9307

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	243.5		mg/Kg		97	90 - 110	0	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-7011-A-11-E MS

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	339.1	F1	mg/Kg		57	90 - 110

Lab Sample ID: 880-7011-A-11-F MSD

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	321.0	F1	mg/Kg		53	90 - 110	6	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Total/NA	Solid	5035	
890-1395-2	FS04	Total/NA	Solid	5035	
MB 880-8975/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1390-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1390-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 9324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Total/NA	Solid	8021B	8975
890-1395-2	FS04	Total/NA	Solid	8021B	8975
MB 880-8975/5-A	Method Blank	Total/NA	Solid	8021B	8975
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	8021B	8975
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8975
890-1390-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8975
890-1390-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	8975

Analysis Batch: 9366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Total/NA	Solid	Total BTEX	
890-1395-2	FS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Total/NA	Solid	8015B NM	9312
890-1395-2	FS04	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Total/NA	Solid	8015NM Prep	
890-1395-2	FS04	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Total/NA	Solid	8015 NM	
890-1395-2	FS04	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

HPLC/IC

Leach Batch: 9210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Soluble	Solid	DI Leach	
MB 880-9210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 9281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-2	FS04	Soluble	Solid	DI Leach	
MB 880-9281/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9281/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9281/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7069-A-10-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7069-A-10-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-2	FS04	Soluble	Solid	300.0	9281
MB 880-9281/1-A	Method Blank	Soluble	Solid	300.0	9281
LCS 880-9281/2-A	Lab Control Sample	Soluble	Solid	300.0	9281
LCSD 880-9281/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9281
880-7069-A-10-E MS	Matrix Spike	Soluble	Solid	300.0	9281
880-7069-A-10-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9281

Analysis Batch: 9307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1395-1	FS03	Soluble	Solid	300.0	9210
MB 880-9210/1-A	Method Blank	Soluble	Solid	300.0	9210
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	300.0	9210
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9210
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	9210
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9210

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Client Sample ID: FS03

Lab Sample ID: 890-1395-1

Date Collected: 10/08/21 10:58

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8975	10/11/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9324	10/12/21 21:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9366	10/13/21 08:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 03:41	AJ	XEN MID
Soluble	Leach	DI Leach			9210	10/11/21 12:29	CH	XEN MID
Soluble	Analysis	300.0		1	9307	10/12/21 16:47	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 890-1395-2

Date Collected: 10/08/21 11:18

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8975	10/11/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9324	10/12/21 21:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9366	10/13/21 08:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 04:02	AJ	XEN MID
Soluble	Leach	DI Leach			9281	10/12/21 08:19	CH	XEN MID
Soluble	Analysis	300.0		1	9303	10/12/21 15:56	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1395-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1395-1	FS03	Solid	10/08/21 10:58	10/08/21 15:50	0 - 1.5
890-1395-2	FS04	Solid	10/08/21 11:18	10/08/21 15:50	0 - 1.5

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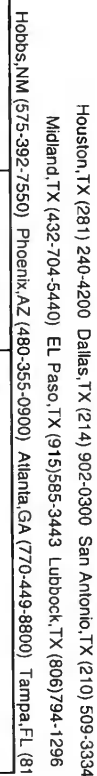
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Chain of Custody

Work Order No:

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> \$perfund <input type="checkbox"/>	
State of Project:	
Reporting Level: II <input type="checkbox"/> Level III <input type="checkbox"/> T/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible][illegible]

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

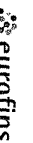
of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 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
<i>phanner</i>	<i>Quincy</i>	10-8-21 1550			

Eurofins Xenco Carlsbad

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

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1395-1

SDG Number: 31403236.022.0129

Login Number: 1395

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1395-1

SDG Number: 31403236.022.0129

Login Number: 1395

List Number: 2

Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland

List Creation: 10/12/21 11:43 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1394-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/13/2021 4:13:59 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1394-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Job ID: 890-1394-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1394-1****Receipt**

The sample was received on 10/8/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-1382-A-1-I). 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.

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9210 and analytical batch 880-9307 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Client Sample ID: SS01

Lab Sample ID: 890-1394-1

Date Collected: 10/08/21 12:09

Matrix: Solid

Date Received: 10/08/21 15:50

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		10/11/21 16:18	10/12/21 21:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 21:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 21:06	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/11/21 16:18	10/12/21 21:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 21:06	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/11/21 16:18	10/12/21 21:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	10/11/21 16:18	10/12/21 21:06	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/11/21 16:18	10/12/21 21:06	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			10/12/21 10:57	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			10/11/21 10:08	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		10/12/21 14:04	10/13/21 03:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/13/21 03:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/13/21 03:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	10/12/21 14:04	10/13/21 03:20	1
o-Terphenyl	119		70 - 130	10/12/21 14:04	10/13/21 03:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.2		5.00	mg/Kg			10/12/21 16:41	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1382-A-1-G MS	Matrix Spike	119	77
890-1382-A-1-H MSD	Matrix Spike Duplicate	118	88
890-1394-1	SS01	128	79
LCS 880-8942/1-A	Lab Control Sample	112	88
LCSD 880-8942/2-A	Lab Control Sample Dup	116	76
MB 880-8942/5-B	Method Blank	112	79
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1394-1	SS01	103	119
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8942/5-B

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8942

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 16:18	10/12/21 13:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/11/21 16:18	10/12/21 13:02	1

Lab Sample ID: LCS 880-8942/1-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09008		mg/Kg		90	70 - 130
Toluene	0.100	0.09025		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09403		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09732		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-8942/2-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08283		mg/Kg		83	70 - 130	8	35
Toluene	0.100	0.08609		mg/Kg		86	70 - 130	5	35
Ethylbenzene	0.100	0.09041		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1906		mg/Kg		95	70 - 130	3	35
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0990	0.08900		mg/Kg		89	70 - 130
Toluene	<0.00199	U	0.0990	0.09358		mg/Kg		94	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.0114		0.0990	0.1000		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.00511		0.198	0.2115		mg/Kg		104	70 - 130
o-Xylene	0.0275		0.0990	0.1061		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 890-1382-A-1-H MSD

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0992	0.09504		mg/Kg		95	70 - 130	7	35
Toluene	<0.00199	U	0.0992	0.09440		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.0114		0.0992	0.09963		mg/Kg		89	70 - 130	0	35
m-Xylene & p-Xylene	0.00511		0.198	0.2082		mg/Kg		102	70 - 130	2	35
o-Xylene	0.0275		0.0992	0.1047		mg/Kg		78	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	115		70 - 130								

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	113		70 - 130								

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9210/1-A

Matrix: Solid

Analysis Batch: 9307

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			10/12/21 13:31	1

Lab Sample ID: LCS 880-9210/2-A

Matrix: Solid

Analysis Batch: 9307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9210/3-A

Matrix: Solid

Analysis Batch: 9307

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	243.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-7011-A-11-E MS

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	339.1	F1	mg/Kg		57	90 - 110

Lab Sample ID: 880-7011-A-11-F MSD

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	321.0	F1	mg/Kg		53	90 - 110	6	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Total/NA	Solid	5035	
MB 880-8942/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 9282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Total/NA	Solid	8021B	8942
MB 880-8942/5-B	Method Blank	Total/NA	Solid	8021B	8942
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	8021B	8942
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8942
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	8942
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8942

Analysis Batch: 9297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Total/NA	Solid	8015 NM	

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 9210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Soluble	Solid	DI Leach	
MB 880-9210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1394-1	SS01	Soluble	Solid	300.0	9210
MB 880-9210/1-A	Method Blank	Soluble	Solid	300.0	9210
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	300.0	9210
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9210
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	9210
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9210

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Client Sample ID: SS01

Lab Sample ID: 890-1394-1

Date Collected: 10/08/21 12:09

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 21:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9187	10/11/21 10:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 03:20	AJ	XEN MID
Soluble	Leach	DI Leach			9210	10/11/21 12:29	CH	XEN MID
Soluble	Analysis	300.0		1	9307	10/12/21 16:41	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1394-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1394-1	SS01	Solid	10/08/21 12:09	10/08/21 15:50	0.5

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



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)


Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO
Address:	3300 North A Street Bldg 1, Unit 222	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com, payton.benner@wsp.com

Program: UST/PT State of Project: Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> T/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____		Work Order Comments <input type="checkbox"/> RP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------

Project Name:	Tiger CS	Turn Around															
Project Number:	31403236.022.0129	Routine	<input type="checkbox"/>														
P.O. Number:		Rush: 2 DAY															
Sampler's Name:	Payton Benner	Due Date:															
SAMPLE RECEIPT																	
Temperature (°C):	2.4/2.2	Temp Blank:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Well Ice:	<input checked="" type="radio"/> Yes <input type="radio"/> No												
Received Inact:	Yes <input checked="" type="radio"/> No <input type="radio"/>	Thermometer ID	TMA-007														
Cooler Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Correction Factor:	-0.2														
Sample Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Total Containers:															
Sample Identification																	
Sample ID	SS01	Matrix	S	Date Sampled	10/8/2021	Time Sampled	12:09	Depth	0.5'	Number of Containers	1	TPH (EPA 8015)	X	BTEX (EPA 0-8021)	X	Chloride (EPA 300.0)	X
																	
890-1394 Chain of Custody																	
ANALYSIS REQUEST																	
Work Order Notes																	
CC:2027031001 NAPP2123231376																	
TAT starts the day received by the lab. If received by 4:30pm																	
Sample Comments																	
Discrete																	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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 <i>Payton Benner</i>	<i>Joe Goff</i>	10-8-21 1550	2		
3			4		
5			6		

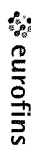
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1394-1

SDG Number: 31403236.022.0129

Login Number: 1394

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1394-1

SDG Number: 31403236.022.0129

Login Number: 1394

List Number: 2

Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland

List Creation: 10/12/21 11:43 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1393-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/13/2021 4:22:15 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1393-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Job ID: 890-1393-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-1393-1**

Receipt

The sample was received on 10/8/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8975 and analytical batch 880-9324 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9210 and analytical batch 880-9307 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Client Sample ID: SS02

Lab Sample ID: 890-1393-1

Date Collected: 10/08/21 12:07

Matrix: Solid

Date Received: 10/08/21 15:50

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		10/11/21 11:00	10/12/21 21:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:00	10/12/21 21:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:00	10/12/21 21:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 11:00	10/12/21 21:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 11:00	10/12/21 21:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 11:00	10/12/21 21:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	10/11/21 11:00	10/12/21 21:17	1
1,4-Difluorobenzene (Surr)	105		70 - 130	10/11/21 11:00	10/12/21 21:17	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			10/13/21 08:57	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			10/13/21 15:09	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		10/12/21 14:04	10/13/21 02:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/13/21 02:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/13/21 02:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	10/12/21 14:04	10/13/21 02:59	1
o-Terphenyl	120		70 - 130	10/12/21 14:04	10/13/21 02:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.3		4.96	mg/Kg			10/12/21 16:35	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1390-A-1-B MSD	Matrix Spike Duplicate	90	96
890-1390-A-1-F MS	Matrix Spike	74	89
890-1393-1	SS02	92	105
LCS 880-8975/1-A	Lab Control Sample	96	101
LCSD 880-8975/2-A	Lab Control Sample Dup	82	93
MB 880-8975/5-A	Method Blank	113	109
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1393-1	SS02	104	120
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8975/5-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8975

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/11/21 11:00	10/12/21 19:53	1
1,4-Difluorobenzene (Surr)	109		70 - 130	10/11/21 11:00	10/12/21 19:53	1

Lab Sample ID: LCS 880-8975/1-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08714		mg/Kg		87	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1005		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08029		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-8975/2-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08186		mg/Kg		82	70 - 130	6	35
Toluene	0.100	0.09746		mg/Kg		97	70 - 130	4	35
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1547		mg/Kg		77	70 - 130	10	35
o-Xylene	0.100	0.07544		mg/Kg		75	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-1390-A-1-B MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.06752	F1	mg/Kg		68	70 - 130	28	35
Toluene	<0.00199	U F1	0.100	0.08128		mg/Kg		81	70 - 130	21	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1390-A-1-B MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00199	U F1	0.100	0.07810		mg/Kg		78	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1340	F1	mg/Kg		67	70 - 130	16	35
o-Xylene	<0.00199	U F1	0.100	0.06389	F1	mg/Kg		64	70 - 130	14	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-1390-A-1-F MS

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.100	0.05117	F1	mg/Kg		51	70 - 130
Toluene	<0.00199	U F1	0.100	0.06554	F1	mg/Kg		65	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.06790	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1146	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05541	F1	mg/Kg		55	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	74		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	101		70 - 130									
o-Terphenyl	101		70 - 130									

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130			
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130			
	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	118		70 - 130									
o-Terphenyl	115		70 - 130									

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20	
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20	
	MSD	MSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	118		70 - 130									
o-Terphenyl	113		70 - 130									

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9210/1-A

Matrix: Solid

Analysis Batch: 9307

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			10/12/21 13:31	1

Lab Sample ID: LCS 880-9210/2-A

Matrix: Solid

Analysis Batch: 9307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9210/3-A

Matrix: Solid

Analysis Batch: 9307

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	243.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-7011-A-11-E MS

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	339.1	F1	mg/Kg		57	90 - 110

Lab Sample ID: 880-7011-A-11-F MSD

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	321.0	F1	mg/Kg		53	90 - 110	6	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Total/NA	Solid	5035	
MB 880-8975/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1390-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1390-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 9324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Total/NA	Solid	8021B	8975
MB 880-8975/5-A	Method Blank	Total/NA	Solid	8021B	8975
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	8021B	8975
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8975
890-1390-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8975
890-1390-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	8975

Analysis Batch: 9366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Soluble	Solid	DI Leach	
MB 880-9210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1393-1	SS02	Soluble	Solid	300.0	9210
MB 880-9210/1-A	Method Blank	Soluble	Solid	300.0	9210
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	300.0	9210
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9210
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	9210
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9210

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Client Sample ID: SS02

Lab Sample ID: 890-1393-1

Date Collected: 10/08/21 12:07

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8975	10/11/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9324	10/12/21 21:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9366	10/13/21 08:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 02:59	AJ	XEN MID
Soluble	Leach	DI Leach			9210	10/11/21 12:29	CH	XEN MID
Soluble	Analysis	300.0		1	9307	10/12/21 16:35	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

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

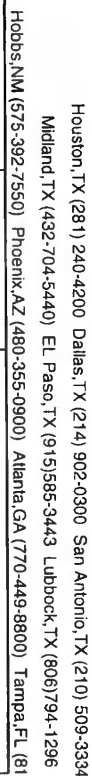
Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1393-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1393-1	SS02	Solid	10/08/21 12:07	10/08/21 15:50	0.5

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



Chain of Custody

Work Order No:

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input checked="" type="checkbox"/> RC <input type="checkbox"/> \$perfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> TT/UST <input type="checkbox"/> RP <input type="checkbox"/> L ₁ /vel IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible][illegible]

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco 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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	10-8-21 1550	2		
3			4		
5			6		

Printed Date: 06/10/2025 09:08

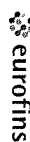
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad, NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1393-1

SDG Number: 31403236.022.0129

Login Number: 1393

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1393-1

SDG Number: 31403236.022.0129

Login Number: 1393

List Number: 2

Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland

List Creation: 10/12/21 11:43 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1392-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/13/2021 4:21:47 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1392-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Job ID: 890-1392-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1392-1****Receipt**

The sample was received on 10/8/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8975 and analytical batch 880-9324 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9210 and analytical batch 880-9307 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Client Sample ID: SS03

Lab Sample ID: 890-1392-1

Date Collected: 10/08/21 12:12

Matrix: Solid

Date Received: 10/08/21 15:50

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		10/11/21 11:00	10/12/21 20:56	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:56	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/11/21 11:00	10/12/21 20:56	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:56	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/11/21 11:00	10/12/21 20:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	10/11/21 11:00	10/12/21 20:56	1
1,4-Difluorobenzene (Surr)	126		70 - 130	10/11/21 11:00	10/12/21 20:56	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			10/13/21 08:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 15:09	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	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 02:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 02:39	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 02:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	10/12/21 14:04	10/13/21 02:39	1
o-Terphenyl	122		70 - 130	10/12/21 14:04	10/13/21 02:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.3		5.04	mg/Kg			10/12/21 16:30	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1390-A-1-B MSD	Matrix Spike Duplicate	90	96
890-1390-A-1-F MS	Matrix Spike	74	89
890-1392-1	SS03	93	126
LCS 880-8975/1-A	Lab Control Sample	96	101
LCSD 880-8975/2-A	Lab Control Sample Dup	82	93
MB 880-8975/5-A	Method Blank	113	109
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1392-1	SS03	107	122
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8975/5-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8975

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/11/21 11:00	10/12/21 19:53	1
1,4-Difluorobenzene (Surr)	109		70 - 130	10/11/21 11:00	10/12/21 19:53	1

Lab Sample ID: LCS 880-8975/1-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08714		mg/Kg		87	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1005		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08029		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-8975/2-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08186		mg/Kg		82	70 - 130	6	35
Toluene	0.100	0.09746		mg/Kg		97	70 - 130	4	35
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1547		mg/Kg		77	70 - 130	10	35
o-Xylene	0.100	0.07544		mg/Kg		75	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-1390-A-1-B MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.06752	F1	mg/Kg		68	70 - 130	28	35
Toluene	<0.00199	U F1	0.100	0.08128		mg/Kg		81	70 - 130	21	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1390-A-1-B MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00199	U F1	0.100	0.07810		mg/Kg		78	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1340	F1	mg/Kg		67	70 - 130	16	35
o-Xylene	<0.00199	U F1	0.100	0.06389	F1	mg/Kg		64	70 - 130	14	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-1390-A-1-F MS

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.100	0.05117	F1	mg/Kg		51	70 - 130
Toluene	<0.00199	U F1	0.100	0.06554	F1	mg/Kg		65	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.06790	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1146	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05541	F1	mg/Kg		55	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	74		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	101		70 - 130									
o-Terphenyl	101		70 - 130									

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130			
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130			
	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	118		70 - 130									
o-Terphenyl	115		70 - 130									

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20	
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20	
	MSD	MSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	118		70 - 130									
o-Terphenyl	113		70 - 130									

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9210/1-A

Matrix: Solid

Analysis Batch: 9307

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			10/12/21 13:31	1

Lab Sample ID: LCS 880-9210/2-A

Matrix: Solid

Analysis Batch: 9307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9210/3-A

Matrix: Solid

Analysis Batch: 9307

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	243.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-7011-A-11-E MS

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	339.1	F1	mg/Kg		57	90 - 110

Lab Sample ID: 880-7011-A-11-F MSD

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	321.0	F1	mg/Kg		53	90 - 110	6	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Total/NA	Solid	5035	
MB 880-8975/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1390-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1390-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 9324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Total/NA	Solid	8021B	8975
MB 880-8975/5-A	Method Blank	Total/NA	Solid	8021B	8975
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	8021B	8975
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8975
890-1390-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8975
890-1390-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	8975

Analysis Batch: 9366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Soluble	Solid	DI Leach	
MB 880-9210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1392-1	SS03	Soluble	Solid	300.0	9210
MB 880-9210/1-A	Method Blank	Soluble	Solid	300.0	9210
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	300.0	9210
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9210
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	9210
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9210

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Client Sample ID: SS03

Lab Sample ID: 890-1392-1

Date Collected: 10/08/21 12:12

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8975	10/11/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9324	10/12/21 20:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9366	10/13/21 08:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 02:39	AJ	XEN MID
Soluble	Leach	DI Leach			9210	10/11/21 12:29	CH	XEN MID
Soluble	Analysis	300.0		1	9307	10/12/21 16:30	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1392-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1392-1	SS03	Solid	10/08/21 12:12	10/08/21 15:50	0.5

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



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

Chain of Custody

Work Order No: _____


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Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO
Address:	3300 North A Street Bldg 1, Unit 222	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com, payton.benner@wsp.com

Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> T/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____		Work Order Comments
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	----------------------------

Project Name:	Tiger CS	Turn Around		
Project Number:	31403236.022.0129	Routine	<input type="checkbox"/>	
P.O. Number:		Rush: 2 DAY		
Sampler's Name:	Payton Benner	Due Date:		

SAMPLE RECEIPT	Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Water: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Temperature (°C):	2.4/2.2	Thermometer ID: TMM-603
	Received Inact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor: 0.2
	Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Total Containers: 1

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST										Work Order Notes
SS03	S	10/8/2021	12:12	0.5'	1	X	X	X	 890-1392 Chain of Custody										CC:2027031001 NAPP2123231376
																			TAT starts the day received by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST										Work Order Notes
SS03	S	10/8/2021	12:12	0.5'	1	X	X	X											Discrete

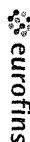
Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. <i>Payton Benner</i>	<i>Payton Benner</i>	10-8-21 1552			
3					
5					

Eurofins Xenco, Carlsbad

1089 N Canal St
Carlsbad, NM 88220

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

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab)						Sampler
Client Contact:						Kramer Jessica
Shipping/Receiving						E-Mail jessica.kramer@eurofinsllc.com
Company						Accreditations Required (See note) NELAP - Louisiana NELAP - Texas
Address						COC No. 890-456 1
City						State of Origin New Mexico
Midland						Page 1 of 1
State Zip						
TX, 79701						
Phone:						
432-704-5440(Tel)						
Email						
Project Name:						
Tiger CS						
Site						
SSOW#:						
Due Date Requested						
10/13/2021						
TAT Requested (days)						
Analysis Requested						
Field Filtered Sample (Yes or No)						
Perform MS/MSD (Yes or No)						
8015MOD_NM/8015NM_S_Prep (MOD) Full TPH						
8015MOD_Calc						
300_ORGFM_28D/DI_LEACH Chloride						
8021B/5035FP_Calc (MOD) BTEX						
Total_BTEX_GCV						
Total Number of containers						
Special Instructions/Note:						
Preservation Codes						
A - HCL						M - Hexane
B - NaOH						N - None
C - Zn Acetate						O - AshK ₂ O
D - Nitric Acid						P - Na ₂ O ₄ S
E - NaHSO ₄						Q - Na ₂ SO ₃
F - MeOH						R - Na ₂ SO ₃
G - Amchlor						S - H ₂ SO ₄
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:						

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1392-1

SDG Number: 31403236.022.0129

Login Number: 1392

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1392-1

SDG Number: 31403236.022.0129

Login Number: 1392

List Number: 2

Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland

List Creation: 10/12/21 11:44 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1390-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

Revision: 1

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/25/2021 2:35:01 PM

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

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results through

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1390-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Job ID: 890-1390-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1390-1

REVISION

The report being provided is a revision of the original report sent on 10/13/2021. The report (revision 1) is being revised due to Per client email, changed sample ID from SS05 to SS04.

Report revision history

Receipt

The sample was received on 10/8/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-8975 and analytical batch 880-9324 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9210 and analytical batch 880-9307 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Client Sample ID: SS04

Lab Sample ID: 890-1390-1

Date Collected: 10/08/21 12:31

Matrix: Solid

Date Received: 10/08/21 15:50

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:15	1
Toluene	<0.00199	U F1	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:15	1
Ethylbenzene	<0.00199	U F1	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:15	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		10/11/21 11:00	10/12/21 20:15	1
o-Xylene	<0.00199	U F1	0.00199	mg/Kg		10/11/21 11:00	10/12/21 20:15	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		10/11/21 11:00	10/12/21 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	10/11/21 11:00	10/12/21 20:15	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/11/21 11:00	10/12/21 20:15	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			10/13/21 08:57	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			10/13/21 15:09	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		10/12/21 14:04	10/13/21 01:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/13/21 01:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/13/21 01:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	10/12/21 14:04	10/13/21 01:57	1
o-Terphenyl	120		70 - 130	10/12/21 14:04	10/13/21 01:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.7		4.98	mg/Kg			10/12/21 16:19	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1390-1	SS04	101	81
890-1390-1 MS	SS04	74	89
890-1390-1 MSD	SS04	90	96
LCS 880-8975/1-A	Lab Control Sample	96	101
LCSD 880-8975/2-A	Lab Control Sample Dup	82	93
MB 880-8975/5-A	Method Blank	113	109

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1390-1	SS04	105	120
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8975/5-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8975

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/11/21 11:00	10/12/21 19:53	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		10/11/21 11:00	10/12/21 19:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/11/21 11:00	10/12/21 19:53	1
1,4-Difluorobenzene (Surr)	109		70 - 130	10/11/21 11:00	10/12/21 19:53	1

Lab Sample ID: LCS 880-8975/1-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08714		mg/Kg		87	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1005		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08029		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-8975/2-A

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08186		mg/Kg		82	70 - 130	6	35
Toluene	0.100	0.09746		mg/Kg		97	70 - 130	4	35
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1547		mg/Kg		77	70 - 130	10	35
o-Xylene	0.100	0.07544		mg/Kg		75	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-1390-1 MS

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.100	0.05117	F1	mg/Kg		51	70 - 130
Toluene	<0.00199	U F1	0.100	0.06554	F1	mg/Kg		65	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1390-1 MS

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U F1	0.100	0.06790	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1146	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05541	F1	mg/Kg		55	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	74		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: 890-1390-1 MSD

Matrix: Solid

Analysis Batch: 9324

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 8975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U F1	0.100	0.06752	F1	mg/Kg		68	70 - 130	28	35
Toluene	<0.00199	U F1	0.100	0.08128		mg/Kg		81	70 - 130	21	35
Ethylbenzene	<0.00199	U F1	0.100	0.07810		mg/Kg		78	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1340	F1	mg/Kg		67	70 - 130	16	35
o-Xylene	<0.00199	U F1	0.100	0.06389	F1	mg/Kg		64	70 - 130	14	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	984.4		mg/Kg		98	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

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 F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	113		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9210/1-A

Matrix: Solid

Analysis Batch: 9307

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			10/12/21 13:31	1

Lab Sample ID: LCS 880-9210/2-A

Matrix: Solid

Analysis Batch: 9307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9210/3-A

Matrix: Solid

Analysis Batch: 9307

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	243.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-7011-A-11-E MS

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	339.1	F1	mg/Kg		57	90 - 110

Lab Sample ID: 880-7011-A-11-F MSD

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	321.0	F1	mg/Kg		53	90 - 110	6	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Total/NA	Solid	5035	
MB 880-8975/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1390-1 MS	SS04	Total/NA	Solid	5035	
890-1390-1 MSD	SS04	Total/NA	Solid	5035	

Analysis Batch: 9324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Total/NA	Solid	8021B	8975
MB 880-8975/5-A	Method Blank	Total/NA	Solid	8021B	8975
LCS 880-8975/1-A	Lab Control Sample	Total/NA	Solid	8021B	8975
LCSD 880-8975/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8975
890-1390-1 MS	SS04	Total/NA	Solid	8021B	8975
890-1390-1 MSD	SS04	Total/NA	Solid	8021B	8975

Analysis Batch: 9366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Soluble	Solid	DI Leach	
MB 880-9210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1390-1	SS04	Soluble	Solid	300.0	9210
MB 880-9210/1-A	Method Blank	Soluble	Solid	300.0	9210
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	300.0	9210
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9210
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	9210
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9210

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Client Sample ID: SS04

Lab Sample ID: 890-1390-1

Date Collected: 10/08/21 12:31

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8975	10/11/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	9324	10/12/21 20:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9366	10/13/21 08:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:09	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 01:57	AJ	XEN MID
Soluble	Leach	DI Leach			9210	10/11/21 12:29	CH	XEN MID
Soluble	Analysis	300.0		1	9307	10/12/21 16:19	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

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

Eurofins Xenco, Carlsbad

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1390-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1390-1	SS04	Solid	10/08/21 12:31	10/08/21 15:50	0.5

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



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Hobbs, NM (575-392-7750)


Chain of Custody

Work Order No.:

Page ____ of ____

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO
Address:	3300 North A Street Bldg 1, Unit 222	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com, dayton.benner@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input checked="" type="checkbox"/> RC <input type="checkbox"/> perfund <input type="checkbox"/>	
State of Project:	
Reporting Level: II <input type="checkbox"/> Level III <input type="checkbox"/> JT/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADaBT <input type="checkbox"/> Other:	

Project Name:	Tiger CS	Turn Around	ANALYSIS REQUEST  890-1390 Chain of Custody	Work Order Notes CC:2027031001 NAPP2123231376	
Project Number:	31403236.022.0129	Routine			
P.O. Number:		Rush: 2 DAY			
Sampler's Name:	Payton Benner	Due Date:			
SAMPLE RECEIPT Temperature (°C): 2.4/2.2 Received Inact: Yes No Cooler Custody Seals: Yes No N/A Sample Custody Seals: Yes No N/A					
Temp Blank: Yes No Wet Ice: Yes No Thermometer ID: TW M-507 Correction Factor: 0.2 Total Containers:					
Number of Containers PA 8015) EPA 0=8021) de (EPA 300.0)					

[illegible]

Total	200.7 / 6010	200.8 / 6020:	
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP	6010:	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
Circle Method(s) and Metal(s) to be analyzed			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. Such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$7500 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 <i>SPENCER</i>	<i>Clare GUY</i>	10-2-21 1550	2		
3			4		
5			6		

Revised Date 05/11/18 Row 2018

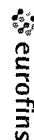
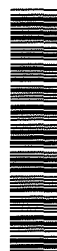
Eurofins Xenco, Carlsbad

1089 N Canal St

Carlsbad, NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1390-1

SDG Number: 31403236.022.0129

Login Number: 1390**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Xenco, Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1390-1
SDG Number: 31403236.022.0129**Login Number: 1390****List Number: 2****Creator: Lowe, Katie****List Source: Eurofins Xenco, Midland****List Creation: 10/12/21 11:45 AM**

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1389-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

Revision: 1

For:

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

Attn: Dan Moir

A handwritten signature in black ink, appearing to read "Jessica Kramer".

Authorized for release by:
10/25/2021 2:32:05 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1389-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

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
F1	MS and/or MSD recovery 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Job ID: 890-1389-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1389-1

REVISION

The report being provided is a revision of the original report sent on 10/13/2021. The report (revision 1) is being revised due to Per client email, changed sample ID from SS06 to SS05.

Report revision history

Receipt

The sample was received on 10/8/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-1382-A-1-I). 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.

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-9210 and analytical batch 880-9307 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Client Sample ID: SS05

Lab Sample ID: 890-1389-1

Date Collected: 10/08/21 12:25

Matrix: Solid

Date Received: 10/08/21 15:50

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/11/21 16:18	10/12/21 20:46	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/11/21 16:18	10/12/21 20:46	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/11/21 16:18	10/12/21 20:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/11/21 16:18	10/12/21 20:46	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/11/21 16:18	10/12/21 20:46	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/11/21 16:18	10/12/21 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130	10/11/21 16:18	10/12/21 20:46	1
1,4-Difluorobenzene (Surr)	78		70 - 130	10/11/21 16:18	10/12/21 20:46	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			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.6		49.9	mg/Kg			10/13/21 15:17	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		10/12/21 14:04	10/13/21 01:36	1
Diesel Range Organics (Over C10-C28)	58.6		49.9	mg/Kg		10/12/21 14:04	10/13/21 01:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/13/21 01:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	10/12/21 14:04	10/13/21 01:36	1
o-Terphenyl	120		70 - 130	10/12/21 14:04	10/13/21 01:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.4		4.99	mg/Kg			10/12/21 16:13	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1382-A-1-G MS	Matrix Spike	119	77
890-1382-A-1-H MSD	Matrix Spike Duplicate	118	88
890-1389-1	SS05	142 S1+	78
LCS 880-8942/1-A	Lab Control Sample	112	88
LCSD 880-8942/2-A	Lab Control Sample Dup	116	76
MB 880-8942/5-B	Method Blank	112	79
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1389-1	SS05	106	120
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8942/5-B

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8942

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 16:18	10/12/21 13:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/11/21 16:18	10/12/21 13:02	1

Lab Sample ID: LCS 880-8942/1-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09008		mg/Kg		90	70 - 130
Toluene	0.100	0.09025		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09403		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09732		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-8942/2-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08283		mg/Kg		83	70 - 130	8	35
Toluene	0.100	0.08609		mg/Kg		86	70 - 130	5	35
Ethylbenzene	0.100	0.09041		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1906		mg/Kg		95	70 - 130	3	35
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0990	0.08900		mg/Kg		89	70 - 130
Toluene	<0.00199	U	0.0990	0.09358		mg/Kg		94	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.0114		0.0990	0.1000		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.00511		0.198	0.2115		mg/Kg		104	70 - 130
o-Xylene	0.0275		0.0990	0.1061		mg/Kg		79	70 - 130

	MS %Recovery	MS Qualifier	Limits
Surrogate			
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 890-1382-A-1-H MSD

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U	0.0992	0.09504		mg/Kg		95	70 - 130	7	35
Toluene	<0.00199	U	0.0992	0.09440		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.0114		0.0992	0.09963		mg/Kg		89	70 - 130	0	35
m-Xylene & p-Xylene	0.00511		0.198	0.2082		mg/Kg		102	70 - 130	2	35
o-Xylene	0.0275		0.0992	0.1047		mg/Kg		78	70 - 130	1	35

	MSD %Recovery	MSD Qualifier	Limits
Surrogate			
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Surrogate						
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20
Surrogate		LCSD	LCSD								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	101		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

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 F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		
Surrogate		MS	MS								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	115		70 - 130								

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

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 F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20
Surrogate		MSD	MSD								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	113		70 - 130								

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9210/1-A

Matrix: Solid

Analysis Batch: 9307

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			10/12/21 13:31	1

Lab Sample ID: LCS 880-9210/2-A

Matrix: Solid

Analysis Batch: 9307

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-9210/3-A

Matrix: Solid

Analysis Batch: 9307

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	243.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-7011-A-11-E MS

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	339.1	F1	mg/Kg		57	90 - 110

Lab Sample ID: 880-7011-A-11-F MSD

Matrix: Solid

Analysis Batch: 9307

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	58.4	F1	495	321.0	F1	mg/Kg		53	90 - 110	6	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Total/NA	Solid	5035	
MB 880-8942/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 9282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Total/NA	Solid	8021B	8942
MB 880-8942/5-B	Method Blank	Total/NA	Solid	8021B	8942
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	8021B	8942
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8942
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	8942
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8942

Analysis Batch: 9297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Soluble	Solid	DI Leach	
MB 880-9210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1389-1	SS05	Soluble	Solid	300.0	9210
MB 880-9210/1-A	Method Blank	Soluble	Solid	300.0	9210
LCS 880-9210/2-A	Lab Control Sample	Soluble	Solid	300.0	9210
LCSD 880-9210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9210
880-7011-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	9210
880-7011-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9210

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Client Sample ID: SS05

Lab Sample ID: 890-1389-1

Date Collected: 10/08/21 12:25

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 20:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 01:36	AJ	XEN MID
Soluble	Leach	DI Leach			9210	10/11/21 12:29	CH	XEN MID
Soluble	Analysis	300.0		1	9307	10/12/21 16:13	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

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

Eurofins Xenco, Carlsbad

Method Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

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

Eurofins Xenco, Carlsbad

Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1389-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1389-1	SS05	Solid	10/08/21 12:25	10/08/21 15:50	0.5

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



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

Chain of Custody

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO
Address:	3300 North A Street Bldg 1, Unit 222	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com, payton.benner@wsp.com

Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Groundfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> T/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:	Tiger CS	Turn Around			
Project Number:	31403236.022.0129	Routine	<input type="checkbox"/>		
P.O. Number:		Rush: 2 DA-1			
Sampler's Name:	Payton Benner	Due Date:			
SAMPLE RECEIPT					
Temperature (°C):	24/2.2	Temp Blank:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Well Ice:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Received Intact:	Yes <input checked="" type="radio"/> No <input type="radio"/>	Thermometer ID	TMM-007		
Cooler Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Correction Factor:	-0.2		
Sample Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Total Containers:			
Sample Identification					
SS06	S	Date Sampled	10/8/2021	Time Sampled	12:25
		Depth	0.5'		
ANALYSIS REQUEST					
Number of Containers: 1					
TPH (EPA 8015) <input checked="" type="checkbox"/>					
BTEX (EPA 0-8021) <input checked="" type="checkbox"/>					
Chloride (EPA 300.0) <input checked="" type="checkbox"/>					
890-1389 Chain of Custody					
Work Order Notes					
CC:2027031001 NAPP2123231376					
TAT starts the day received by the lab. If received by 4:30pm					
Sample Comments					
Discrete					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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
<i>Payton Benner</i>	<i>Chelup</i>	10-8-21 1530			

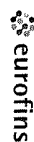
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1389-1

SDG Number: 31403236.022.0129

Login Number: 1389**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Xenco, Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1389-1
SDG Number: 31403236.022.0129**Login Number: 1389****List Number: 2****Creator: Lowe, Katie****List Source: Eurofins Xenco, Midland****List Creation: 10/12/21 11:45 AM**

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1388-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

Revision: 1

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/25/2021 2:28:19 PM

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

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results through

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1388-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Job ID: 890-1388-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1388-1

REVISION

The report being provided is a revision of the original report sent on 10/13/2021. The report (revision 1) is being revised due to Per client email, changed sample ID from SS07 to SS06.

Report revision history

Receipt

The sample was received on 10/8/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-1382-A-1-I). 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.

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Client Sample ID: SS06

Lab Sample ID: 890-1388-1

Date Collected: 10/08/21 12:53

Matrix: Solid

Date Received: 10/08/21 15:50

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 20:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 20:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 20:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/11/21 16:18	10/12/21 20:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/11/21 16:18	10/12/21 20:25	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/11/21 16:18	10/12/21 20:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	10/11/21 16:18	10/12/21 20:25	1
1,4-Difluorobenzene (Surr)	83		70 - 130	10/11/21 16:18	10/12/21 20:25	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			10/12/21 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/13/21 15:17	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	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 00:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 00:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/12/21 14:04	10/13/21 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/12/21 14:04	10/13/21 00:55	1
o-Terphenyl	126		70 - 130	10/12/21 14:04	10/13/21 00:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83.1		5.00	mg/Kg			10/12/21 15:49	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1382-A-1-G MS	Matrix Spike	119	77
890-1382-A-1-H MSD	Matrix Spike Duplicate	118	88
890-1388-1	SS06	129	83
LCS 880-8942/1-A	Lab Control Sample	112	88
LCSD 880-8942/2-A	Lab Control Sample Dup	116	76
MB 880-8942/5-B	Method Blank	112	79

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1388-1	SS06	110	126
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8942/5-B

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8942

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 16:18	10/12/21 13:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/11/21 16:18	10/12/21 13:02	1

Lab Sample ID: LCS 880-8942/1-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09008		mg/Kg		90	70 - 130
Toluene	0.100	0.09025		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09403		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09732		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-8942/2-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08283		mg/Kg		83	70 - 130	8	35
Toluene	0.100	0.08609		mg/Kg		86	70 - 130	5	35
Ethylbenzene	0.100	0.09041		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1906		mg/Kg		95	70 - 130	3	35
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0990	0.08900		mg/Kg		89	70 - 130
Toluene	<0.00199	U	0.0990	0.09358		mg/Kg		94	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.0114		0.0990	0.1000		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.00511		0.198	0.2115		mg/Kg		104	70 - 130
o-Xylene	0.0275		0.0990	0.1061		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 890-1382-A-1-H MSD

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U	0.0992	0.09504		mg/Kg		95	70 - 130	7	35
Toluene	<0.00199	U	0.0992	0.09440		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.0114		0.0992	0.09963		mg/Kg		89	70 - 130	0	35
m-Xylene & p-Xylene	0.00511		0.198	0.2082		mg/Kg		102	70 - 130	2	35
o-Xylene	0.0275		0.0992	0.1047		mg/Kg		78	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	984.4		mg/Kg		98	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

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 F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	113		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9281/1-A

Matrix: Solid

Analysis Batch: 9303

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			10/12/21 12:50	1

Lab Sample ID: LCS 880-9281/2-A

Matrix: Solid

Analysis Batch: 9303

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.8		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-9281/3-A

Matrix: Solid

Analysis Batch: 9303

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	254.3		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 880-7069-A-10-E MS

Matrix: Solid

Analysis Batch: 9303

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	20.5		497	547.9		mg/Kg		106	90 - 110

Lab Sample ID: 880-7069-A-10-F MSD

Matrix: Solid

Analysis Batch: 9303

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	20.5		497	548.0		mg/Kg		106	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Total/NA	Solid	5035	
MB 880-8942/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 9282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Total/NA	Solid	8021B	8942
MB 880-8942/5-B	Method Blank	Total/NA	Solid	8021B	8942
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	8021B	8942
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8942
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	8942
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8942

Analysis Batch: 9297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Soluble	Solid	DI Leach	
MB 880-9281/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9281/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9281/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9281 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7069-A-10-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7069-A-10-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1388-1	SS06	Soluble	Solid	300.0	9281
MB 880-9281/1-A	Method Blank	Soluble	Solid	300.0	9281
LCS 880-9281/2-A	Lab Control Sample	Soluble	Solid	300.0	9281
LCSD 880-9281/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9281
880-7069-A-10-E MS	Matrix Spike	Soluble	Solid	300.0	9281
880-7069-A-10-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9281

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Client Sample ID: SS06

Lab Sample ID: 890-1388-1

Date Collected: 10/08/21 12:53

Matrix: Solid

Date Received: 10/08/21 15:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 20:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 00:55	AJ	XEN MID
Soluble	Leach	DI Leach			9281	10/12/21 08:19	CH	XEN MID
Soluble	Analysis	300.0		1	9303	10/12/21 15:49	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

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

Eurofins Xenco, Carlsbad

Method Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

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

Eurofins Xenco, Carlsbad

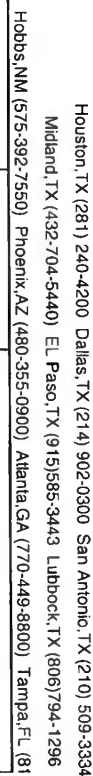
Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1388-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1388-1	SS06	Solid	10/08/21 12:53	10/08/21 15:50	0.5

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



Chain of Custody

Work Order No:

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level: II <input type="checkbox"/> Level III <input type="checkbox"/> T/U/ST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

[illegible][illegible]

Total	200.7 / 6010	200.8 / 6620:	
Circle Method(s) and Metal(s) to be analyzed			
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP	6010:	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
			1631 / 245.1 / 7470 / 7471 : Hg

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1. <i>[Signature]</i>	<i>[Signature]</i>	11-8-21 1550	2		
3			4		
5			6		

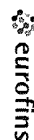
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1388-1

SDG Number: 31403236.022.0129

Login Number: 1388**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Xenco, Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1388-1

SDG Number: 31403236.022.0129

Login Number: 1388**List Number: 2****Creator: Lowe, Katie****List Source: Eurofins Xenco, Midland****List Creation: 10/12/21 11:45 AM**

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1387-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: Tiger CS

Revision: 1

For:

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

Attn: Dan Moir

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

Authorized for release by:
10/25/2021 2:25:35 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Tiger CS

Laboratory Job ID: 890-1387-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Job ID: 890-1387-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1387-1

REVISION

The report being provided is a revision of the original report sent on 10/13/2021. The report (revision 1) is being revised due to Per client email, changed sample ID from SS08 to SS07.

Report revision history

Receipt

The sample was received on 10/8/2021 3:56 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-1382-A-1-I). 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.

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9312 and analytical batch 880-9261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-9312/1-A). 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: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Client Sample ID: SS07

Lab Sample ID: 890-1387-1

Date Collected: 10/08/21 12:56

Matrix: Solid

Date Received: 10/08/21 15:56

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		10/11/21 16:18	10/12/21 20:05	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 20:05	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 20:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/11/21 16:18	10/12/21 20:05	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/11/21 16:18	10/12/21 20:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/11/21 16:18	10/12/21 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	10/11/21 16:18	10/12/21 20:05	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/11/21 16:18	10/12/21 20:05	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			10/12/21 10:57	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			10/13/21 15:17	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		10/12/21 14:04	10/13/21 00:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/13/21 00:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/12/21 14:04	10/13/21 00:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	10/12/21 14:04	10/13/21 00:34	1
o-Terphenyl	120		70 - 130	10/12/21 14:04	10/13/21 00:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.1		4.95	mg/Kg			10/12/21 15:42	1

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1382-A-1-G MS	Matrix Spike	119	77
890-1382-A-1-H MSD	Matrix Spike Duplicate	118	88
890-1387-1	SS07	122	80
LCS 880-8942/1-A	Lab Control Sample	112	88
LCSD 880-8942/2-A	Lab Control Sample Dup	116	76
MB 880-8942/5-B	Method Blank	112	79

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1382-A-1-K MS	Matrix Spike	118	115
890-1382-A-1-L MSD	Matrix Spike Duplicate	118	113
890-1387-1	SS07	107	120
LCS 880-9312/2-A	Lab Control Sample	92	90
LCSD 880-9312/3-A	Lab Control Sample Dup	101	101
MB 880-9312/1-A	Method Blank	115	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8942/5-B

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8942

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 16:18	10/12/21 13:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 16:18	10/12/21 13:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 16:18	10/12/21 13:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130	10/11/21 16:18	10/12/21 13:02	1

Lab Sample ID: LCS 880-8942/1-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09008		mg/Kg		90	70 - 130
Toluene	0.100	0.09025		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09403		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09732		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-8942/2-A

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08283		mg/Kg		83	70 - 130	8	35
Toluene	0.100	0.08609		mg/Kg		86	70 - 130	5	35
Ethylbenzene	0.100	0.09041		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1906		mg/Kg		95	70 - 130	3	35
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0990	0.08900		mg/Kg		89	70 - 130
Toluene	<0.00199	U	0.0990	0.09358		mg/Kg		94	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1382-A-1-G MS

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.0114		0.0990	0.1000		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.00511		0.198	0.2115		mg/Kg		104	70 - 130
o-Xylene	0.0275		0.0990	0.1061		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 890-1382-A-1-H MSD

Matrix: Solid

Analysis Batch: 9282

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 8942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U	0.0992	0.09504		mg/Kg		95	70 - 130	7	35
Toluene	<0.00199	U	0.0992	0.09440		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.0114		0.0992	0.09963		mg/Kg		89	70 - 130	0	35
m-Xylene & p-Xylene	0.00511		0.198	0.2082		mg/Kg		102	70 - 130	2	35
o-Xylene	0.0275		0.0992	0.1047		mg/Kg		78	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

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

Lab Sample ID: MB 880-9312/1-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9312

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		10/12/21 14:04	10/12/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/12/21 14:04	10/12/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/12/21 14:04	10/12/21 20:01	1
o-Terphenyl	133	S1+	70 - 130	10/12/21 14:04	10/12/21 20:01	1

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1102		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	973.2		mg/Kg		97	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCS 880-9312/2-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9312

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-9312/3-A

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9312

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1032		mg/Kg		103	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	984.4		mg/Kg		98	70 - 130	1	20
Surrogate	LCSD	LCSD									
	%Recovery	Qualifier									
1-Chlorooctane	101										
o-Terphenyl	101										

Lab Sample ID: 890-1382-A-1-K MS

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9312

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 F1	997	1314	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	124		997	1290		mg/Kg		117	70 - 130		
Surrogate	MS	MS									
	%Recovery	Qualifier									
1-Chlorooctane	118										
o-Terphenyl	115										

Lab Sample ID: 890-1382-A-1-L MSD

Matrix: Solid

Analysis Batch: 9261

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9312

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 F1	1000	1419	F1	mg/Kg		142	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	124		1000	1297		mg/Kg		117	70 - 130	1	20
Surrogate	MSD	MSD									
	%Recovery	Qualifier									
1-Chlorooctane	118										
o-Terphenyl	113										

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9281/1-A

Matrix: Solid

Analysis Batch: 9303

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			10/12/21 12:50	1

Lab Sample ID: LCS 880-9281/2-A

Matrix: Solid

Analysis Batch: 9303

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.8		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-9281/3-A

Matrix: Solid

Analysis Batch: 9303

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	254.3		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 880-7069-A-10-E MS

Matrix: Solid

Analysis Batch: 9303

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	20.5		497	547.9		mg/Kg		106	90 - 110

Lab Sample ID: 880-7069-A-10-F MSD

Matrix: Solid

Analysis Batch: 9303

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	20.5		497	548.0		mg/Kg		106	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Total/NA	Solid	5035	
MB 880-8942/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 9282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Total/NA	Solid	8021B	8942
MB 880-8942/5-B	Method Blank	Total/NA	Solid	8021B	8942
LCS 880-8942/1-A	Lab Control Sample	Total/NA	Solid	8021B	8942
LCSD 880-8942/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	8942
890-1382-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	8942
890-1382-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	8942

Analysis Batch: 9297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 9261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Total/NA	Solid	8015B NM	9312
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015B NM	9312
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9312
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9312
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015B NM	9312
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9312

Prep Batch: 9312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Total/NA	Solid	8015NM Prep	
MB 880-9312/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9312/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9312/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1382-A-1-K MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1382-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Soluble	Solid	DI Leach	
MB 880-9281/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9281/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9281/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

HPLC/IC (Continued)

Leach Batch: 9281 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7069-A-10-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7069-A-10-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1387-1	SS07	Soluble	Solid	300.0	9281
MB 880-9281/1-A	Method Blank	Soluble	Solid	300.0	9281
LCS 880-9281/2-A	Lab Control Sample	Soluble	Solid	300.0	9281
LCSD 880-9281/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9281
880-7069-A-10-E MS	Matrix Spike	Soluble	Solid	300.0	9281
880-7069-A-10-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9281

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Client Sample ID: SS07

Lab Sample ID: 890-1387-1

Date Collected: 10/08/21 12:56

Matrix: Solid

Date Received: 10/08/21 15:56

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8942	10/11/21 16:18	KL	XEN MID
Total/NA	Analysis	8021B		1	9282	10/12/21 20:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9297	10/12/21 10:57	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9387	10/13/21 15:17	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9312	10/12/21 14:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9261	10/13/21 00:34	AJ	XEN MID
Soluble	Leach	DI Leach			9281	10/12/21 08:19	CH	XEN MID
Soluble	Analysis	300.0		1	9303	10/12/21 15:42	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

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

Eurofins Xenco, Carlsbad

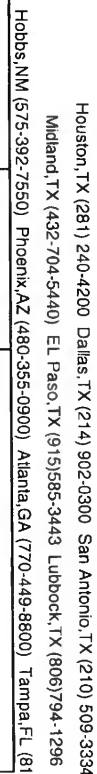
Sample Summary

Client: WSP USA Inc.
Project/Site: Tiger CS

Job ID: 890-1387-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1387-1	SS07	Solid	10/08/21 12:56	10/08/21 15:56	0.5

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



Chain of Custody

Work Order No:

Project Manager:		Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:		WSP USA	Company Name:	XTO
Address:		3300 North A Street Bldg 1, Unit 222	Address: 3104 E Green Street	
City, State ZIP:		Midland, Texas 79705	City, State ZIP: Carlsbad, NM 88220	
Phone:		817-683-2503	Email:	kalei.jennings@wsp.com, payton.benner@wsp.com

Work Order Comments				
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> rowfields <input type="checkbox"/> RC <input type="checkbox"/> \$perfund <input type="checkbox"/>				
State of Project:				
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> T/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>				
Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: <input type="checkbox"/>				

[illegible]

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	<i>[Signature]</i>	<i>[Signature]</i>	10-8-21 1550	2		
3				4		
5				6		

Revised Date 05/11/18 Rev 2015

Eurofins Xenco, Carlsbad

1089 N Canal St

Carlsbad NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1387-1

SDG Number: 31403236.022.0129

Login Number: 1387**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Xenco, Carlsbad**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1387-1

SDG Number: 31403236.022.0129

Login Number: 1387**List Number: 2****Creator: Lowe, Katie****List Source: Eurofins Xenco, Midland****List Creation: 10/12/21 11:46 AM**

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

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 60501

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 60501
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2123231376 TIGER COMPRESSOR STATION, thank you. This closure is approved.	3/14/2022