

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2106141780
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Armstrong Energy Corporation	OGRID: 1092
Contact Name: Kyle Alpers	Contact Telephone: 575-625-2222
Contact email: kalpers@aecn.com	Incident #:
Contact mailing address: P.O. Box 1973 Roswell, NM 88202-1973	

Location of Release Source

Latitude 32.92718 Longitude -103.43903
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Boyce 15 #001	Site Type: Production Well Facility
Date Release Discovered: 1/25/2021	API# (if applicable): 30-025-34591

Unit Letter	Section	Township	Range	County
A	15	16S	35E	LEA

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls): 120 bbl	Volume Recovered (bbls): 0.0 bbl
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The tank sprung a leak causing crude oil to spill into the bermed containment. A third-party contractor has been retained for remediation activities.

Form C-141

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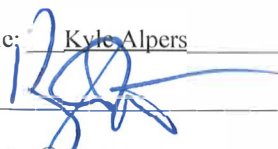
State of New Mexico
Oil Conservation Division

Incident ID	nAPP2106141780
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Kyler Alpers to Kerry Fortner, NMOCD via phone on Monday, January 25, 2021 3:00 PM.	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why: N/A
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Kyle Alpers</u> Title: <u>VP Engineering</u> Signature:  Date: <u>01/26/2021</u> email: <u>kalpers@acnm.com</u> Telephone: <u>575-625-2222</u>
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>5/10/2021</u>

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State of New Mexico
Oil Conservation Division

Incident ID	nAPP2106141780
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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?	> 51 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

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

Printed Name: Karla AlvarezTitle: VP EngineeringSignature: Date: 04/27/2021email: kalpers@aecnm.comTelephone: 575-625-2222**OCD Only**Received by: Ramona MarcusDate: 5/10/2021

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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 OCD District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health 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: Kyle Alpers Title: VP Engineering
 Signature:  Date: 04/27/21
 email: kalpers@aecnm.com Telephone: 575-625-2222

OCD Only

Received by: Ramona Marcus Date: 5/10/2021

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: 06/23/2021
 Printed Name: Chad Hensley Title: Environmental Specialist Advanced



WSP USA

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

April 28, 2021

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

**Re: Closure Request
Boyce 15 #001
Incident Number nAPP2106141780
Lea County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of Armstrong Energy Corporation (Armstrong), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Boyce 15 #001 (Site) located in Unit A, Section 15, Township 16 South, Range 35 East, in Lea County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following the release of crude oil at the Site. Based on excavation activities and laboratory analytical results, Armstrong is submitting this Closure Request and requesting no further action (NFA) for Incident Number nAPP2106141780.

RELEASE BACKGROUND

On January 25, 2021, a tank sprung a leak resulting in the release of approximately 120 barrels (bbls) of crude oil into the earthen berm containment. No fluids were recovered. Armstrong reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on February 2, 2021 and subsequently the release was assigned Incident Number nAPP2106141780.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated between 51 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 325518103255901, located approximately 1,020 feet southeast of the Site. The groundwater well has a reported depth to groundwater of 54 feet bgs and a total depth of 80 feet bgs and last measured in 1996. All wells used for depth to groundwater determination are depicted on Figure 1. When viewed regionally, the Site falls in an area with depth to groundwater between 54 feet and 60 feet bgs, with seven corresponding data points within 1 mile of the Site. Data from



the northern water well (Office of the State Engineer well L-02521) was not included in the depth to water evaluation since the last depth to water measurements were from 1950, and not reflective of current depth to water measurements in the region. The referenced water well records are provided in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent palustrine, located approximately 1.4 miles 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: 10,000 mg/kg

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between January 28, 2021 and February 3, 2021, WSP personnel were at the Site to oversee delineation activities and evaluate the release based on information provided on the Form C-141 and visual observations. WSP collected one delineation soil sample inside the earthen berm containment (PH01) and four delineation soil samples (PH02 through PH05) around the earthen berm containment at depths ranging from approximately 2 feet to 19 feet bgs, to confirm the lateral extent of the release. The five delineation potholes (PH01 through PH05) were advanced via track-mounted track hoe at five locations to assess the lateral and vertical extent of impacted soil. Two discrete soil samples were collected from each pothole at depths of approximately 2 feet bgs and 19 feet bgs. Soil from the potholes were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the potholes were documented on a lithologic/soil sampling log and are included as Attachment 2. The release extent and pothole delineation soil sample locations are depicted on Figure 2.



Photographic documentation was conducted during the Site visit. The photographic log is included in Attachment 3.

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

Laboratory analytical results for the delineation soil samples collected from potholes PH02, PH03, and PH04 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for the 2-foot bgs delineation samples from potholes PH01 and PH05 indicated that BTEX, TPH-GRO/TPH-DRO, and TPH concentrations exceeded the Closure Criteria. Subsequent delineation samples collected at 19 feet bgs from potholes PH01 and PH05 were compliant with the Closure Criteria. Based on the soil analytical results from delineation activities, excavation activities appeared warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between March 16, 2021 and April 9, 2021, WSP personnel returned to the Site to oversee excavation activities as indicated by visual observations, field screening, and laboratory analytical results for the delineation soil samples.

Excavation activities were performed using a track-mounted track hoe and transport vehicle. To direct excavation activities, WSP screened for volatile aromatic hydrocarbons and chloride. Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. A total of 15 confirmation floor samples (FS01 through FS15) and 10 confirmation sidewalls (SW01 through SW10) were collected from the excavation. The confirmation floor samples were collected at a maximum depth of 10 feet bgs. The confirmation sidewall samples were collected from depths ranging from ground surface to a maximum depth of 9 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The confirmation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 3.

Laboratory analytical results for confirmation floor samples FS05, FS09, FS14 and confirmation sidewall samples SW01 and SW06 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for confirmation floor samples FS01 through FS04, FS06 through FS08, FS10 through FS13, FS15



and confirmation sidewall samples SW02 through SW05, and SW07 through SW10 indicated TPH-GRO/TPH-DRO and/or TPH exceed the Closure Criteria. Additional excavation in the vicinity of these confirmation floor and sidewall samples appeared warranted to address residual TPH-impacted soil. Based on elevated TPH-GRO/TPH-DRO and/or TPH concentrations in the confirmation floor and sidewall soil samples, the excavation was extended vertically and laterally. Additional soil was removed from those areas and subsequent samples FS01A through FS04A, FS06A through FS08A, FS10A through FS13A, FS15A, FS16, FS17, SW11 through SW27 were collected. The final excavation soil sample locations are presented on Figure 3.

The final excavation extent totaled approximately 3,368 square feet. At the completion of excavation activities, approximately 1,400 cubic yards of soil had been removed. The impacted soil was transported and properly disposed of at a licensed facility. The excavated area will be backfilled with material purchased locally and recontoured to match pre-existing site conditions.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples collected from potholes PH02, PH03, and PH04 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for the 2-foot bgs delineation samples from potholes PH01 and PH05 indicated BTEX, TPH-GRO/TPH-DRO, and TPH concentrations exceeded the Closure Criteria. Subsequent delineation samples collected at 19 feet bgs from potholes PH01 and PH05 were compliant with the Closure Criteria.

Laboratory analytical results for confirmation floor samples FS05, FS09, FS14 and confirmation sidewall samples SW01 and SW06 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for confirmation floor samples FS01 through FS04, FS06 through FS08, FS10 through FS13, FS15 and confirmation sidewall samples SW02 through SW05, and SW07 through SW10 indicated TPH-GRO/TPH-DRO and/or TPH exceed the Closure Criteria. Additional excavation in the vicinity of these confirmation floor and sidewall samples appeared warranted to address residual TPH-impacted soil. Based on elevated TPH-GRO/TPH-DRO and/or TPH concentrations in the confirmation floor and sidewall soil samples, the excavation was extended vertically and laterally. Additional soil was removed from the area around those areas and subsequent samples FS01A through FS04A, FS06A through FS08A, FS10A through FS13A, FS15A, FS16, FS17, SW11 through SW27 were collected.

At the completion of excavation activities, all floor samples (FS01 through FS17) and final sidewall samples (SW01, SW06, SW11 through SW27) were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and depicted on Figure 3. The complete laboratory analytical report is included as Attachment 4.

CLOSURE REQUEST

District 1
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Site assessment and excavation activities were conducted at the Site to address the January 25, 2021, crude oil release. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated benzene, BTEX, TPH-GRO/ TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the excavation soil sample analytical results, no further remediation appears necessary. Armstrong will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions.

Depth to groundwater has been determined to be between 51 and 100 feet bgs and no other sensitive receptors were identified near the release extent. WSP and Armstrong believe these remedial actions are protective of human health, the environment, and groundwater. As such, Armstrong respectfully requests no further action for Incident Number nAPP2106141780.

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

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 "Daniel R. Moir".

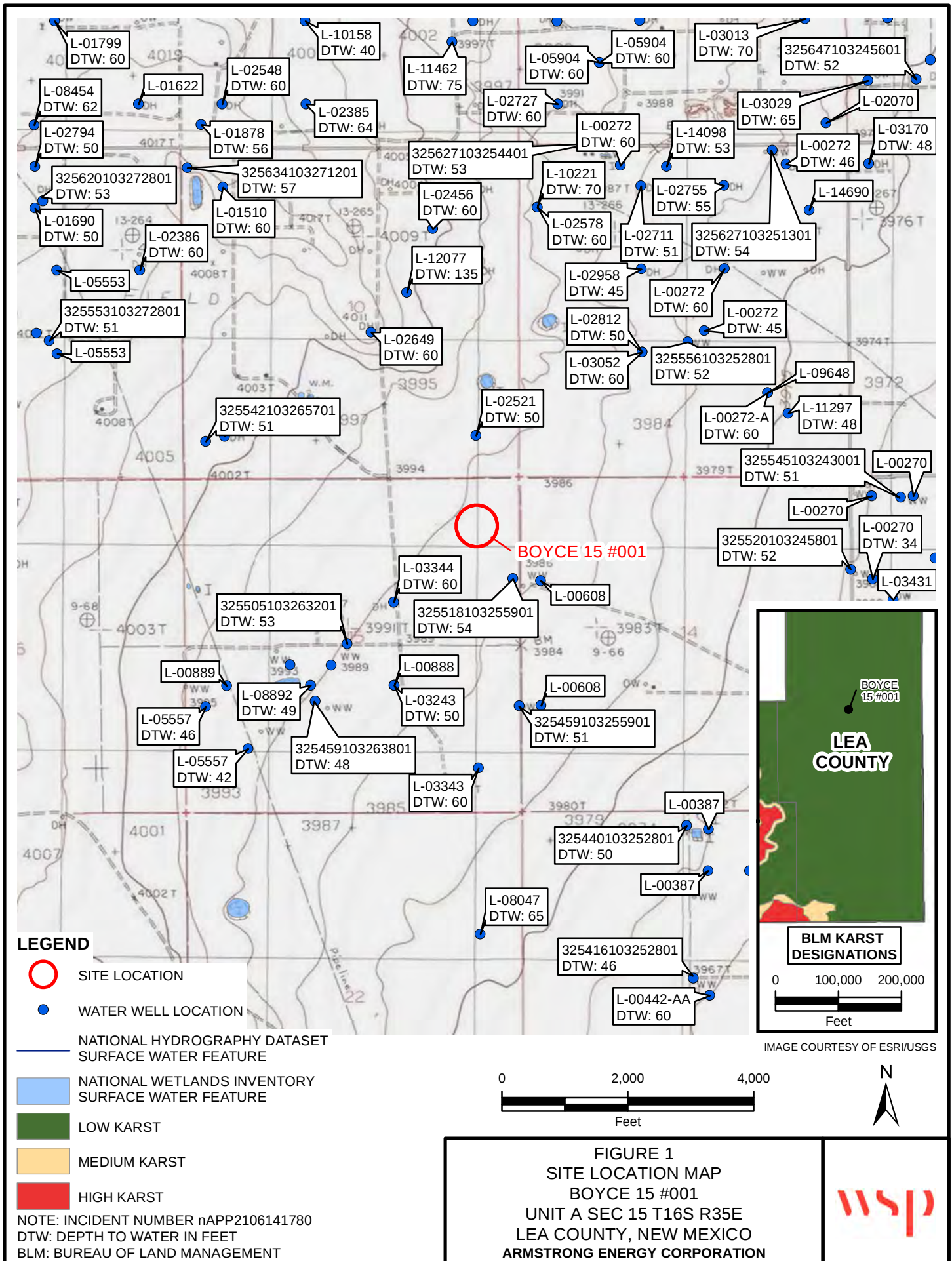
Daniel R. Moir, P.G.
Lead Consultant, Geologist

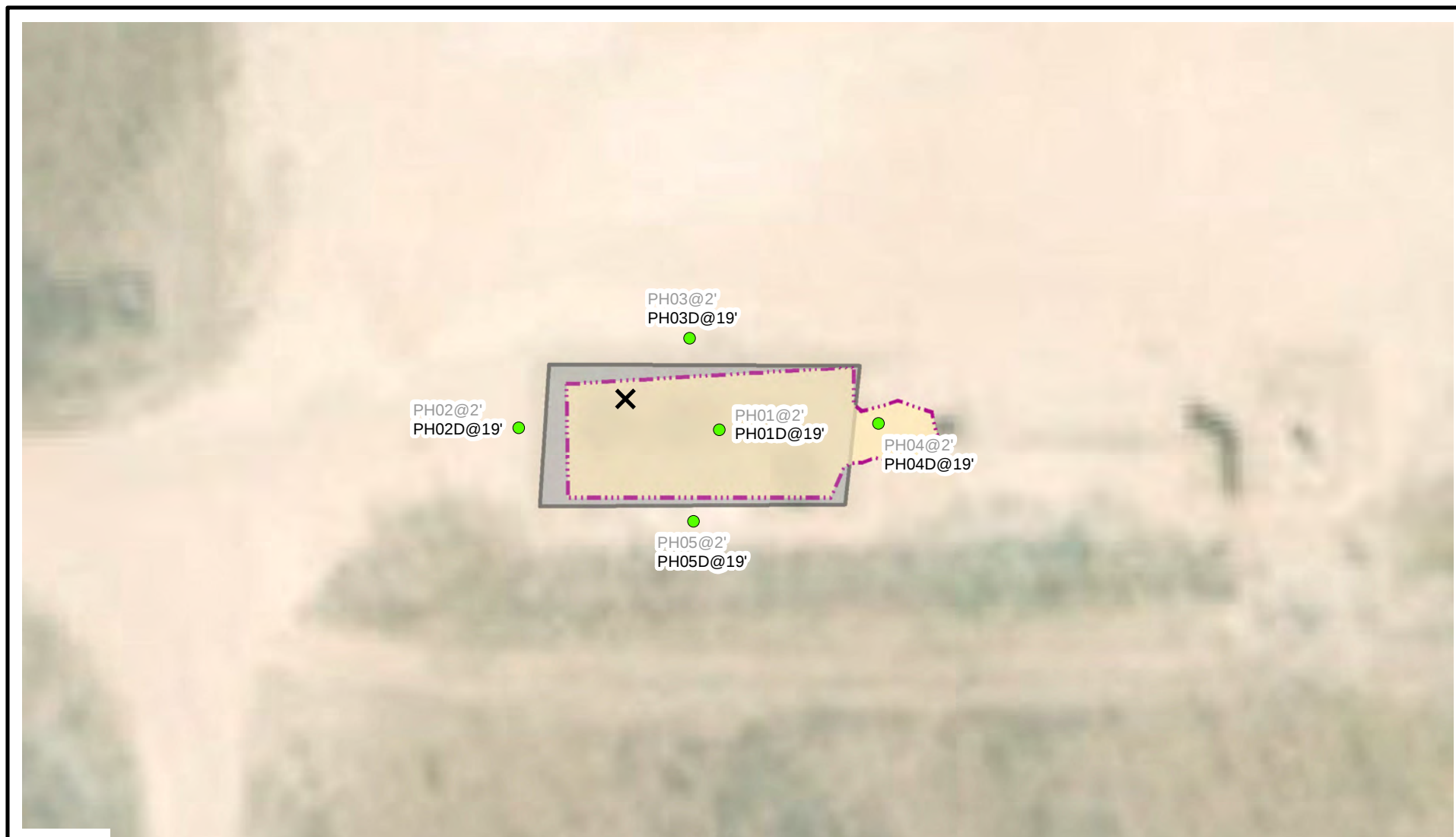
cc: Kyle Alpers, Armstrong Energy Corporation

Attachments:

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

FIGURES



**LEGEND**

✕ RELEASE LOCATION

● DELINEATION SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

■ RELEASE EXTENT

■ INFRASTRUCTURE

NOTE: INCIDENT NUMBER nAPP2106141780

SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

TEXT: INDICATES SOIL REPRESENTED BY SAMPLE
THAT WAS REMOVED

IMAGE COURTESY OF ESRI

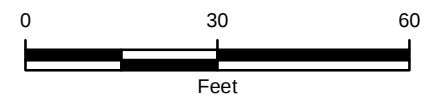
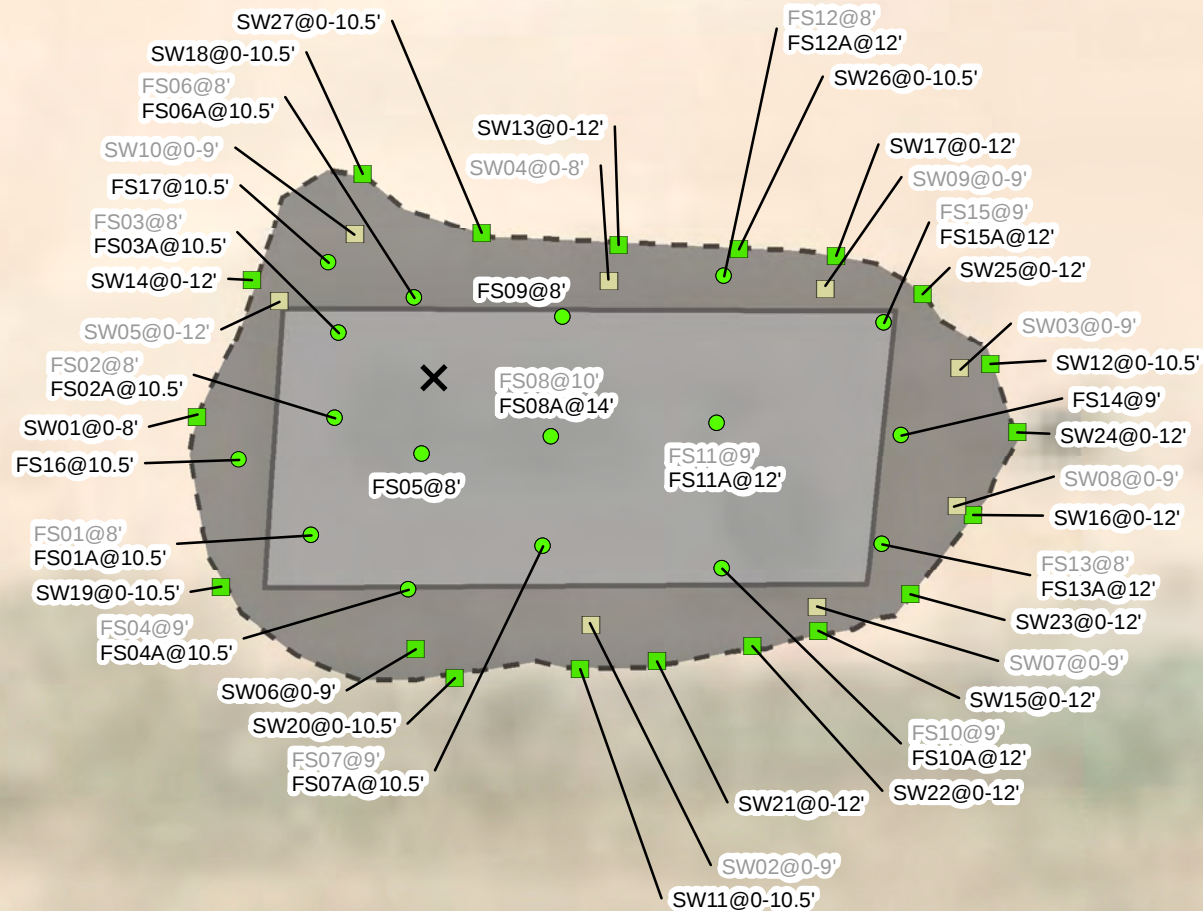


FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
 BOYCE 15 #001
 UNIT A SEC 15 T16S R35E
 LEA COUNTY, NEW MEXICO
 ARMSTRONG ENERGY CORPORATION



P:\Armstrong Energy Corp\GIS\MXD\106521001_BOYCE 15 #001\106521001_FIG02_DELINEATION_2021.mxd

**LEGEND**

- X** RELEASE LOCATION
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- INFRASTRUCTURE
- EXCAVATION EXTENT
- SIDEWALL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED

NOTE: INCIDENT NUMBER nAPP2106141780
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

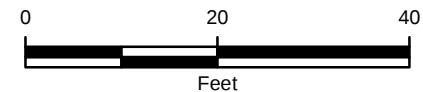


FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
 BOYCE 15 #001
 UNIT A SEC 15 T16S R35E
 LEA COUNTY, NEW MEXICO
 ARMSTRONG ENERGY CORPORATION



TABLES

Table 1

Soil Analytical Results
Boyce 15 #001
Incident Number NAPP2106141780
Armstrong Energy Corp
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Samples										
PH01	01/28/2021	2	6.60	385	5,360	4,480	433	9,840	10,300	14.2
PH01D	02/02/2021	19	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	42.2
PH02	01/28/2021	2	0.0127	0.619	211	71.7	<50.0	283	283	16.2
PH02D	02/03/2021	19	0.0172	0.407	<50.0	<50.0	<50.0	<50.0	<50.0	12.2
PH03	02/03/2021	2	0.00331	0.183	<49.9	<49.9	<49.9	<49.9	<49.9	41.4
PH03D	02/03/2021	19	0.0840	0.518	<49.8	<49.8	<49.8	<49.8	<49.8	13.9
PH04	02/03/2021	2	0.0543	0.477	<50.0	<50.0	<50.0	<50.0	<50.0	44.9
PH04D	02/03/2021	19	0.00486	0.806	296	67.7	<50.0	364	364	22.1
PH05	02/03/2021	2	11.5	437	3,120	2,440	295	5,560	5,860	13.3
PH05D	02/03/2021	19	0.0189	0.213	<50.0	<50.0	<50.0	<50.0	<50.0	9.85
Excavation Floor Samples										
FS01	03/16/2021	8	0.161	7.00	2,320	207	<50.0	2,572	2,530	9.18
FS01A	04/09/2021	10.5	<0.00200	<0.00200	<50.0	74.7	<50.0	74.7	74.7	47.7
FS02	03/16/2021	8	<0.100	13.3	2,040	281	<50.0	2,321	2,320	15.0
FS02A	04/09/2021	10.5	<0.00202	<0.00202	51.5	<50.1	<50.1	51.5	51.5	34.4
FS03	03/17/2021	8	0.274	45.5	1,990	706	<49.9	2,696	2,700	18.7
FS03A	04/09/2021	10.5	<0.00199	<0.00199	<49.9	63.0	<49.9	63.0	63.0	96.2
FS04	03/17/2021	9	<0.100	5.04	1,650	101	<49.8	1,751	1,750	6.88
FS04A	04/09/2021	10.5	<0.00200	<0.00200	<49.9	58.4	<49.9	58.4	58.4	82.8
FS05	03/16/2021	8	0.269	1.81	378	<50.0	<50.0	378	378	5.30

Table 1

Soil Analytical Results
Boyce 15 #001
Incident Number NAPP2106141780
Armstrong Energy Corp
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
FS06	03/17/2021	8	0.0751	14.3	2,220	365	<49.9	2,585	2,590	10.9
FS06A	04/09/2021	10.5	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	45.5
FS07	03/17/2021	9	0.231	42.2	6,080	3,060	<249	9,140	9,140	8.73
FS07A	04/09/2021	10.5	<0.00199	<0.00199	<49.9	82.9	<49.9	82.9	82.9	33.0
FS08	03/17/2021	10	0.0260	1.15	906	419	123	1,325	1,450	14.9
FS08A	03/22/2021	14	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	15.8
FS09	03/16/2021	8	<0.0200	0.985	766	<50.0	<50.0	766	766	6.18
FS10	03/17/2021	9	0.104	162	3,780	1,590	<50.0	5,370	5,370	16.0
FS10A	04/08/2021	12	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	12.6
FS11	03/17/2021	9	<0.101	67.2	2,800	888	<50.1	3,688	3,690	16.0
FS11A	04/08/2021	12	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	5.89
FS12	03/16/2021	8	0.591	83.4	3,800	990	<50.0	4,790	4,790	8.70
FS12A	04/08/2021	12	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	5.61
FS13	03/16/2021	8	<0.0404	1.44	1,100	<49.8	<49.8	1,100	1,100	58.5
FS13A	04/08/2021	12	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	35.7
FS14	03/17/2021	9	<0.0402	1.19	764	65.6	<49.9	830	830	46.3
FS15	03/17/2021	9	<0.101	40.4	3,110	837	<49.9	3,947	3,950	16.2
FS15A	04/08/2021	12	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	66.9
FS16	04/08/2021	10.5	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	20.5
FS17	04/08/2021	10.5	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	22.0

Table 1

Soil Analytical Results
Boyce 15 #001
Incident Number NAPP2106141780
Armstrong Energy Corp
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Excavation Sidewall Samples										
SW01	03/16/2021	0 - 8	<0.0402	0.410	681	<49.9	<49.9	681	681	6.69
SW02	03/16/2021	0 - 9	<0.0399	1.05	1,410	85.3	<50.0	1,495	1,500	<4.97
SW03	03/16/2021	0 - 9	0.0397	9.30	6,590	645	<250	7,235	7,240	10.8
SW04	03/16/2021	0 - 8	0.0256	3.47	2,900	224	<49.9	3,124	3,120	9.25
SW05	04/08/2021	0 - 8	0.0941	2.34	3,420	94.8	<50.0	3,515	3,510	20.5
SW06	03/17/2021	0 - 9	0.0922	0.461	456	<50.1	<50.1	456	456	<4.99
SW07	04/08/2021	0 - 9	0.0526	4.23	2,230	198	264	2,428	2,690	5.66
SW08	04/08/2021	0 - 9	0.0421	4.46	2,480	163	289	2,643	2,930	11.0
SW09	03/17/2021	0 - 9	0.134	1.80	2,730	84.2	366	2,814	3,180	18.6
SW10	03/17/2021	0 - 9	0.0484	5.87	1,940	298	237	2,238	2,480	13.1
SW11	04/09/2021	0 - 10.5	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	105
SW12	04/09/2021	0 - 10.5	<0.00198	<0.00198	<49.9	81.2	<49.9	81.2	81.2	87.0
SW13	04/09/2021	0 - 10.5	<0.00198	<0.00198	<49.8	87.5	<49.8	87.5	87.5	109
SW14	04/08/2021	0 - 12	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	54.1
SW15	04/08/2021	0 - 12	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	44.5
SW16	04/08/2021	0 - 12	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	47.9
SW17	04/09/2021	0 - 10.5	<0.00198	<0.00198	<49.9	83.1	<49.9	83.1	83.1	108
SW18	04/08/2021	0 - 10.5	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	42.5
SW19	04/08/2021	0 - 10.5	0.00209	0.00209	<50.0	<50.0	<50.0	<50.0	<50.0	56.6
SW20	04/08/2021	0 - 10.5	0.00226	0.178	81.0	<49.9	<49.9	81.0	81.0	6.37

Table 1

Soil Analytical Results
 Boyce 15 #001
 Incident Number NAPP2106141780
 Armstrong Energy Corp
 Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
SW21	04/08/2021	0 - 12	<0.00201	0.156	157	<49.9	<49.9	157	157	<4.97
SW22	04/08/2021	0 - 12	<0.00200	0.103	122	<50.0	<50.0	122	122	<4.99
SW23	04/08/2021	0 - 12	<0.00202	0.152	149	<50.0	<50.0	149	149	<4.95
SW24	04/08/2021	0 - 12	<0.00202	0.174	62.7	<50.0	<50.0	62.7	62.7	<5.00
SW25	04/08/2021	0 - 12	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	45.7
SW26	04/08/2021	0 - 10.5	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	<5.00
SW27	04/08/2021	0 - 10.5	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	26.6

Notes

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

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

NE - Not Established

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

Text

impacted soil has been removed

ATTACHMENT 1: REFERENCED WELL RECORD



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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Site Information ▼

Geographic Area:

United States ▼

GO

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- [Full News](#) 

USGS 325518103255901 16S.35E.14.131311

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°55'29", Longitude 103°26'12" NAD27
Lea County, New Mexico , Hydrologic Unit 12080003
Well depth: 80 feet
Land surface altitude: 3,985.00 feet above NGVD29.
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1961-02-07	1996-02-02	8
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

[Questions about sites/data?](#)

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Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=325518103255901)

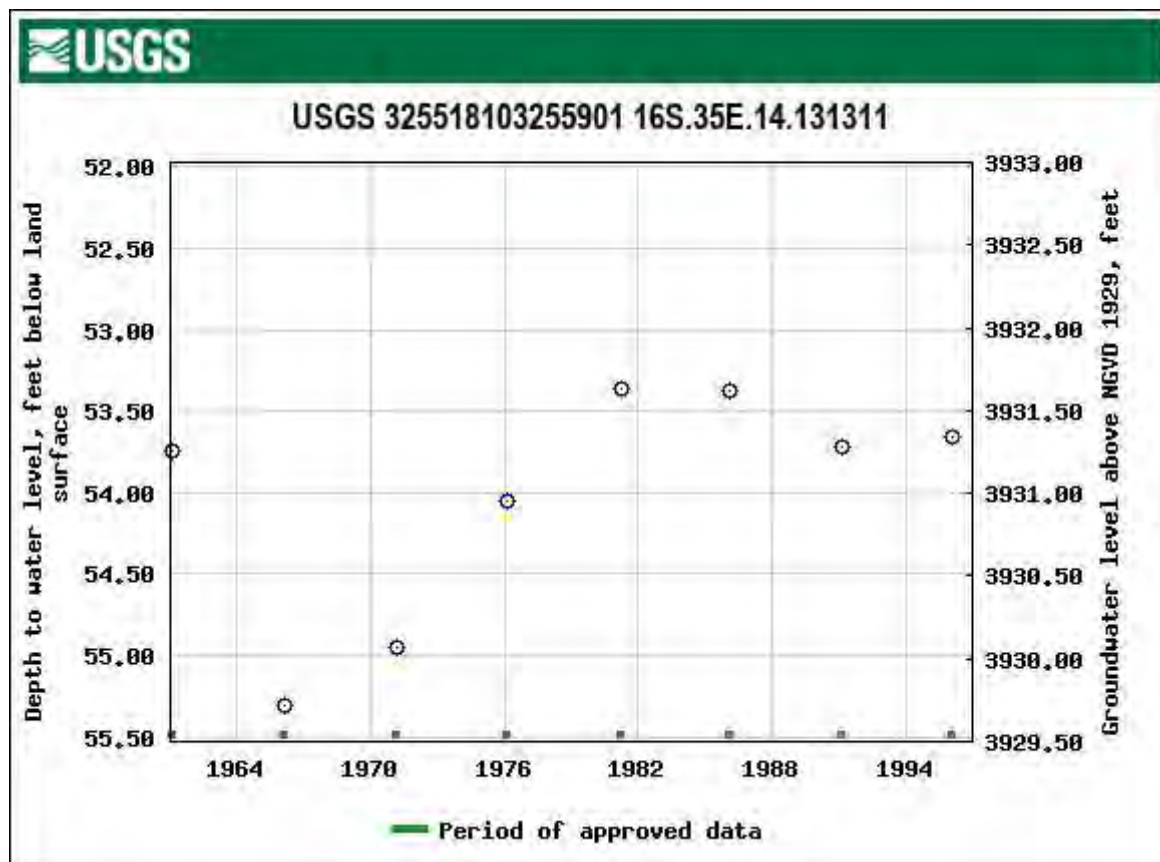
[agency_code=USGS&site_no=325518103255901](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=325518103255901)



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

Page Last Modified: 2021-04-20 21:25:27 EDT

0.27 0.24 caww01



ATTACHMENT 2: LITHOLOGIC/SOIL SAMPLING LOG

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH01		1/28/2021	
						Site Name: Boyce 15-1			
						RP or Incident Number: nAPP2106141780			
						LTE Job Number:			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: Kaleb Henry		Method: Backhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					19'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
m	<124	3,311	yes	PH01	2'	0	CCHE	CALICHE, moist, off-white, poorly consolidated, stained, strong odor.	
						2	CH	CLAY w/ some silt, moist, dark brown, cohesive, high plasticity, stained, strong odor.	
						5			
d	<124	7.6	no	PH01D	19'	6	CCHE	CALICHE, dry, off-white, well consolidated, stained, strong odor.	
						10		-color change - reddish orange-brown, poorly - moderately consolidated, no stain, slight odor	
						15			
						20			
								Total Depth: 19 feet	

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH02		1/28/2021-2/3/2021	
						Site Name: Boyce 15-1			
						RP or Incident Number: nAPP2106141780			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: Kaleb Henry		Method: Backhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					19'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
m	<124	548	yes	PH02	2'	0	CCHE	CALICHE, moist, off-white, poorly consolidated, stained, strong odor.	
						2	CH	CLAY w/ some silt, moist, dark brown, cohesive, high plasticity, stained, strong odor.	
						3	FL	FLINT, dry, Reddish orange, very well consolidated, no stain, no odor.	
						6	CCHE	CALICHE, dry, off-white, well consolidated, stained, strong odor.	
d	<124	50.8	no	PH02D	19'	10		-color change - reddish orange-brown, poorly - moderately consolidated, no stain, slight odor	
						11			
						12			
						13			
						14			
						15			
						16			
						17			
						18			
						19			
								Total Depth: 19 feet	

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH03		2/3/2021	
						Site Name: Boyce 15-1			
						RP or Incident Number: nAPP2106141780			
						LTE Job Number:			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: Kaleb Henry		Method: Backhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					19'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
m	<124	47.5	yes	PH03	2'	0	CCHE	CALICHE, moist, off-white, poorly consolidated, stained, strong odor.	
						2	CH	CLAY w/ some silt, moist, dark brown, cohesive, high plasticity, stained, strong odor.	
						5			
						6	CCHE	CALICHE, dry, off-white, well consolidated, stained, strong odor.	
d	<124	1.4	no	PH03D	19'	10	FL	FLINT, dry, reddish orange, very well consolidated, no stain, no odor.	
						12	CCHE	CALICHE, dry, reddish orange-brown, poorly - moderately consolidated, no stain, slight odor.	
						15			
						20			
								Total Depth: 19 feet	

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						PH04		2/3/2021	
						Site Name: Boyce 15-1			
						RP or Incident Number: nAPP2106141780			
						LTE Job Number:			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By: Kaleb Henry		Method: Backhoe	
Lat/Long:			Field Screening:			Hole Diameter:		Total Depth:	
			Chloride, PID					19'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
m	<124	181.6	yes	PH04	2'	0	CCHE	CALICHE, moist, off-white, poorly consolidated, stained, strong odor.	
						2	CH	CLAY w/ some silt, moist, dark brown, cohesive, high plasticity, stained, strong odor.	
						5			
d	<124	262	no	PH04D	19'	6	CCHE	CALICHE, dry, off-white, well consolidated, stained, strong odor.	
						10		-color change - reddish orange, poorly - moderately consolidated, no stain, slight odor.	
						15			
						20			
								Total Depth: 19 feet	

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG

Armstrong Energy Corp	Boyce 15 #001 Lea County, New Mexico	TE106521001
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Photo No.	Date	
1	January 26-April 8, 2021	
Initial spill before tank removal, southern side of tanks facing east		 A photograph showing a large, rusted metal tank on the left. A dark, viscous liquid has spilled onto the gravel ground in front of the tank. Two people are standing in the background near a white truck. The sky is overcast.

Photo No.	Date	
2	January 26-April 8, 2021	
Initial spill before tank removal, northern side of tanks facing east		 A photograph showing a large, rusted metal tank on the right. A dark, viscous liquid has spilled onto the gravel ground in front of the tank. A person is standing on a ladder next to the tank. A white truck is visible in the background. The sky is overcast.



PHOTOGRAPHIC LOG

Armstrong Energy Corp	Boyce 15 #001 Lea County, New Mexico	TE106521001
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Photo No.	Date	
3	January 26-April 8, 2021	
Containment after tank removal facing southwest		 A photograph showing a large, rectangular containment area filled with dark, viscous material, likely oil or sludge. The area is surrounded by a light-colored gravel or sand border. In the background, there is a flat, open landscape under a cloudy sky, with some distant structures and a fence line visible.

Photo No.	Date	
4	January 26-April 8, 2021	
Containment after tank removal facing southeast		 A photograph showing a large, rectangular containment area filled with dark, viscous material, likely oil or sludge. The area is surrounded by a light-colored gravel or sand border. In the background, there is a flat, open landscape under a cloudy sky, with some distant structures and a fence line visible. A yellow excavator is visible on the left side of the containment area.



PHOTOGRAPHIC LOG

Armstrong Energy Corp	Boyce 15 #001 Lea County, New Mexico	TE106521001
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Photo No.	Date	
5	January 26-April 8, 2021	
During delineation activities via excavator, facing northwest		

Photo No.	Date	
6	January 26-April 8, 2021	
Closeup of pothole during delineation activities		



PHOTOGRAPHIC LOG

Armstrong Energy Corp	Boyce 15 #001 Lea County, New Mexico	TE106521001
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Photo No.	Date	
7	January 26-April 8, 2021	
During excavation activities facing west		 A wide-angle photograph of an excavation site. In the background, a yellow excavator is positioned on a raised area of earth. To its left, a red pickup truck is parked near a pile of dirt. The foreground shows a deep, wide excavation pit with exposed soil and some rocks. The sky is clear and blue.

Photo No.	Date	
8	January 26-April 8, 2021	
Final excavation facing east		 A photograph showing the final stage of an excavation. The pit is deep and filled with loose soil and rocks. In the background, several vehicles, including a white pickup truck and a red pickup truck, are parked. A tall, thin structure, possibly a drilling rig or pumpjack, is visible in the distance. The sky is clear and blue.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

Certificate of Analysis Summary 687301



WSP USA, Dallas, TX

Project Name: Boyce 15-001

Project Id: 106521001

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 02.04.2021 10:01

Report Date: 02.10.2021 11:20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	687301-001	687301-002	687301-003	687301-004	687301-005	687301-006
	<i>Field Id:</i>	PH01	PH01D	PH02	PH02D	PH03	PH03D
	<i>Depth:</i>	2- ft	19- ft	2- ft	19- ft	2- ft	19- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.28.2021 09:05	02.02.2021 10:25	01.28.2021 13:15	02.03.2021 17:25	02.03.2021 08:35	02.03.2021 15:40
BTEX by EPA 8021B	<i>Extracted:</i>	02.04.2021 17:00	02.09.2021 08:30	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00
	<i>Analyzed:</i>	02.05.2021 01:54	02.09.2021 13:26	02.05.2021 02:35	02.05.2021 02:55	02.05.2021 03:15	02.05.2021 03:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		6.60 DX 0.199	<0.00200 0.00200	0.0127 0.00199	0.0172 0.00200	0.00331 0.00198	0.0840 0.00200
Toluene		317 DXF 9.96	<0.00200 0.00200	0.124 0.00199	0.102 0.00200	0.0356 0.00198	0.0278 D 0.0200
Ethylbenzene		24.2 DX 0.199	<0.00200 0.00200	0.0460 0.00199	0.0647 0.00200	0.0147 0.00198	<0.0200 0.0200
m,p-Xylenes		36.7 DXF 0.398	<0.00399 0.00399	0.225 0.00398	0.143 0.00400	0.0835 0.00396	0.0453 D 0.0399
o-Xylene		0.368 X 0.00199	<0.00200 0.00200	0.211 0.00199	0.0799 0.00200	0.0454 0.00198	0.361 0.00200
Total Xylenes		37.1 0.00199	<0.00200 0.00200	0.436 0.00199	0.223 0.00200	0.129 0.00198	0.406 0.00200
Total BTEX		385 0.00199	<0.00200 0.00200	0.619 0.00199	0.407 0.00200	0.183 0.00198	0.518 0.00200
Chloride by EPA 300	<i>Extracted:</i>	02.04.2021 18:05	02.04.2021 18:05	02.04.2021 18:05	02.04.2021 18:05	02.04.2021 18:05	02.04.2021 18:05
	<i>Analyzed:</i>	02.04.2021 23:59	02.05.2021 00:15	02.05.2021 00:20	02.05.2021 00:26	02.05.2021 00:31	02.05.2021 01:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		14.2 X 4.97	42.2 4.96	16.2 4.98	12.2 4.97	41.4 5.02	13.9 5.05
TPH by SW8015 Mod	<i>Extracted:</i>	02.06.2021 10:00	02.06.2021 10:00	02.06.2021 10:00	02.06.2021 10:00	02.06.2021 10:00	02.06.2021 10:00
	<i>Analyzed:</i>	02.06.2021 23:49	02.06.2021 22:44	02.07.2021 00:09	02.07.2021 00:30	02.07.2021 00:51	02.07.2021 01:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		4480 250	<50.0 50.0	71.7 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		5360 250	<50.0 50.0	211 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		433 250	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		10300 250	<50.0 50.0	283 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 687301



WSP USA, Dallas, TX

Project Name: Boyce 15-001

Project Id: 106521001

Contact: Dan Moir

Project Location:

Date Received in Lab: Thu 02.04.2021 10:01

Report Date: 02.10.2021 11:20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	687301-007	687301-008	687301-009	687301-010		
	Field Id:	PH04	PH04D	PH05	PH05D		
	Depth:	2- ft	19- ft	2- ft	19- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	02.03.2021 10:35	02.03.2021 11:45	02.03.2021 12:39	02.03.2021 14:45		
BTEX by EPA 8021B	Extracted:	02.04.2021 17:00	02.04.2021 17:00	02.05.2021 17:00	02.04.2021 17:00		
	Analyzed:	02.05.2021 03:56	02.05.2021 04:17	02.06.2021 19:21	02.05.2021 04:58		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		0.0543 0.00199	0.00486 0.00200	11.5 1.01	0.0189 0.00198		
Toluene		0.0264 D 0.0199	0.129 0.00200	157 1.01	0.0856 0.00198		
Ethylbenzene		<0.0199 0.0199	0.200 0.00200	83.8 1.01	0.0346 0.00198		
m,p-Xylenes		<0.0398 0.0398	0.310 0.00401	136 2.01	0.0558 0.00397		
o-Xylene		0.396 0.00199	0.162 0.00200	49.1 1.01	0.0184 0.00198		
Total Xylenes		0.396 0.00199	0.472 0.00200	185 1.01	0.0742 0.00198		
Total BTEX		0.477 0.00199	0.806 0.00200	437 1.01	0.213 0.00198		
Chloride by EPA 300	Extracted:	02.04.2021 18:05	02.04.2021 18:05	02.04.2021 18:05	02.04.2021 18:05		
	Analyzed:	02.05.2021 01:08	02.05.2021 01:14	02.05.2021 01:29	02.05.2021 01:35		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		44.9 5.00	22.1 X 4.99	13.3 4.96	9.85 4.96		
TPH by SW8015 Mod	Extracted:	02.06.2021 10:00	02.06.2021 10:00	02.06.2021 10:00	02.06.2021 10:00		
	Analyzed:	02.07.2021 01:33	02.07.2021 01:53	02.07.2021 02:14	02.07.2021 02:35		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	67.7 50.0	2440 49.9	<50.0 50.0		
Diesel Range Organics (DRO)		<50.0 50.0	296 50.0	3120 49.9	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	295 49.9	<50.0 50.0		
Total TPH		<50.0 50.0	364 50.0	5860 49.9	<50.0 50.0		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Analytical Report 687301

for

WSP USA

Project Manager: Dan Moir

Boyce 15-001

106521001

02.10.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.10.2021

Project Manager: **Dan Moir**

WSP USA

2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **687301**

Boyce 15-001

Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687301. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687301 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 687301****WSP USA, Dallas, TX**

Boyce 15-001

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	01.28.2021 09:05	2 ft	687301-001
PH01D	S	02.02.2021 10:25	19 ft	687301-002
PH02	S	01.28.2021 13:15	2 ft	687301-003
PH02D	S	02.03.2021 17:25	19 ft	687301-004
PH03	S	02.03.2021 08:35	2 ft	687301-005
PH03D	S	02.03.2021 15:40	19 ft	687301-006
PH04	S	02.03.2021 10:35	2 ft	687301-007
PH04D	S	02.03.2021 11:45	19 ft	687301-008
PH05	S	02.03.2021 12:39	2 ft	687301-009
PH05D	S	02.03.2021 14:45	19 ft	687301-010

**CASE NARRATIVE****Client Name: WSP USA****Project Name: Boyce 15-001**Project ID: 106521001
Work Order Number(s): 687301Report Date: 02.10.2021
Date Received: 02.04.2021**Sample receipt non conformances and comments:**

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3150090 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 687301-001 SD.

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 687301-001 S, 687301-001 SD, 687301-001.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 687301-006, 687301-007, 687301-004, 687301-008, 687301-003.

Toluene, m,p-Xylenes Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 687301-001, -003, -004, -005, -006, -007, -008, -010

Lab Sample ID 687301-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Toluene, m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Benzene, Ethylbenzene, o-Xylene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 687301-001, -003, -004, -005, -006, -007, -008, -010.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3150094 Chloride by EPA 300

Lab Sample ID 687301-008 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).

Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 687301-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3150258 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;

Samples affected are: 687440-001 S, 687301-009, 687301-002.



CASE NARRATIVE

Client Name: WSP USA

Project Name: Boyce 15-001

Project ID: 106521001
Work Order Number(s): 687301

Report Date: 02.10.2021
Date Received: 02.04.2021

Batch: LBA-3150520 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7721162-1-BLK.



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH01**
Lab Sample Id: 687301-001

Matrix: Soil
Date Collected: 01.28.2021 09:05

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.2	4.97	mg/kg	02.04.2021 23:59	X	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4480	250	mg/kg	02.06.2021 23:49		5
Diesel Range Organics (DRO)	C10C28DRO	5360	250	mg/kg	02.06.2021 23:49		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	433	250	mg/kg	02.06.2021 23:49		5
Total TPH	PHC635	10300	250	mg/kg	02.06.2021 23:49		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	02.06.2021 23:49	
o-Terphenyl	84-15-1	106	%	70-130	02.06.2021 23:49	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH01**
Lab Sample Id: 687301-001

Matrix: Soil
Date Collected: 01.28.2021 09:05

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	6.60	0.199	mg/kg	02.08.2021 00:10	DX	100
Toluene	108-88-3	317	9.96	mg/kg	02.09.2021 15:50	DXF	5000
Ethylbenzene	100-41-4	24.2	0.199	mg/kg	02.08.2021 00:10	DX	100
m,p-Xylenes	179601-23-1	36.7	0.398	mg/kg	02.08.2021 00:10	DXF	100
o-Xylene	95-47-6	0.368	0.00199	mg/kg	02.05.2021 01:54	X	1
Total Xylenes	1330-20-7	37.1	0.00199	mg/kg	02.08.2021 00:10		100
Total BTEX		385	0.00199	mg/kg	02.09.2021 15:50		5000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.05.2021 01:54	
1,4-Difluorobenzene	540-36-3	196	%	70-130	02.05.2021 01:54	**



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH01D**
Lab Sample Id: 687301-002

Matrix: Soil
Date Collected: 02.02.2021 10:25

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.2	4.96	mg/kg	02.05.2021 00:15		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 22:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 22:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 22:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 22:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	02.06.2021 22:44	
o-Terphenyl	84-15-1	96	%	70-130	02.06.2021 22:44	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH01D**
Lab Sample Id: 687301-002

Matrix: Soil
Date Collected: 02.02.2021 10:25

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.09.2021 08:30

% Moisture:
Basis: Wet Weight

Seq Number: 3150520

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.09.2021 13:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.09.2021 13:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.09.2021 13:26	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.09.2021 13:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.09.2021 13:26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.09.2021 13:26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.09.2021 13:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	02.09.2021 13:26	
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.09.2021 13:26	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH02**
Lab Sample Id: 687301-003

Matrix: Soil
Date Collected: 01.28.2021 13:15

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.2	4.98	mg/kg	02.05.2021 00:20		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	71.7	50.0	mg/kg	02.07.2021 00:09		1
Diesel Range Organics (DRO)	C10C28DRO	211	50.0	mg/kg	02.07.2021 00:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 00:09	U	1
Total TPH	PHC635	283	50.0	mg/kg	02.07.2021 00:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	02.07.2021 00:09	
o-Terphenyl	84-15-1	98	%	70-130	02.07.2021 00:09	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH02**
Lab Sample Id: 687301-003

Matrix: Soil
Date Collected: 01.28.2021 13:15

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0127	0.00199	mg/kg	02.05.2021 02:35		1
Toluene	108-88-3	0.124	0.00199	mg/kg	02.05.2021 02:35		1
Ethylbenzene	100-41-4	0.0460	0.00199	mg/kg	02.05.2021 02:35		1
m,p-Xylenes	179601-23-1	0.225	0.00398	mg/kg	02.05.2021 02:35		1
o-Xylene	95-47-6	0.211	0.00199	mg/kg	02.05.2021 02:35		1
Total Xylenes	1330-20-7	0.436	0.00199	mg/kg	02.05.2021 02:35		1
Total BTEX		0.619	0.00199	mg/kg	02.05.2021 02:35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	159	%	70-130	02.05.2021 02:35	**	
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.05.2021 02:35		



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH02D**
Lab Sample Id: 687301-004

Matrix: Soil
Date Collected: 02.03.2021 17:25

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.2	4.97	mg/kg	02.05.2021 00:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.07.2021 00:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.07.2021 00:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 00:30	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.07.2021 00:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	02.07.2021 00:30	
o-Terphenyl	84-15-1	94	%	70-130	02.07.2021 00:30	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH02D**
Lab Sample Id: 687301-004

Matrix: Soil
Date Collected: 02.03.2021 17:25

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0172	0.00200	mg/kg	02.05.2021 02:55		1
Toluene	108-88-3	0.102	0.00200	mg/kg	02.05.2021 02:55		1
Ethylbenzene	100-41-4	0.0647	0.00200	mg/kg	02.05.2021 02:55		1
m,p-Xylenes	179601-23-1	0.143	0.00400	mg/kg	02.05.2021 02:55		1
o-Xylene	95-47-6	0.0799	0.00200	mg/kg	02.05.2021 02:55		1
Total Xylenes	1330-20-7	0.223	0.00200	mg/kg	02.05.2021 02:55		1
Total BTEX		0.407	0.00200	mg/kg	02.05.2021 02:55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	02.05.2021 02:55	
4-Bromofluorobenzene	460-00-4	138	%	70-130	02.05.2021 02:55	**



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH03**
Lab Sample Id: 687301-005

Matrix: Soil
Date Collected: 02.03.2021 08:35

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.4	5.02	mg/kg	02.05.2021 00:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.07.2021 00:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.07.2021 00:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.07.2021 00:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.07.2021 00:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	02.07.2021 00:51	
o-Terphenyl	84-15-1	94	%	70-130	02.07.2021 00:51	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH03**
Lab Sample Id: 687301-005

Matrix: Soil
Date Collected: 02.03.2021 08:35

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00331	0.00198	mg/kg	02.05.2021 03:15		1
Toluene	108-88-3	0.0356	0.00198	mg/kg	02.05.2021 03:15		1
Ethylbenzene	100-41-4	0.0147	0.00198	mg/kg	02.05.2021 03:15		1
m,p-Xylenes	179601-23-1	0.0835	0.00396	mg/kg	02.05.2021 03:15		1
o-Xylene	95-47-6	0.0454	0.00198	mg/kg	02.05.2021 03:15		1
Total Xylenes	1330-20-7	0.129	0.00198	mg/kg	02.05.2021 03:15		1
Total BTEX		0.183	0.00198	mg/kg	02.05.2021 03:15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.05.2021 03:15	
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.05.2021 03:15	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH03D**
Lab Sample Id: 687301-006

Matrix: Soil
Date Collected: 02.03.2021 15:40

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.9	5.05	mg/kg	02.05.2021 01:03		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.07.2021 01:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.07.2021 01:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.07.2021 01:12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.07.2021 01:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	02.07.2021 01:12	
o-Terphenyl	84-15-1	96	%	70-130	02.07.2021 01:12	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH03D**
Lab Sample Id: 687301-006

Matrix: Soil
Date Collected: 02.03.2021 15:40

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0840	0.00200	mg/kg	02.05.2021 03:36		1
Toluene	108-88-3	0.0278	0.0200	mg/kg	02.07.2021 22:54	D	10
Ethylbenzene	100-41-4	<0.0200	0.0200	mg/kg	02.07.2021 22:54	UD	10
m,p-Xylenes	179601-23-1	0.0453	0.0399	mg/kg	02.07.2021 22:54	D	10
o-Xylene	95-47-6	0.361	0.00200	mg/kg	02.05.2021 03:36		1
Total Xylenes	1330-20-7	0.406	0.00200	mg/kg	02.07.2021 22:54		10
Total BTEX		0.518	0.00200	mg/kg	02.07.2021 22:54		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.05.2021 03:36		
4-Bromofluorobenzene	460-00-4	244	%	70-130	02.05.2021 03:36	**	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH04**
Lab Sample Id: 687301-007

Matrix: Soil
Date Collected: 02.03.2021 10:35

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.9	5.00	mg/kg	02.05.2021 01:08		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.07.2021 01:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.07.2021 01:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 01:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.07.2021 01:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	02.07.2021 01:33	
o-Terphenyl	84-15-1	95	%	70-130	02.07.2021 01:33	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH04**
Lab Sample Id: 687301-007

Matrix: Soil
Date Collected: 02.03.2021 10:35

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0543	0.00199	mg/kg	02.05.2021 03:56		1
Toluene	108-88-3	0.0264	0.0199	mg/kg	02.07.2021 23:20	D	10
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	02.07.2021 23:20	UD	10
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	02.07.2021 23:20	UD	10
o-Xylene	95-47-6	0.396	0.00199	mg/kg	02.05.2021 03:56		1
Total Xylenes	1330-20-7	0.396	0.00199	mg/kg	02.07.2021 23:20		10
Total BTEX		0.477	0.00199	mg/kg	02.07.2021 23:20		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	247	%	70-130	02.05.2021 03:56	**	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.05.2021 03:56		



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH04D**
Lab Sample Id: 687301-008

Matrix: Soil
Date Collected: 02.03.2021 11:45

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.1	4.99	mg/kg	02.05.2021 01:14	X	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	67.7	50.0	mg/kg	02.07.2021 01:53		1
Diesel Range Organics (DRO)	C10C28DRO	296	50.0	mg/kg	02.07.2021 01:53		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 01:53	U	1
Total TPH	PHC635	364	50.0	mg/kg	02.07.2021 01:53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	02.07.2021 01:53	
o-Terphenyl	84-15-1	96	%	70-130	02.07.2021 01:53	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH04D**
Lab Sample Id: 687301-008

Matrix: Soil
Date Collected: 02.03.2021 11:45

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00486	0.00200	mg/kg	02.05.2021 04:17		1
Toluene	108-88-3	0.129	0.00200	mg/kg	02.05.2021 04:17		1
Ethylbenzene	100-41-4	0.200	0.00200	mg/kg	02.05.2021 04:17		1
m,p-Xylenes	179601-23-1	0.310	0.00401	mg/kg	02.05.2021 04:17		1
o-Xylene	95-47-6	0.162	0.00200	mg/kg	02.05.2021 04:17		1
Total Xylenes	1330-20-7	0.472	0.00200	mg/kg	02.05.2021 04:17		1
Total BTEX		0.806	0.00200	mg/kg	02.05.2021 04:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	161	%	70-130	02.05.2021 04:17	**
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.05.2021 04:17	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH05**
Lab Sample Id: 687301-009

Matrix: Soil
Date Collected: 02.03.2021 12:39

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.3	4.96	mg/kg	02.05.2021 01:29		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2440	49.9	mg/kg	02.07.2021 02:14		1
Diesel Range Organics (DRO)	C10C28DRO	3120	49.9	mg/kg	02.07.2021 02:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	295	49.9	mg/kg	02.07.2021 02:14		1
Total TPH	PHC635	5860	49.9	mg/kg	02.07.2021 02:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	02.07.2021 02:14	
o-Terphenyl	84-15-1	88	%	70-130	02.07.2021 02:14	



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH05**
Lab Sample Id: 687301-009

Matrix: Soil
Date Collected: 02.03.2021 12:39

Date Received: 02.04.2021 10:01
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	11.5	1.01	mg/kg	02.06.2021 19:21		500
Toluene	108-88-3	157	1.01	mg/kg	02.06.2021 19:21		500
Ethylbenzene	100-41-4	83.8	1.01	mg/kg	02.06.2021 19:21		500
m,p-Xylenes	179601-23-1	136	2.01	mg/kg	02.06.2021 19:21		500
o-Xylene	95-47-6	49.1	1.01	mg/kg	02.06.2021 19:21		500
Total Xylenes	1330-20-7	185	1.01	mg/kg	02.06.2021 19:21		500
Total BTEX		437	1.01	mg/kg	02.06.2021 19:21		500

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	84	%	70-130	02.06.2021 19:21	
4-Bromofluorobenzene	460-00-4	209	%	70-130	02.06.2021 19:21	**



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH05D**
Lab Sample Id: 687301-010

Matrix: Soil
Date Collected: 02.03.2021 14:45

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 18:05

% Moisture:
Basis: Wet Weight

Seq Number: 3150094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.85	4.96	mg/kg	02.05.2021 01:35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.07.2021 02:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.07.2021 02:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 02:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.07.2021 02:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	80	%	70-130	02.07.2021 02:35		
o-Terphenyl	84-15-1	94	%	70-130	02.07.2021 02:35		



Certificate of Analytical Results 687301

WSP USA, Dallas, TX

Boyce 15-001

Sample Id: **PH05D**
Lab Sample Id: 687301-010

Matrix: Soil
Date Collected: 02.03.2021 14:45

Date Received: 02.04.2021 10:01
Sample Depth: 19 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0189	0.00198	mg/kg	02.05.2021 04:58		1
Toluene	108-88-3	0.0856	0.00198	mg/kg	02.05.2021 04:58		1
Ethylbenzene	100-41-4	0.0346	0.00198	mg/kg	02.05.2021 04:58		1
m,p-Xylenes	179601-23-1	0.0558	0.00397	mg/kg	02.05.2021 04:58		1
o-Xylene	95-47-6	0.0184	0.00198	mg/kg	02.05.2021 04:58		1
Total Xylenes	1330-20-7	0.0742	0.00198	mg/kg	02.05.2021 04:58		1
Total BTEX		0.213	0.00198	mg/kg	02.05.2021 04:58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	02.05.2021 04:58	
1,4-Difluorobenzene	540-36-3	90	%	70-130	02.05.2021 04:58	



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



WSP USA
Boyce 15-001

Analytical Method: Chloride by EPA 300

Seq Number: 3150094

MB Sample Id: 7720833-1-BLK

Matrix: Solid

LCS Sample Id: 7720833-1-BKS

Prep Method: E300P

Date Prep: 02.04.2021

LCSD Sample Id: 7720833-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	254	102	90-110	2	20	mg/kg	02.04.2021 23:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3150094

Parent Sample Id: 687301-001

Matrix: Soil

MS Sample Id: 687301-001 S

Prep Method: E300P

Date Prep: 02.04.2021

MSD Sample Id: 687301-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	14.2	249	306	117	300	115	90-110	2	20	mg/kg	02.05.2021 00:04	X

Analytical Method: Chloride by EPA 300

Seq Number: 3150094

Parent Sample Id: 687301-008

Matrix: Soil

MS Sample Id: 687301-008 S

Prep Method: E300P

Date Prep: 02.04.2021

MSD Sample Id: 687301-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.1	250	285	105	331	124	90-110	15	20	mg/kg	02.05.2021 01:19	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150327

MB Sample Id: 7721016-1-BLK

Matrix: Solid

LCS Sample Id: 7721016-1-BKS

Prep Method: SW8015P

Date Prep: 02.06.2021

LCSD Sample Id: 7721016-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1040	104	1110	111	70-130	7	20	mg/kg	02.06.2021 22:01	
Diesel Range Organics (DRO)	<50.0	1000	959	96	1030	103	70-130	7	20	mg/kg	02.06.2021 22:01	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	91		93		99		70-130	%	02.06.2021 22:01			
o-Terphenyl	106		94		101		70-130	%	02.06.2021 22:01			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150327

Matrix: Solid

MB Sample Id: 7721016-1-BLK

Prep Method: SW8015P

Date Prep: 02.06.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.06.2021 21:39	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WSP USA

Boyce 15-001

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150327

Parent Sample Id: 687301-002

Matrix: Soil

MS Sample Id: 687301-002 S

Prep Method: SW8015P

Date Prep: 02.06.2021

MSD Sample Id: 687301-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	994	100	1010	101	70-130	2	20	mg/kg	02.06.2021 23:06	
Diesel Range Organics (DRO)	<49.9	997	904	91	905	91	70-130	0	20	mg/kg	02.06.2021 23:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	84		85		70-130	%	02.06.2021 23:06
o-Terphenyl	88		87		70-130	%	02.06.2021 23:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150090

MB Sample Id: 7720848-1-BLK

Matrix: Solid

LCS Sample Id: 7720848-1-BKS

Prep Method: SW5035A

Date Prep: 02.04.2021

LCSD Sample Id: 7720848-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0852	85	0.0959	96	70-130	12	35	mg/kg	02.04.2021 23:33	
Toluene	<0.00200	0.100	0.0807	81	0.0923	92	70-130	13	35	mg/kg	02.04.2021 23:33	
Ethylbenzene	<0.00200	0.100	0.0863	86	0.101	101	70-130	16	35	mg/kg	02.04.2021 23:33	
m,p-Xylenes	<0.00400	0.200	0.171	86	0.203	102	70-130	17	35	mg/kg	02.04.2021 23:33	
o-Xylene	<0.00200	0.100	0.0860	86	0.103	103	70-130	18	35	mg/kg	02.04.2021 23:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		101		103		70-130	%	02.04.2021 23:33
4-Bromofluorobenzene	106		94		110		70-130	%	02.04.2021 23:33

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150258

MB Sample Id: 7720950-1-BLK

Matrix: Solid

LCS Sample Id: 7720950-1-BKS

Prep Method: SW5035A

Date Prep: 02.05.2021

LCSD Sample Id: 7720950-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.121	121	0.118	118	70-130	3	35	mg/kg	02.06.2021 05:46	
Toluene	<0.00200	0.100	0.115	115	0.114	114	70-130	1	35	mg/kg	02.06.2021 05:46	
Ethylbenzene	<0.00200	0.100	0.113	113	0.112	112	70-130	1	35	mg/kg	02.06.2021 05:46	
m,p-Xylenes	<0.00400	0.200	0.233	117	0.234	117	70-130	0	35	mg/kg	02.06.2021 05:46	
o-Xylene	<0.00200	0.100	0.115	115	0.116	116	70-130	1	35	mg/kg	02.06.2021 05:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		112		119		70-130	%	02.06.2021 05:46
4-Bromofluorobenzene	90		113		130		70-130	%	02.06.2021 05:46

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WSP USA
Boyce 15-001

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150520

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.09.2021

MB Sample Id: 7721162-1-BLK

LCS Sample Id: 7721162-1-BKS

LCSD Sample Id: 7721162-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0753	75	0.0822	82	70-130	9	35	mg/kg	02.09.2021 10:22	
Toluene	<0.00200	0.100	0.0813	81	0.0855	86	70-130	5	35	mg/kg	02.09.2021 10:22	
Ethylbenzene	<0.00200	0.100	0.0838	84	0.0890	89	70-130	6	35	mg/kg	02.09.2021 10:22	
m,p-Xylenes	<0.00400	0.200	0.170	85	0.179	90	70-130	5	35	mg/kg	02.09.2021 10:22	
o-Xylene	<0.00200	0.100	0.0828	83	0.0842	84	70-130	2	35	mg/kg	02.09.2021 10:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		99		99		70-130	%	02.09.2021 10:22
4-Bromofluorobenzene	132	**	97		93		70-130	%	02.09.2021 10:22

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150090

Matrix: Soil

Prep Method: SW5035A

Date Prep: 02.04.2021

Parent Sample Id: 687301-001

MS Sample Id: 687301-001 S

MSD Sample Id: 687301-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	2.35	0.0994	3.74	1398	2.86	513	70-130	27	35	mg/kg	02.05.2021 00:14	X
Toluene	5.96	0.0994	9.51	3571	0.372	0	70-130	185	35	mg/kg	02.05.2021 00:14	XF
Ethylbenzene	2.54	0.0994	4.66	2133	3.57	1036	70-130	26	35	mg/kg	02.05.2021 00:14	X
m,p-Xylenes	2.66	0.199	4.67	1010	1.96	0	70-130	82	35	mg/kg	02.05.2021 00:14	XF
o-Xylene	0.368	0.0994	0.640	274	0.511	144	70-130	22	35	mg/kg	02.05.2021 00:14	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	7300	**	299	**	70-130	%	02.05.2021 00:14
4-Bromofluorobenzene	90		17	**	70-130	%	02.05.2021 00:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150258

Matrix: Soil

Prep Method: SW5035A

Date Prep: 02.05.2021

Parent Sample Id: 687440-001

MS Sample Id: 687440-001 S

MSD Sample Id: 687440-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0539	54	0.0470	47	70-130	14	35	mg/kg	02.06.2021 06:36	X
Toluene	<0.00200	0.0998	0.0599	60	0.0517	52	70-130	15	35	mg/kg	02.06.2021 06:36	X
Ethylbenzene	<0.00200	0.0998	0.0607	61	0.0549	55	70-130	10	35	mg/kg	02.06.2021 06:36	X
m,p-Xylenes	<0.00399	0.200	0.127	64	0.0973	49	70-130	26	35	mg/kg	02.06.2021 06:36	X
o-Xylene	<0.00200	0.0998	0.0614	62	0.0796	80	70-130	26	35	mg/kg	02.06.2021 06:36	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		73		70-130	%	02.06.2021 06:36
4-Bromofluorobenzene	132	**	120		70-130	%	02.06.2021 06:36

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WSP USA
Boyce 15-001

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150520

Parent Sample Id: 687306-006

Matrix: Soil

MS Sample Id: 687306-006 S

Prep Method: SW5035A

Date Prep: 02.09.2021

MSD Sample Id: 687306-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0738	74	0.111	112	70-130	40	35	mg/kg	02.09.2021 11:03	F
Toluene	<0.00200	0.100	0.0711	71	0.0926	93	70-130	26	35	mg/kg	02.09.2021 11:03	
Ethylbenzene	<0.00200	0.100	0.0626	63	0.0767	77	70-130	20	35	mg/kg	02.09.2021 11:03	X
m,p-Xylenes	<0.00400	0.200	0.128	64	0.155	78	70-130	19	35	mg/kg	02.09.2021 11:03	X
o-Xylene	<0.00200	0.100	0.0613	61	0.0834	84	70-130	31	35	mg/kg	02.09.2021 11:03	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		105		70-130	%	02.09.2021 11:03
4-Bromofluorobenzene	107		99		70-130	%	02.09.2021 11:03

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 087301

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)

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Project Manager:	Dan Moir	Bill to: (if different)	Dan Moir
Company Name:	WSP USA	Company Name:	WSP USA
Address:	3300 N. A St	Address:	3300 N. A Street
City, State ZIP:	Midland TX 79705	City, State ZIP:	Midland, TX 79705
Phone:	303-887-2946	Email:	Dan.Moir@wsp.com, kate.tennings@wsp.com
Project Name:	Boyle 15-001	Turn Around	
Project Number:	1065A1001	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Kaleb Henry	Due Date:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	4.2	Thermometer ID				
Received Inlet:	Yes	No	Correction Factor: 1.28			
Cooler Custody Seals:	Yes	No	Total Containers: 5			
Sample Custody Seals:	Yes	No				

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EP)	BTEX (E)	Chloride	Sample Comments									
PH01		S	1/18	09:05	2'	1	X	X	X										
PH01P			2/12	10:25	19'		X												
PH02			1/28	13:15	2'														
PH02D			2/3	17:25	19'														
PH03			2/3	08:35	2'														
PH03D			2/3	15:40	19'														
PH04			2/3	10:35	2'														
PH04D			2/3	11:45	19'														
PH05			2/3	12:39	2'														
PH05D			2/3	14:45	19'														

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>[Signature]</i>	<i>[Signature]</i>	2/1/21 10:01	2		
3 <i>[Signature]</i>			4		
5			6		



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-376-1

Laboratory Sample Delivery Group: TE106521001

Client Project/Site: Boyce 15 #001

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:
3/18/2021 9:50:07 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: Boyce 15 #001

Laboratory Job ID: 890-376-1
SDG: TE106521001

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Job ID: 890-376-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-376-1****Receipt**

The sample was received on 3/17/2021 4:55 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 3.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS08 (890-376-1).

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following sample: FS08 (890-376-1). The sample(s) shows evidence of matrix interference. Confirmed by re-analysis.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Client Sample ID: FS08

Lab Sample ID: 890-376-1

Date Collected: 03/17/21 12:18

Matrix: Solid

Date Received: 03/17/21 16:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0260		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Ethylbenzene	0.214		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Toluene	0.319		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Total BTEX	1.15		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Xylenes, Total	0.591		0.00401	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
m-Xylene & p-Xylene	0.407		0.00401	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
o-Xylene	0.184		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	22	S1-	70 - 130	03/18/21 12:09	03/18/21 16:36	1
1,4-Difluorobenzene (Surr)	10	S1-	70 - 130	03/18/21 12:09	03/18/21 16:36	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	419		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1
Total TPH	1450		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1
Diesel Range Organics (Over C10-C28)	906		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1
Oil Range Organics (Over C28-C36)	123		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/18/21 12:03	03/18/21 13:46	1
o-Terphenyl	95		70 - 130	03/18/21 12:03	03/18/21 13:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.9		4.96	mg/Kg			03/18/21 17:17	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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)
890-376-1	FS08	22 S1-	10 S1-
LCS 880-508/1-B	Lab Control Sample	99	98
LCSD 880-508/2-B	Lab Control Sample Dup	100	100
MB 880-500/5-A	Method Blank	103	94
MB 880-508/5-B	Method Blank	100	95
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)
890-376-1	FS08	102	95
LCS 880-556/2-A	Lab Control Sample	122	109
LCSD 880-556/3-A	Lab Control Sample Dup	114	102
MB 880-556/1-A	Method Blank	96	91
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-500/5-A

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 500

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			03/17/21 15:42	03/18/21 02:06	1
1,4-Difluorobenzene (Surr)	94		70 - 130			03/17/21 15:42	03/18/21 02:06	1

Lab Sample ID: MB 880-508/5-B

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			03/16/21 15:47	03/18/21 12:22	1
1,4-Difluorobenzene (Surr)	95		70 - 130			03/16/21 15:47	03/18/21 12:22	1

Lab Sample ID: LCS 880-508/1-B

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08775		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.09672		mg/Kg		97	70 - 130
Toluene	0.100	0.09571		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1988		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09865		mg/Kg		99	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		70 - 130				
1,4-Difluorobenzene (Surr)	98		70 - 130				

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-508/2-B

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09498		mg/Kg		95	70 - 130	8	35
Ethylbenzene	0.100	0.1040		mg/Kg		104	70 - 130	7	35
Toluene	0.100	0.1015		mg/Kg		101	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2126		mg/Kg		106	70 - 130	7	35
o-Xylene	0.100	0.1053		mg/Kg		105	70 - 130	7	35

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

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

Lab Sample ID: MB 880-556/1-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 556

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1
Total TPH	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/18/21 09:00	03/18/21 11:19	1
o-Terphenyl	91		70 - 130	03/18/21 09:00	03/18/21 11:19	1

Lab Sample ID: LCS 880-556/2-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1117		mg/Kg		112	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1023		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-556/3-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1111		mg/Kg		111	70 - 130	0	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-556/3-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	954.5		mg/Kg		95	70 - 130	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	114		70 - 130						
o-Terphenyl	102		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-560/1-A

Matrix: Solid

Analysis Batch: 562

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			03/18/21 16:14	1

Lab Sample ID: LCS 880-560/2-A

Matrix: Solid

Analysis Batch: 562

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-560/3-A

Matrix: Solid

Analysis Batch: 562

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	248.4		mg/Kg		99	90 - 110	6	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

GC VOA

Prep Batch: 500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-500/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	5035	
MB 880-508/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-508/1-B	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-508/2-B	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	8021B	508
MB 880-500/5-A	Method Blank	Total/NA	Solid	8021B	500
MB 880-508/5-B	Method Blank	Total/NA	Solid	8021B	508
LCS 880-508/1-B	Lab Control Sample	Total/NA	Solid	8021B	508
LCSD 880-508/2-B	Lab Control Sample Dup	Total/NA	Solid	8021B	508

GC Semi VOA

Prep Batch: 556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	8015NM Prep	
MB 880-556/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-556/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	8015B NM	556
MB 880-556/1-A	Method Blank	Total/NA	Solid	8015B NM	556
LCS 880-556/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	556
LCSD 880-556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	556

HPLC/IC

Leach Batch: 560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Soluble	Solid	DI Leach	
MB 880-560/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-560/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-560/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Soluble	Solid	300.0	560
MB 880-560/1-A	Method Blank	Soluble	Solid	300.0	560
LCS 880-560/2-A	Lab Control Sample	Soluble	Solid	300.0	560
LCSD 880-560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	560

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Client Sample ID: FS08

Lab Sample ID: 890-376-1

Date Collected: 03/17/21 12:18

Matrix: Solid

Date Received: 03/17/21 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508	03/18/21 12:09	MR	XM
Total/NA	Analysis	8021B		1	528	03/18/21 16:36	MR	XM
Total/NA	Prep	8015NM Prep			556	03/18/21 12:03	DM	XM
Total/NA	Analysis	8015B NM		1	557	03/18/21 13:46	AM	XM
Soluble	Leach	DI Leach			560	03/18/21 12:58	CH	XM
Soluble	Analysis	300.0		1	562	03/18/21 17:17	CH	XM

Laboratory References:

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

Method Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-376-1	FS08	Solid	03/17/21 12:18	03/17/21 16:55	

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



Environment Testing
Xenco

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

Chain of Custody

Work Order No.:

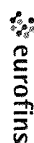
Page 1 of 1
www.xenco.com[illegible]

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: 890-376-1

SDG Number: TE106521001

Login Number: 376

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-376-1

SDG Number: TE106521001

Login Number: 376

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 03/18/21 11:51 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?	N/A	
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: 890-377-1

Laboratory Sample Delivery Group: TE106521001

Client Project/Site: Boyce 15 # 001

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:
3/30/2021 7:07:57 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: Boyce 15 # 001

Laboratory Job ID: 890-377-1
SDG: TE106521001

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD 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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD 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: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Job ID: 890-377-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-377-1

Receipt

The samples were received on 3/17/2021 4:53 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 3.0°C

Receipt Exceptions

The following samples analyzed for method BTEX were received and analyzed from an unpreserved bulk soil jar: FS01 (890-377-1), FS02 (890-377-2), FS03 (890-377-3), FS04 (890-377-4), FS05 (890-377-5), FS06 (890-377-6), FS07 (890-377-7), FS09 (890-377-8), FS10 (890-377-9), FS11 (890-377-10), FS12 (890-377-11), FS13 (890-377-12), FS14 (890-377-13), FS15 (890-377-14), SW01 (890-377-15), SW02 (890-377-16), SW03 (890-377-17), SW04 (890-377-18), SW05 (890-377-19), SW06 (890-377-20), SW07 (890-377-21), SW08 (890-377-22), SW09 (890-377-23) and SW10 (890-377-24).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch recovered above the upper control limit for Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FS01 (890-377-1), FS02 (890-377-2), FS03 (890-377-3), FS04 (890-377-4) and FS05 (890-377-5).

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW10 (890-377-24). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS01

Lab Sample ID: 890-377-1

Date Collected: 03/16/21 15:23

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.161		0.0998		mg/Kg		03/26/21 11:28	03/26/21 22:50	50
Ethylbenzene	<0.00200	U ** *1	0.00200		mg/Kg		03/26/21 11:28	03/27/21 20:17	1
Toluene	<0.00200	U ** *1	0.00200		mg/Kg		03/26/21 11:28	03/27/21 20:17	1
Total BTEX	7.00		0.0998		mg/Kg		03/26/21 11:28	03/26/21 22:50	50
Xylenes, Total	6.84		0.200		mg/Kg		03/26/21 11:28	03/26/21 22:50	50
m-Xylene & p-Xylene	4.27		0.200		mg/Kg		03/26/21 11:28	03/26/21 22:50	50
o-Xylene	2.57		0.0998		mg/Kg		03/26/21 11:28	03/26/21 22:50	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	230	S1+	70 - 130	03/26/21 11:28	03/26/21 22:50	50
1,4-Difluorobenzene (Surr)	70		70 - 130	03/26/21 11:28	03/26/21 22:50	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	207		50.0		mg/Kg		03/24/21 09:00	03/25/21 22:34	1
Diesel Range Organics (Over C10-C28)	2320		50.0		mg/Kg		03/24/21 09:00	03/25/21 22:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:00	03/25/21 22:34	1
Total TPH	2530		50.0		mg/Kg		03/24/21 09:00	03/25/21 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	03/24/21 09:00	03/25/21 22:34	1
o-Terphenyl	96		70 - 130	03/24/21 09:00	03/25/21 22:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.18		5.02		mg/Kg			03/23/21 19:14	1

Client Sample ID: FS02

Lab Sample ID: 890-377-2

Date Collected: 03/16/21 15:25

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.100	U	0.100		mg/Kg		03/26/21 11:28	03/26/21 23:17	50
Ethylbenzene	0.968		0.100		mg/Kg		03/26/21 11:28	03/26/21 23:17	50
Toluene	1.52	** *1	0.0402		mg/Kg		03/26/21 11:28	03/27/21 20:42	20
Total BTEX	13.3		0.100		mg/Kg		03/26/21 11:28	03/26/21 23:17	50
Xylenes, Total	11.2		0.201		mg/Kg		03/26/21 11:28	03/26/21 23:17	50
m-Xylene & p-Xylene	7.54		0.201		mg/Kg		03/26/21 11:28	03/26/21 23:17	50
o-Xylene	3.65		0.100		mg/Kg		03/26/21 11:28	03/26/21 23:17	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130	03/26/21 11:28	03/26/21 23:17	50
1,4-Difluorobenzene (Surr)	46	S1-	70 - 130	03/26/21 11:28	03/26/21 23:17	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	281		50.0		mg/Kg		03/24/21 09:00	03/26/21 00:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS02

Lab Sample ID: 890-377-2

Date Collected: 03/16/21 15:25

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	2040		50.0		mg/Kg		03/24/21 09:00	03/26/21 00:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:00	03/26/21 00:06	1
Total TPH	2320		50.0		mg/Kg		03/24/21 09:00	03/26/21 00:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				03/24/21 09:00	03/26/21 00:06	1
o-Terphenyl	84		70 - 130				03/24/21 09:00	03/26/21 00:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.0		4.98		mg/Kg			03/23/21 19:20	1

Client Sample ID: FS03

Lab Sample ID: 890-377-3

Date Collected: 03/17/21 11:14

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.274		0.101		mg/Kg		03/26/21 11:28	03/26/21 23:42	50
Ethylbenzene	3.44		0.101		mg/Kg		03/26/21 11:28	03/26/21 23:42	50
Toluene	8.10		0.398		mg/Kg		03/30/21 09:18	03/30/21 16:08	200
Total BTEX	45.5		0.101		mg/Kg		03/26/21 11:28	03/26/21 23:42	50
Xylenes, Total	31.1		0.201		mg/Kg		03/26/21 11:28	03/26/21 23:42	50
m-Xylene & p-Xylene	22.7		0.201		mg/Kg		03/26/21 11:28	03/26/21 23:42	50
o-Xylene	8.35		0.101		mg/Kg		03/26/21 11:28	03/26/21 23:42	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	237	S1+	70 - 130				03/26/21 11:28	03/26/21 23:42	50
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130				03/26/21 11:28	03/26/21 23:42	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	706		49.9		mg/Kg		03/24/21 09:00	03/26/21 00:36	1
Diesel Range Organics (Over C10-C28)	1990		49.9		mg/Kg		03/24/21 09:00	03/26/21 00:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:00	03/26/21 00:36	1
Total TPH	2700		49.9		mg/Kg		03/24/21 09:00	03/26/21 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				03/24/21 09:00	03/26/21 00:36	1
o-Terphenyl	89		70 - 130				03/24/21 09:00	03/26/21 00:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.7		4.95		mg/Kg			03/23/21 19:25	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS04

Lab Sample ID: 890-377-4

Date Collected: 03/17/21 09:45

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.100	U	0.100		mg/Kg		03/26/21 11:28	03/27/21 00:08	50
Ethylbenzene	0.706		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:08	50
Toluene	<0.100	U ** *1	0.100		mg/Kg		03/26/21 11:28	03/27/21 21:08	50
Total BTEX	5.04		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:08	50
Xylenes, Total	3.91		0.200		mg/Kg		03/26/21 11:28	03/27/21 00:08	50
m-Xylene & p-Xylene	2.88		0.200		mg/Kg		03/26/21 11:28	03/27/21 00:08	50
o-Xylene	1.03		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:08	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	167	S1+	70 - 130	03/26/21 11:28	03/27/21 00:08	50
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130	03/26/21 11:28	03/27/21 00:08	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	101		49.8		mg/Kg		03/24/21 09:00	03/26/21 01:08	1
Diesel Range Organics (Over C10-C28)	1650		49.8		mg/Kg		03/24/21 09:00	03/26/21 01:08	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/21 09:00	03/26/21 01:08	1
Total TPH	1750		49.8		mg/Kg		03/24/21 09:00	03/26/21 01:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/24/21 09:00	03/26/21 01:08	1
o-Terphenyl	87		70 - 130	03/24/21 09:00	03/26/21 01:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.88		5.05		mg/Kg			03/23/21 19:40	1

Client Sample ID: FS05

Lab Sample ID: 890-377-5

Date Collected: 03/16/21 15:32

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.269		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:34	50
Ethylbenzene	0.133		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:34	50
Toluene	<0.0400	U ** *1	0.0400		mg/Kg		03/26/21 11:28	03/27/21 21:33	20
Total BTEX	1.81		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:34	50
Xylenes, Total	1.41		0.200		mg/Kg		03/26/21 11:28	03/27/21 00:34	50
m-Xylene & p-Xylene	0.662		0.200		mg/Kg		03/26/21 11:28	03/27/21 00:34	50
o-Xylene	0.748		0.100		mg/Kg		03/26/21 11:28	03/27/21 00:34	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130	03/26/21 11:28	03/27/21 00:34	50
1,4-Difluorobenzene (Surr)	54	S1-	70 - 130	03/26/21 11:28	03/27/21 00:34	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 01:30	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS05

Lab Sample ID: 890-377-5

Date Collected: 03/16/21 15:32

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	378		50.0		mg/Kg		03/24/21 09:01	03/26/21 01:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 01:30	1
Total TPH	378		50.0		mg/Kg		03/24/21 09:01	03/26/21 01:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				03/24/21 09:01	03/26/21 01:30	1
o-Terphenyl	90		70 - 130				03/24/21 09:01	03/26/21 01:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.30		4.98		mg/Kg			03/23/21 19:46	1

Client Sample ID: FS06

Lab Sample ID: 890-377-6

Date Collected: 03/17/21 09:48

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0751	*+ *1	0.00994		mg/Kg		03/24/21 10:57	03/27/21 21:59	5
Ethylbenzene	2.94		0.0398		mg/Kg		03/24/21 10:57	03/26/21 19:37	20
Toluene	0.791		0.0398		mg/Kg		03/24/21 10:57	03/26/21 19:37	20
Total BTEX	14.3		0.0398		mg/Kg		03/24/21 10:57	03/26/21 19:37	20
Xylenes, Total	10.6		0.0795		mg/Kg		03/24/21 10:57	03/26/21 19:37	20
m-Xylene & p-Xylene	7.46		0.0795		mg/Kg		03/24/21 10:57	03/26/21 19:37	20
o-Xylene	3.14		0.0398		mg/Kg		03/24/21 10:57	03/26/21 19:37	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				03/24/21 10:57	03/26/21 19:37	20
1,4-Difluorobenzene (Surr)	75		70 - 130				03/24/21 10:57	03/26/21 19:37	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	365		49.9		mg/Kg		03/24/21 09:01	03/26/21 01:51	1
Diesel Range Organics (Over C10-C28)	2220		49.9		mg/Kg		03/24/21 09:01	03/26/21 01:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:01	03/26/21 01:51	1
Total TPH	2590		49.9		mg/Kg		03/24/21 09:01	03/26/21 01:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				03/24/21 09:01	03/26/21 01:51	1
o-Terphenyl	92		70 - 130				03/24/21 09:01	03/26/21 01:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.9		4.97		mg/Kg			03/23/21 19:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS07

Lab Sample ID: 890-377-7

Date Collected: 03/17/21 09:50

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.231		0.0996		mg/Kg		03/24/21 10:57	03/26/21 19:57	50
Ethylbenzene	10.1		0.0996		mg/Kg		03/24/21 10:57	03/26/21 19:57	50
Toluene	11.0		0.0996		mg/Kg		03/24/21 10:57	03/26/21 19:57	50
Total BTEX	42.2		0.0996		mg/Kg		03/24/21 10:57	03/26/21 19:57	50
Xylenes, Total	20.9		0.199		mg/Kg		03/24/21 10:57	03/26/21 19:57	50
m-Xylene & p-Xylene	14.8		0.199		mg/Kg		03/24/21 10:57	03/26/21 19:57	50
o-Xylene	6.08		0.0996		mg/Kg		03/24/21 10:57	03/26/21 19:57	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	19	S1-	70 - 130	03/24/21 10:57	03/26/21 19:57	50
1,4-Difluorobenzene (Surr)	14	S1-	70 - 130	03/24/21 10:57	03/26/21 19:57	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3060		249		mg/Kg		03/24/21 09:01	03/26/21 02:21	5
Diesel Range Organics (Over C10-C28)	6080		249		mg/Kg		03/24/21 09:01	03/26/21 02:21	5
Oil Range Organics (Over C28-C36)	<249	U	249		mg/Kg		03/24/21 09:01	03/26/21 02:21	5
Total TPH	9140		249		mg/Kg		03/24/21 09:01	03/26/21 02:21	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	03/24/21 09:01	03/26/21 02:21	5
o-Terphenyl	96		70 - 130	03/24/21 09:01	03/26/21 02:21	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.73		4.95		mg/Kg			03/23/21 19:56	1

Client Sample ID: FS09

Lab Sample ID: 890-377-8

Date Collected: 03/16/21 14:50

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		03/24/21 10:57	03/26/21 20:18	10
Ethylbenzene	0.116		0.0200		mg/Kg		03/24/21 10:57	03/26/21 20:18	10
Toluene	0.0327		0.0200		mg/Kg		03/24/21 10:57	03/26/21 20:18	10
Total BTEX	0.985		0.0200		mg/Kg		03/24/21 10:57	03/26/21 20:18	10
Xylenes, Total	0.836		0.0399		mg/Kg		03/24/21 10:57	03/26/21 20:18	10
m-Xylene & p-Xylene	0.364		0.0399		mg/Kg		03/24/21 10:57	03/26/21 20:18	10
o-Xylene	0.472		0.0200		mg/Kg		03/24/21 10:57	03/26/21 20:18	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	31	S1-	70 - 130	03/24/21 10:57	03/26/21 20:18	10
1,4-Difluorobenzene (Surr)	98		70 - 130	03/24/21 10:57	03/26/21 20:18	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 02:46	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS09

Lab Sample ID: 890-377-8

Date Collected: 03/16/21 14:50

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	766		50.0		mg/Kg		03/24/21 09:01	03/26/21 02:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 02:46	1
Total TPH	766		50.0		mg/Kg		03/24/21 09:01	03/26/21 02:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				03/24/21 09:01	03/26/21 02:46	1
o-Terphenyl	96		70 - 130				03/24/21 09:01	03/26/21 02:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.18		5.00		mg/Kg			03/23/21 20:01	1

Client Sample ID: FS10

Lab Sample ID: 890-377-9

Date Collected: 03/17/21 09:32

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.104		0.100		mg/Kg		03/24/21 10:57	03/26/21 20:38	50
Ethylbenzene	38.4	*+ *1	0.200		mg/Kg		03/24/21 10:57	03/27/21 22:24	100
Toluene	29.2	*+ *1	0.200		mg/Kg		03/24/21 10:57	03/27/21 22:24	100
Total BTEX	162	*+ *1	0.200		mg/Kg		03/24/21 10:57	03/27/21 22:24	100
Xylenes, Total	94.4	*+ *1	0.401		mg/Kg		03/24/21 10:57	03/27/21 22:24	100
m-Xylene & p-Xylene	67.8	*+ *1	0.401		mg/Kg		03/24/21 10:57	03/27/21 22:24	100
o-Xylene	19.4		0.100		mg/Kg		03/24/21 10:57	03/26/21 20:38	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				03/24/21 10:57	03/26/21 20:38	50
1,4-Difluorobenzene (Surr)	80		70 - 130				03/24/21 10:57	03/26/21 20:38	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1590		50.0		mg/Kg		03/24/21 09:01	03/26/21 03:07	1
Diesel Range Organics (Over C10-C28)	3780		50.0		mg/Kg		03/24/21 09:01	03/26/21 03:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 03:07	1
Total TPH	5370		50.0		mg/Kg		03/24/21 09:01	03/26/21 03:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				03/24/21 09:01	03/26/21 03:07	1
o-Terphenyl	77		70 - 130				03/24/21 09:01	03/26/21 03:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			03/23/21 20:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS11

Lab Sample ID: 890-377-10

Date Collected: 03/17/21 09:35

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101		mg/Kg		03/24/21 10:57	03/26/21 20:59	50
Ethylbenzene	13.7		0.101		mg/Kg		03/24/21 10:57	03/26/21 20:59	50
Toluene	13.5		0.101		mg/Kg		03/24/21 10:57	03/26/21 20:59	50
Total BTEX	67.2		0.101		mg/Kg		03/24/21 10:57	03/26/21 20:59	50
Xylenes, Total	40.0		0.202		mg/Kg		03/24/21 10:57	03/26/21 20:59	50
m-Xylene & p-Xylene	26.7		0.202		mg/Kg		03/24/21 10:57	03/26/21 20:59	50
o-Xylene	13.3		0.101		mg/Kg		03/24/21 10:57	03/26/21 20:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/24/21 10:57	03/26/21 20:59	50
1,4-Difluorobenzene (Surr)	83		70 - 130	03/24/21 10:57	03/26/21 20:59	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	888		50.1		mg/Kg		03/24/21 09:01	03/26/21 03:41	1
Diesel Range Organics (Over C10-C28)	2800		50.1		mg/Kg		03/24/21 09:01	03/26/21 03:41	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/24/21 09:01	03/26/21 03:41	1
Total TPH	3690		50.1		mg/Kg		03/24/21 09:01	03/26/21 03:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	03/24/21 09:01	03/26/21 03:41	1
o-Terphenyl	25	S1-	70 - 130	03/24/21 09:01	03/26/21 03:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		5.04		mg/Kg			03/23/21 20:22	1

Client Sample ID: FS12

Lab Sample ID: 890-377-11

Date Collected: 03/16/21 14:57

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.591	*+ *1	0.0202		mg/Kg		03/24/21 10:57	03/27/21 22:49	10
Ethylbenzene	19.3		0.101		mg/Kg		03/24/21 10:57	03/26/21 21:19	50
Toluene	14.3		0.101		mg/Kg		03/24/21 10:57	03/26/21 21:19	50
Total BTEX	83.4		0.101		mg/Kg		03/24/21 10:57	03/26/21 21:19	50
Xylenes, Total	49.8		0.202		mg/Kg		03/24/21 10:57	03/26/21 21:19	50
m-Xylene & p-Xylene	34.3		0.202		mg/Kg		03/24/21 10:57	03/26/21 21:19	50
o-Xylene	15.5		0.101		mg/Kg		03/24/21 10:57	03/26/21 21:19	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	03/24/21 10:57	03/26/21 21:19	50
1,4-Difluorobenzene (Surr)	98		70 - 130	03/24/21 10:57	03/26/21 21:19	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	990		50.0		mg/Kg		03/24/21 09:01	03/26/21 04:36	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS12

Lab Sample ID: 890-377-11

Date Collected: 03/16/21 14:57

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	3800		50.0		mg/Kg		03/24/21 09:01	03/26/21 04:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 04:36	1
Total TPH	4790		50.0		mg/Kg		03/24/21 09:01	03/26/21 04:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130				03/24/21 09:01	03/26/21 04:36	1
o-Terphenyl	29	S1-	70 - 130				03/24/21 09:01	03/26/21 04:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.70		5.03		mg/Kg			03/23/21 20:27	1

Client Sample ID: FS13

Lab Sample ID: 890-377-12

Date Collected: 03/16/21 15:00

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0404	U	0.0404		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
Ethylbenzene	0.133		0.0404		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
Toluene	<0.0404	U	0.0404		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
Total BTEX	1.44		0.0404		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
Xylenes, Total	1.31		0.0808		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
m-Xylene & p-Xylene	0.228		0.0808		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
o-Xylene	1.08		0.0404		mg/Kg		03/24/21 10:57	03/26/21 21:39	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				03/24/21 10:57	03/26/21 21:39	20
1,4-Difluorobenzene (Surr)	92		70 - 130				03/24/21 10:57	03/26/21 21:39	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/24/21 09:01	03/26/21 05:07	1
Diesel Range Organics (Over C10-C28)	1100		49.8		mg/Kg		03/24/21 09:01	03/26/21 05:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/21 09:01	03/26/21 05:07	1
Total TPH	1100		49.8		mg/Kg		03/24/21 09:01	03/26/21 05:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130				03/24/21 09:01	03/26/21 05:07	1
o-Terphenyl	9	S1-	70 - 130				03/24/21 09:01	03/26/21 05:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.5		5.05		mg/Kg			03/23/21 20:43	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS14

Lab Sample ID: 890-377-13

Date Collected: 03/17/21 09:38

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:00	20
Ethylbenzene	0.253		0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:00	20
Toluene	<0.0402	U	0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:00	20
Total BTEX	1.19		0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:00	20
Xylenes, Total	0.935		0.0803		mg/Kg		03/24/21 10:57	03/26/21 22:00	20
m-Xylene & p-Xylene	0.538		0.0803		mg/Kg		03/24/21 10:57	03/26/21 22:00	20
o-Xylene	0.397		0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:00	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	03/24/21 10:57	03/26/21 22:00	20
1,4-Difluorobenzene (Surr)	90		70 - 130	03/24/21 10:57	03/26/21 22:00	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	65.6		49.9		mg/Kg		03/24/21 09:01	03/26/21 05:28	1
Diesel Range Organics (Over C10-C28)	764		49.9		mg/Kg		03/24/21 09:01	03/26/21 05:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:01	03/26/21 05:28	1
Total TPH	830		49.9		mg/Kg		03/24/21 09:01	03/26/21 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/24/21 09:01	03/26/21 05:28	1
o-Terphenyl	8	S1-	70 - 130	03/24/21 09:01	03/26/21 05:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.3		5.05		mg/Kg			03/23/21 20:48	1

Client Sample ID: FS15

Lab Sample ID: 890-377-14

Date Collected: 03/17/21 09:40

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101		mg/Kg		03/24/21 10:57	03/26/21 22:20	50
Ethylbenzene	10.7		0.101		mg/Kg		03/24/21 10:57	03/26/21 22:20	50
Toluene	5.41		0.101		mg/Kg		03/24/21 10:57	03/26/21 22:20	50
Total BTEX	40.4		0.101		mg/Kg		03/24/21 10:57	03/26/21 22:20	50
Xylenes, Total	24.3		0.202		mg/Kg		03/24/21 10:57	03/26/21 22:20	50
m-Xylene & p-Xylene	16.9		0.202		mg/Kg		03/24/21 10:57	03/26/21 22:20	50
o-Xylene	7.39		0.101		mg/Kg		03/24/21 10:57	03/26/21 22:20	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	03/24/21 10:57	03/26/21 22:20	50
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	03/24/21 10:57	03/26/21 22:20	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	837		49.9		mg/Kg		03/24/21 09:01	03/26/21 05:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS15

Lab Sample ID: 890-377-14

Date Collected: 03/17/21 09:40

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	3110		49.9		mg/Kg		03/24/21 09:01	03/26/21 05:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:01	03/26/21 05:49	1
Total TPH	3950		49.9		mg/Kg		03/24/21 09:01	03/26/21 05:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				03/24/21 09:01	03/26/21 05:49	1
o-Terphenyl	29	S1-	70 - 130				03/24/21 09:01	03/26/21 05:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.2		5.00		mg/Kg			03/23/21 20:53	1

Client Sample ID: SW01

Lab Sample ID: 890-377-15

Date Collected: 03/16/21 15:48

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
Ethylbenzene	0.0619		0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
Toluene	<0.0402	U	0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
Total BTEX	0.410		0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
Xylenes, Total	0.348		0.0803		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
m-Xylene & p-Xylene	<0.0803	U	0.0803		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
o-Xylene	0.348		0.0402		mg/Kg		03/24/21 10:57	03/26/21 22:41	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				03/24/21 10:57	03/26/21 22:41	20
1,4-Difluorobenzene (Surr)	91		70 - 130				03/24/21 10:57	03/26/21 22:41	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/24/21 09:01	03/26/21 06:21	1
Diesel Range Organics (Over C10-C28)	681		49.9		mg/Kg		03/24/21 09:01	03/26/21 06:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:01	03/26/21 06:21	1
Total TPH	681		49.9		mg/Kg		03/24/21 09:01	03/26/21 06:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				03/24/21 09:01	03/26/21 06:21	1
o-Terphenyl	6	S1-	70 - 130				03/24/21 09:01	03/26/21 06:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.69		4.98		mg/Kg			03/23/21 20:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW02

Lab Sample ID: 890-377-16

Date Collected: 03/16/21 15:50

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399		mg/Kg		03/26/21 14:28	03/27/21 06:34	20
Ethylbenzene	0.465		0.0399		mg/Kg		03/26/21 14:28	03/27/21 06:34	20
Toluene	0.233		0.0399		mg/Kg		03/26/21 14:28	03/27/21 06:34	20
Total BTEX	1.05		0.0399		mg/Kg		03/26/21 14:28	03/27/21 06:34	20
Xylenes, Total	0.350		0.0798		mg/Kg		03/26/21 14:28	03/27/21 06:34	20
m-Xylene & p-Xylene	<0.0798	U	0.0798		mg/Kg		03/26/21 14:28	03/27/21 06:34	20
o-Xylene	0.350		0.0399		mg/Kg		03/26/21 14:28	03/27/21 06:34	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/26/21 14:28	03/27/21 06:34	20
1,4-Difluorobenzene (Surr)	87		70 - 130	03/26/21 14:28	03/27/21 06:34	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	85.3		50.0		mg/Kg		03/24/21 09:01	03/26/21 06:42	1
Diesel Range Organics (Over C10-C28)	1410		50.0		mg/Kg		03/24/21 09:01	03/26/21 06:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 06:42	1
Total TPH	1500		50.0		mg/Kg		03/24/21 09:01	03/26/21 06:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	03/24/21 09:01	03/26/21 06:42	1
o-Terphenyl	12	S1-	70 - 130	03/24/21 09:01	03/26/21 06:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			03/23/21 21:03	1

Client Sample ID: SW03

Lab Sample ID: 890-377-17

Date Collected: 03/16/21 15:52

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0397	*+ *1	0.00996		mg/Kg		03/26/21 14:28	03/28/21 02:10	5
Ethylbenzene	2.17		0.0398		mg/Kg		03/26/21 14:28	03/27/21 11:37	20
Toluene	1.23		0.0398		mg/Kg		03/26/21 14:28	03/27/21 11:37	20
Total BTEX	9.30		0.0398		mg/Kg		03/26/21 14:28	03/27/21 11:37	20
Xylenes, Total	5.90		0.0797		mg/Kg		03/26/21 14:28	03/27/21 11:37	20
m-Xylene & p-Xylene	4.00		0.0797		mg/Kg		03/26/21 14:28	03/27/21 11:37	20
o-Xylene	1.90		0.0398		mg/Kg		03/26/21 14:28	03/27/21 11:37	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	03/26/21 14:28	03/27/21 11:37	20
1,4-Difluorobenzene (Surr)	78		70 - 130	03/26/21 14:28	03/27/21 11:37	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	645		250		mg/Kg		03/24/21 09:01	03/26/21 07:04	5

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW03

Lab Sample ID: 890-377-17

Date Collected: 03/16/21 15:52

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	6590		250		mg/Kg		03/24/21 09:01	03/26/21 07:04	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		03/24/21 09:01	03/26/21 07:04	5
Total TPH	7240		250		mg/Kg		03/24/21 09:01	03/26/21 07:04	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				03/24/21 09:01	03/26/21 07:04	5
o-Terphenyl	64	S1-	70 - 130				03/24/21 09:01	03/26/21 07:04	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.8		4.95		mg/Kg			03/23/21 21:08	1

Client Sample ID: SW04

Lab Sample ID: 890-377-18

Date Collected: 03/16/21 15:54

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0256	*+ *1	0.00994		mg/Kg		03/26/21 14:28	03/28/21 02:35	5
Ethylbenzene	0.228		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:03	20
Toluene	0.0638		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:03	20
Total BTEX	3.47		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:03	20
Xylenes, Total	3.18		0.0795		mg/Kg		03/26/21 14:28	03/27/21 07:03	20
m-Xylene & p-Xylene	2.07		0.0795		mg/Kg		03/26/21 14:28	03/27/21 07:03	20
o-Xylene	1.11		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:03	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130				03/26/21 14:28	03/27/21 07:03	20
1,4-Difluorobenzene (Surr)	83		70 - 130				03/26/21 14:28	03/27/21 07:03	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	224		49.9		mg/Kg		03/24/21 09:01	03/26/21 07:27	1
Diesel Range Organics (Over C10-C28)	2900		49.9		mg/Kg		03/24/21 09:01	03/26/21 07:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/21 09:01	03/26/21 07:27	1
Total TPH	3120		49.9		mg/Kg		03/24/21 09:01	03/26/21 07:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				03/24/21 09:01	03/26/21 07:27	1
o-Terphenyl	23	S1-	70 - 130				03/24/21 09:01	03/26/21 07:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.25		5.00		mg/Kg			03/23/21 21:14	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW05

Lab Sample ID: 890-377-19

Date Collected: 03/17/21 14:05

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0941	*+ *1	0.00992		mg/Kg		03/26/21 14:28	03/28/21 03:01	5
Ethylbenzene	0.312		0.0397		mg/Kg		03/26/21 14:28	03/27/21 07:23	20
Toluene	0.205		0.0397		mg/Kg		03/26/21 14:28	03/27/21 07:23	20
Total BTEX	2.34		0.0397		mg/Kg		03/26/21 14:28	03/27/21 07:23	20
Xylenes, Total	1.83		0.0794		mg/Kg		03/26/21 14:28	03/27/21 07:23	20
m-Xylene & p-Xylene	1.15		0.0794		mg/Kg		03/26/21 14:28	03/27/21 07:23	20
o-Xylene	0.675		0.0397		mg/Kg		03/26/21 14:28	03/27/21 07:23	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/21 14:28	03/27/21 07:23	20
1,4-Difluorobenzene (Surr)	93		70 - 130	03/26/21 14:28	03/27/21 07:23	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	94.8		50.0		mg/Kg		03/24/21 09:01	03/26/21 07:54	1
Diesel Range Organics (Over C10-C28)	3420		50.0		mg/Kg		03/24/21 09:01	03/26/21 07:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:01	03/26/21 07:54	1
Total TPH	3510		50.0		mg/Kg		03/24/21 09:01	03/26/21 07:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	03/24/21 09:01	03/26/21 07:54	1
o-Terphenyl	32	S1-	70 - 130	03/24/21 09:01	03/26/21 07:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.5		5.02		mg/Kg			03/21/21 16:28	1

Client Sample ID: SW06

Lab Sample ID: 890-377-20

Date Collected: 03/17/21 14:08

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0922	*+ *1	0.00994		mg/Kg		03/26/21 14:28	03/28/21 03:26	5
Ethylbenzene	0.0838		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:44	20
Toluene	<0.00994	U *+ *1	0.00994		mg/Kg		03/26/21 14:28	03/28/21 03:26	5
Total BTEX	0.461		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:44	20
Xylenes, Total	0.377		0.0795		mg/Kg		03/26/21 14:28	03/27/21 07:44	20
m-Xylene & p-Xylene	0.181		0.0795		mg/Kg		03/26/21 14:28	03/27/21 07:44	20
o-Xylene	0.196		0.0398		mg/Kg		03/26/21 14:28	03/27/21 07:44	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/21 14:28	03/27/21 07:44	20
1,4-Difluorobenzene (Surr)	91		70 - 130	03/26/21 14:28	03/27/21 07:44	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/24/21 09:01	03/26/21 08:23	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW06

Lab Sample ID: 890-377-20

Date Collected: 03/17/21 14:08

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	456		50.1		mg/Kg		03/24/21 09:01	03/26/21 08:23	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/24/21 09:01	03/26/21 08:23	1
Total TPH	456		50.1		mg/Kg		03/24/21 09:01	03/26/21 08:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				03/24/21 09:01	03/26/21 08:23	1
o-Terphenyl	5	S1-	70 - 130				03/24/21 09:01	03/26/21 08:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			03/21/21 16:44	1

Client Sample ID: SW07

Lab Sample ID: 890-377-21

Date Collected: 03/17/21 14:10

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0526	*+ *1	0.0100		mg/Kg		03/26/21 14:28	03/28/21 03:51	5
Ethylbenzene	0.655		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:04	20
Toluene	0.380		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:04	20
Total BTEX	4.23		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:04	20
Xylenes, Total	3.19		0.0802		mg/Kg		03/26/21 14:28	03/27/21 08:04	20
m-Xylene & p-Xylene	2.01		0.0802		mg/Kg		03/26/21 14:28	03/27/21 08:04	20
o-Xylene	1.18		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:04	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				03/26/21 14:28	03/27/21 08:04	20
1,4-Difluorobenzene (Surr)	86		70 - 130				03/26/21 14:28	03/27/21 08:04	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	198	*+ *1	49.8		mg/Kg		03/24/21 09:20	03/25/21 05:16	1
Diesel Range Organics (Over C10-C28)	2230		49.8		mg/Kg		03/24/21 09:20	03/25/21 05:16	1
Oil Range Organics (Over C28-C36)	264		49.8		mg/Kg		03/24/21 09:20	03/25/21 05:16	1
Total TPH	2690		49.8		mg/Kg		03/24/21 09:20	03/25/21 05:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				03/24/21 09:20	03/25/21 05:16	1
o-Terphenyl	92		70 - 130				03/24/21 09:20	03/25/21 05:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.66		4.97		mg/Kg			03/21/21 16:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW08

Lab Sample ID: 890-377-22

Date Collected: 03/17/21 14:12

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0421	*+ *1	0.0101		mg/Kg		03/26/21 14:28	03/28/21 04:16	5
Ethylbenzene	0.160		0.0404		mg/Kg		03/26/21 14:28	03/27/21 08:25	20
Toluene	0.320		0.0404		mg/Kg		03/26/21 14:28	03/27/21 08:25	20
Total BTEX	4.46		0.0404		mg/Kg		03/26/21 14:28	03/27/21 08:25	20
Xylenes, Total	3.98		0.0808		mg/Kg		03/26/21 14:28	03/27/21 08:25	20
m-Xylene & p-Xylene	2.44		0.0808		mg/Kg		03/26/21 14:28	03/27/21 08:25	20
o-Xylene	1.54		0.0404		mg/Kg		03/26/21 14:28	03/27/21 08:25	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/21 14:28	03/27/21 08:25	20
1,4-Difluorobenzene (Surr)	93		70 - 130	03/26/21 14:28	03/27/21 08:25	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	163	*+ *1	50.0		mg/Kg		03/24/21 09:20	03/25/21 05:38	1
Diesel Range Organics (Over C10-C28)	2480		50.0		mg/Kg		03/24/21 09:20	03/25/21 05:38	1
Oil Range Organics (Over C28-C36)	289		50.0		mg/Kg		03/24/21 09:20	03/25/21 05:38	1
Total TPH	2930		50.0		mg/Kg		03/24/21 09:20	03/25/21 05:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	03/24/21 09:20	03/25/21 05:38	1
o-Terphenyl	88		70 - 130	03/24/21 09:20	03/25/21 05:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.0		4.99		mg/Kg			03/21/21 16:54	1

Client Sample ID: SW09

Lab Sample ID: 890-377-23

Date Collected: 03/17/21 14:15

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.134	*+ *1	0.0100		mg/Kg		03/26/21 14:28	03/28/21 04:42	5
Ethylbenzene	0.119		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:45	20
Toluene	0.0450		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:45	20
Total BTEX	1.80		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:45	20
Xylenes, Total	1.63		0.0802		mg/Kg		03/26/21 14:28	03/27/21 08:45	20
m-Xylene & p-Xylene	0.952		0.0802		mg/Kg		03/26/21 14:28	03/27/21 08:45	20
o-Xylene	0.681		0.0401		mg/Kg		03/26/21 14:28	03/27/21 08:45	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/26/21 14:28	03/27/21 08:45	20
1,4-Difluorobenzene (Surr)	88		70 - 130	03/26/21 14:28	03/27/21 08:45	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	84.2	*+ *1	49.9		mg/Kg		03/24/21 09:20	03/25/21 05:59	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW09

Lab Sample ID: 890-377-23

Date Collected: 03/17/21 14:15

Matrix: Solid

Date Received: 03/17/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	2730		49.9		mg/Kg		03/24/21 09:20	03/25/21 05:59	1
Oil Range Organics (Over C28-C36)	366		49.9		mg/Kg		03/24/21 09:20	03/25/21 05:59	1
Total TPH	3180		49.9		mg/Kg		03/24/21 09:20	03/25/21 05:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	03/24/21 09:20	03/25/21 05:59	1
o-Terphenyl	85		70 - 130	03/24/21 09:20	03/25/21 05:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.6		5.00		mg/Kg			03/21/21 16:59	1

Client Sample ID: SW10

Lab Sample ID: 890-377-24

Date Collected: 03/17/21 14:18

Matrix: Solid

Date Received: 03/17/21 16:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0484		0.00994		mg/Kg		03/27/21 17:09	03/28/21 01:16	5
Ethylbenzene	0.149		0.0402		mg/Kg		03/26/21 14:28	03/27/21 09:06	20
Toluene	0.0958		0.0402		mg/Kg		03/26/21 14:28	03/27/21 09:06	20
Total BTEX	5.87		0.0402		mg/Kg		03/26/21 14:28	03/27/21 09:06	20
Xylenes, Total	5.63		0.0803		mg/Kg		03/26/21 14:28	03/27/21 09:06	20
m-Xylene & p-Xylene	3.44		0.0803		mg/Kg		03/26/21 14:28	03/27/21 09:06	20
o-Xylene	2.19		0.0402		mg/Kg		03/26/21 14:28	03/27/21 09:06	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	03/26/21 14:28	03/27/21 09:06	20
1,4-Difluorobenzene (Surr)	74		70 - 130	03/26/21 14:28	03/27/21 09:06	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	298	*+ *1	50.0		mg/Kg		03/24/21 09:20	03/25/21 06:20	1
Diesel Range Organics (Over C10-C28)	1940		50.0		mg/Kg		03/24/21 09:20	03/25/21 06:20	1
Oil Range Organics (Over C28-C36)	237		50.0		mg/Kg		03/24/21 09:20	03/25/21 06:20	1
Total TPH	2480		50.0		mg/Kg		03/24/21 09:20	03/25/21 06:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/24/21 09:20	03/25/21 06:20	1
o-Terphenyl	95		70 - 130	03/24/21 09:20	03/25/21 06:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.1		5.01		mg/Kg			03/21/21 17:15	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-377-1	FS01	230 S1+	70
890-377-2	FS02	171 S1+	46 S1-
890-377-3	FS03	237 S1+	57 S1-
890-377-4	FS04	167 S1+	57 S1-
890-377-5	FS05	151 S1+	54 S1-
890-377-6	FS06	94	75
890-377-7	FS07	19 S1-	14 S1-
890-377-8	FS09	31 S1-	98
890-377-9	FS10	95	80
890-377-10	FS11	95	83
890-377-11	FS12	121	98
890-377-12	FS13	106	92
890-377-13	FS14	95	90
890-377-14	FS15	79	68 S1-
890-377-15	SW01	103	91
890-377-16	SW02	98	87
890-377-17	SW03	82	78
890-377-18	SW04	89	83
890-377-19	SW05	100	93
890-377-20	SW06	100	91
890-377-21	SW07	100	86
890-377-22	SW08	100	93
890-377-23	SW09	98	88
890-377-24	SW10	81	74
LCS 880-1037/1-A	Lab Control Sample	97	101
LCS 880-803/1-A	Lab Control Sample	102	101
LCS 880-905/1-A	Lab Control Sample	97	89
LCS 880-910/1-A	Lab Control Sample	102	101
LCS 880-952/1-A	Lab Control Sample	277 S1+	270 S1+
LCS 880-961/1-A	Lab Control Sample	85	95
LCSD 880-1037/2-A	Lab Control Sample Dup	101	104
LCSD 880-803/2-A	Lab Control Sample Dup	102	101
LCSD 880-905/2-A	Lab Control Sample Dup	103	102
LCSD 880-910/2-A	Lab Control Sample Dup	102	100
LCSD 880-952/2-A	Lab Control Sample Dup	115	97
LCSD 880-961/2-A	Lab Control Sample Dup	90	103
MB 880-1037/5-A	Method Blank	99	102
MB 880-803/5-A	Method Blank	102	95
MB 880-851/5-A	Method Blank	70	81
MB 880-905/5-A	Method Blank	71	81
MB 880-910/5-A	Method Blank	104	96
MB 880-952/5-A	Method Blank	78	84
MB 880-961/5-A	Method Blank	109	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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)
890-377-1	FS01	117	96
890-377-1 MS	FS01	116	77
890-377-1 MSD	FS01	111	77
890-377-2	FS02	114	84
890-377-3	FS03	108	89
890-377-4	FS04	102	87
890-377-5	FS05	97	90
890-377-6	FS06	114	92
890-377-7	FS07	124	96
890-377-8	FS09	99	96
890-377-9	FS10	127	77
890-377-10	FS11	115	25 S1-
890-377-11	FS12	133 S1+	29 S1-
890-377-12	FS13	123	9 S1-
890-377-13	FS14	106	8 S1-
890-377-14	FS15	134 S1+	29 S1-
890-377-15	SW01	103	6 S1-
890-377-16	SW02	103	12 S1-
890-377-17	SW03	113	64 S1-
890-377-18	SW04	112	23 S1-
890-377-19	SW05	106	32 S1-
890-377-20	SW06	102	5 S1-
890-377-21	SW07	104	92
890-377-22	SW08	94	88
890-377-23	SW09	90	85
890-377-24	SW10	99	95
LCS 880-797/2-A	Lab Control Sample	38 S1-	15 S1-
LCS 880-798/2-A	Lab Control Sample	92	80
LCSD 880-797/3-A	Lab Control Sample Dup	111	94
LCSD 880-798/3-A	Lab Control Sample Dup	111	100
MB 880-798/1-A	Method Blank	102	103

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1037/5-A

Matrix: Solid

Analysis Batch: 1038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1037

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/29/21 18:30	03/29/21 21:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/29/21 18:30	03/29/21 21:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/29/21 18:30	03/29/21 21:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/29/21 18:30	03/29/21 21:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/29/21 18:30	03/29/21 21:51	1
1,4-Difluorobenzene (Surr)	102		70 - 130	03/29/21 18:30	03/29/21 21:51	1

Lab Sample ID: LCS 880-1037/1-A

Matrix: Solid

Analysis Batch: 1038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07967		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.08067		mg/Kg		81	70 - 130
Toluene	0.100	0.07787		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	0.200	0.1593		mg/Kg		80	70 - 130
o-Xylene	0.100	0.08008		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-1037/2-A

Matrix: Solid

Analysis Batch: 1038

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1037

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08930		mg/Kg		89	70 - 130	11	35
Ethylbenzene	0.100	0.08741		mg/Kg		87	70 - 130	8	35
Toluene	0.100	0.08493		mg/Kg		85	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1739		mg/Kg		87	70 - 130	9	35
o-Xylene	0.100	0.08945		mg/Kg		89	70 - 130	11	35

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

Lab Sample ID: MB 880-803/5-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: MB 880-803/5-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/24/21 10:57	03/26/21 14:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/21 10:57	03/26/21 14:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/21 10:57	03/26/21 14:32	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/24/21 10:57	03/26/21 14:32	1

Lab Sample ID: LCS 880-803/1-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 803

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1080		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1166		mg/Kg		117	70 - 130
Toluene	0.100	0.1109		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	0.200	0.2378		mg/Kg		119	70 - 130
o-Xylene	0.100	0.1158		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-803/2-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 803

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1070		mg/Kg		107	70 - 130	1	35
Ethylbenzene	0.100	0.1103		mg/Kg		110	70 - 130	5	35
Toluene	0.100	0.1062		mg/Kg		106	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2236		mg/Kg		112	70 - 130	6	35
o-Xylene	0.100	0.1108		mg/Kg		111	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-851/5-A

Matrix: Solid

Analysis Batch: 846

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/21 10:53	03/26/21 01:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/21 10:53	03/26/21 01:09	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: MB 880-851/5-A

Matrix: Solid

Analysis Batch: 846

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/21 10:53	03/26/21 01:09	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/25/21 10:53	03/26/21 01:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/25/21 10:53	03/26/21 01:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/25/21 10:53	03/26/21 01:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/21 10:53	03/26/21 01:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	03/25/21 10:53	03/26/21 01:09	1
1,4-Difluorobenzene (Surr)	81		70 - 130	03/25/21 10:53	03/26/21 01:09	1

Lab Sample ID: MB 880-905/5-A

Matrix: Solid

Analysis Batch: 846

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 905

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/21 11:28	03/26/21 14:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/21 11:28	03/26/21 14:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/21 11:28	03/26/21 14:25	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/26/21 11:28	03/26/21 14:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/26/21 11:28	03/26/21 14:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/26/21 11:28	03/26/21 14:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/21 11:28	03/26/21 14:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130	03/26/21 11:28	03/26/21 14:25	1
1,4-Difluorobenzene (Surr)	81		70 - 130	03/26/21 11:28	03/26/21 14:25	1

Lab Sample ID: LCS 880-905/1-A

Matrix: Solid

Analysis Batch: 846

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 905

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09780		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09617		mg/Kg		96	70 - 130
Toluene	0.100	0.08995		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1920		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09975		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-905/2-A

Matrix: Solid

Analysis Batch: 846

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 905

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1028		mg/Kg		103	70 - 130	5	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-905/2-A

Matrix: Solid

Analysis Batch: 846

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 905

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	0.100	0.1002		mg/Kg		100	70 - 130	4	35
Toluene	0.100	0.09785		mg/Kg		98	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1999		mg/Kg		100	70 - 130	4	35
o-Xylene	0.100	0.1042		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-910/5-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/26/21 14:28	03/27/21 01:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/21 14:28	03/27/21 01:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/26/21 14:28	03/27/21 01:50	1
1,4-Difluorobenzene (Surr)	96		70 - 130	03/26/21 14:28	03/27/21 01:50	1

Lab Sample ID: LCS 880-910/1-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09929		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1051		mg/Kg		105	70 - 130
Toluene	0.100	0.1012		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2131		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1061		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-910/2-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1019		mg/Kg		102	70 - 130	3	35
Ethylbenzene	0.100	0.1067		mg/Kg		107	70 - 130	1	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-910/2-A

Matrix: Solid

Analysis Batch: 904

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1036		mg/Kg		104	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2144		mg/Kg		107	70 - 130	1	35
o-Xylene	0.100	0.1076		mg/Kg		108	70 - 130	1	35

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

Lab Sample ID: MB 880-952/5-A

Matrix: Solid

Analysis Batch: 960

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 952

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/27/21 11:43	03/27/21 19:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/27/21 11:43	03/27/21 19:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/27/21 11:43	03/27/21 19:00	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/27/21 11:43	03/27/21 19:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/27/21 11:43	03/27/21 19:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/27/21 11:43	03/27/21 19:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/27/21 11:43	03/27/21 19:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	03/27/21 11:43	03/27/21 19:00	1
1,4-Difluorobenzene (Surr)	84		70 - 130	03/27/21 11:43	03/27/21 19:00	1

Lab Sample ID: LCS 880-952/1-A

Matrix: Solid

Analysis Batch: 960

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 952

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.2674	*+	mg/Kg		267	70 - 130
Ethylbenzene	0.100	0.2618	*+	mg/Kg		262	70 - 130
Toluene	0.100	0.2433	*+	mg/Kg		243	70 - 130
m-Xylene & p-Xylene	0.200	0.5243	*+	mg/Kg		262	70 - 130
o-Xylene	0.100	0.2746	*+	mg/Kg		275	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	277	S1+	70 - 130
1,4-Difluorobenzene (Surr)	270	S1+	70 - 130

Lab Sample ID: LCSD 880-952/2-A

Matrix: Solid

Analysis Batch: 960

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1032	*1	mg/Kg		103	70 - 130	89	35
Ethylbenzene	0.100	0.1012	*1	mg/Kg		101	70 - 130	88	35
Toluene	0.100	0.1024	*1	mg/Kg		102	70 - 130	81	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-952/2-A

Matrix: Solid

Analysis Batch: 960

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 952

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.2005	*1	mg/Kg		100	70 - 130	89	35
o-Xylene	0.100	0.1065	*1	mg/Kg		107	70 - 130	88	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-961/5-A

Matrix: Solid

Analysis Batch: 963

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/27/21 17:09	03/27/21 21:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/27/21 17:09	03/27/21 21:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/27/21 17:09	03/27/21 21:48	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/27/21 17:09	03/27/21 21:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/27/21 17:09	03/27/21 21:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/27/21 17:09	03/27/21 21:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/27/21 17:09	03/27/21 21:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	03/27/21 17:09	03/27/21 21:48	1
1,4-Difluorobenzene (Surr)	91		70 - 130	03/27/21 17:09	03/27/21 21:48	1

Lab Sample ID: LCS 880-961/1-A

Matrix: Solid

Analysis Batch: 963

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1172		mg/Kg		117	70 - 130
Ethylbenzene	0.100	0.1111		mg/Kg		111	70 - 130
Toluene	0.100	0.1185		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	0.200	0.2193		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1058		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-961/2-A

Matrix: Solid

Analysis Batch: 963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 961

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1088		mg/Kg		109	70 - 130	7	35
Ethylbenzene	0.100	0.1053		mg/Kg		105	70 - 130	5	35
Toluene	0.100	0.1103		mg/Kg		110	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2103		mg/Kg		105	70 - 130	4	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-961/2-A

Matrix: Solid

Analysis Batch: 963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 961

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene	0.100	0.1020		mg/Kg		102	70 - 130	4	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	90		70 - 130						
1,4-Difluorobenzene (Surr)	103		70 - 130						

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

Lab Sample ID: LCS 880-797/2-A

Matrix: Solid

Analysis Batch: 843

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 797

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	1154		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1041		mg/Kg		104	70 - 130		

Lab Sample ID: LCSD 880-797/3-A

Matrix: Solid

Analysis Batch: 843

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 797

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1303		mg/Kg		130	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	1004		mg/Kg		100	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: 890-377-1 MS

Matrix: Solid

Analysis Batch: 843

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 797

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	207		1000	1459		mg/Kg		125	70 - 130		
Diesel Range Organics (Over C10-C28)	2320		1000	3465		mg/Kg		115	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	116		70 - 130								
o-Terphenyl	77		70 - 130								

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: 890-377-1 MSD

Matrix: Solid

Analysis Batch: 843

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 797

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	207		999	1455		mg/Kg		125	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	2320		999	3505		mg/Kg		119	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	111		70 - 130								
o-Terphenyl	77		70 - 130								

Lab Sample ID: MB 880-798/1-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 798

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/21 09:20	03/24/21 21:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/21 09:20	03/24/21 21:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/21 09:20	03/24/21 21:09	1
Total TPH	<50.0	U	50.0		mg/Kg		03/24/21 09:20	03/24/21 21:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				03/24/21 09:20	03/24/21 21:09	1
o-Terphenyl	103		70 - 130				03/24/21 09:20	03/24/21 21:09	1

Lab Sample ID: LCS 880-798/2-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1140		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	974.5		mg/Kg		97	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	80		70 - 130						

Lab Sample ID: LCSD 880-798/3-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 798

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1444	*+ *1	mg/Kg		144	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	1000	1117		mg/Kg		112	70 - 130	14	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-798/3-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 798

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	100		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-628/1-B

Matrix: Solid

Analysis Batch: 660

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			03/21/21 16:13		1

Lab Sample ID: LCS 880-628/2-B

Matrix: Solid

Analysis Batch: 660

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	243.4		mg/Kg		97	90 - 110	

Lab Sample ID: LCSD 880-628/3-B

Matrix: Solid

Analysis Batch: 660

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	247.9		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 890-377-19 MS

Matrix: Solid

Analysis Batch: 660

Client Sample ID: SW05

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	20.5		252	263.0		mg/Kg		96	90 - 110	

Lab Sample ID: 890-377-19 MSD

Matrix: Solid

Analysis Batch: 660

Client Sample ID: SW05

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	20.5		249	264.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-646/1-A

Matrix: Solid

Analysis Batch: 763

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			03/23/21 18:38		1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-646/2-A

Matrix: Solid

Analysis Batch: 763

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	262.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-646/3-A

Matrix: Solid

Analysis Batch: 763

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	5	20

Lab Sample ID: 890-377-9 MS

Matrix: Solid

Analysis Batch: 763

Client Sample ID: FS10

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<4.96	U	248	250.4		mg/Kg		99	90 - 110		

Lab Sample ID: 890-377-9 MSD

Matrix: Solid

Analysis Batch: 763

Client Sample ID: FS10

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<4.96	U	248	266.6		mg/Kg		106	90 - 110	6	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

GC VOA

Prep Batch: 803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-6	FS06	Total/NA	Solid	5035	
890-377-7	FS07	Total/NA	Solid	5035	
890-377-8	FS09	Total/NA	Solid	5035	
890-377-9	FS10	Total/NA	Solid	5035	
890-377-10	FS11	Total/NA	Solid	5035	
890-377-11	FS12	Total/NA	Solid	5035	
890-377-12	FS13	Total/NA	Solid	5035	
890-377-13	FS14	Total/NA	Solid	5035	
890-377-14	FS15	Total/NA	Solid	5035	
890-377-15	SW01	Total/NA	Solid	5035	
MB 880-803/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-803/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-803/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Total/NA	Solid	8021B	905
890-377-2	FS02	Total/NA	Solid	8021B	905
890-377-3	FS03	Total/NA	Solid	8021B	905
890-377-4	FS04	Total/NA	Solid	8021B	905
890-377-5	FS05	Total/NA	Solid	8021B	905
MB 880-851/5-A	Method Blank	Total/NA	Solid	8021B	851
MB 880-905/5-A	Method Blank	Total/NA	Solid	8021B	905
LCS 880-905/1-A	Lab Control Sample	Total/NA	Solid	8021B	905
LCSD 880-905/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	905

Prep Batch: 851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-851/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-6	FS06	Total/NA	Solid	8021B	803
890-377-7	FS07	Total/NA	Solid	8021B	803
890-377-8	FS09	Total/NA	Solid	8021B	803
890-377-9	FS10	Total/NA	Solid	8021B	803
890-377-10	FS11	Total/NA	Solid	8021B	803
890-377-11	FS12	Total/NA	Solid	8021B	803
890-377-12	FS13	Total/NA	Solid	8021B	803
890-377-13	FS14	Total/NA	Solid	8021B	803
890-377-14	FS15	Total/NA	Solid	8021B	803
890-377-15	SW01	Total/NA	Solid	8021B	803
890-377-16	SW02	Total/NA	Solid	8021B	910
890-377-17	SW03	Total/NA	Solid	8021B	910
890-377-18	SW04	Total/NA	Solid	8021B	910
890-377-19	SW05	Total/NA	Solid	8021B	910
890-377-20	SW06	Total/NA	Solid	8021B	910
890-377-21	SW07	Total/NA	Solid	8021B	910
890-377-22	SW08	Total/NA	Solid	8021B	910
890-377-23	SW09	Total/NA	Solid	8021B	910
890-377-24	SW10	Total/NA	Solid	8021B	910

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

GC VOA (Continued)

Analysis Batch: 904 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-803/5-A	Method Blank	Total/NA	Solid	8021B	803
MB 880-910/5-A	Method Blank	Total/NA	Solid	8021B	910
LCS 880-803/1-A	Lab Control Sample	Total/NA	Solid	8021B	803
LCS 880-910/1-A	Lab Control Sample	Total/NA	Solid	8021B	910
LCSD 880-803/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	803
LCSD 880-910/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	910

Prep Batch: 905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Total/NA	Solid	5035	
890-377-2	FS02	Total/NA	Solid	5035	
890-377-3	FS03	Total/NA	Solid	5035	
890-377-4	FS04	Total/NA	Solid	5035	
890-377-5	FS05	Total/NA	Solid	5035	
MB 880-905/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-905/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-905/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-16	SW02	Total/NA	Solid	5035	
890-377-17	SW03	Total/NA	Solid	5035	
890-377-18	SW04	Total/NA	Solid	5035	
890-377-19	SW05	Total/NA	Solid	5035	
890-377-20	SW06	Total/NA	Solid	5035	
890-377-21	SW07	Total/NA	Solid	5035	
890-377-22	SW08	Total/NA	Solid	5035	
890-377-23	SW09	Total/NA	Solid	5035	
890-377-24	SW10	Total/NA	Solid	5035	
MB 880-910/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-910/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-910/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-952/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-952/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-952/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Total/NA	Solid	8021B	905
890-377-2	FS02	Total/NA	Solid	8021B	905
890-377-4	FS04	Total/NA	Solid	8021B	905
890-377-5	FS05	Total/NA	Solid	8021B	905
890-377-6	FS06	Total/NA	Solid	8021B	803
890-377-9	FS10	Total/NA	Solid	8021B	803
890-377-11	FS12	Total/NA	Solid	8021B	803
890-377-17	SW03	Total/NA	Solid	8021B	910
890-377-18	SW04	Total/NA	Solid	8021B	910
890-377-19	SW05	Total/NA	Solid	8021B	910

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

GC VOA (Continued)

Analysis Batch: 960 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-20	SW06	Total/NA	Solid	8021B	910
890-377-21	SW07	Total/NA	Solid	8021B	910
890-377-22	SW08	Total/NA	Solid	8021B	910
890-377-23	SW09	Total/NA	Solid	8021B	910
MB 880-952/5-A	Method Blank	Total/NA	Solid	8021B	952
LCS 880-952/1-A	Lab Control Sample	Total/NA	Solid	8021B	952
LCSD 880-952/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	952

Prep Batch: 961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-24	SW10	Total/NA	Solid	5035	
MB 880-961/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-961/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-961/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-24	SW10	Total/NA	Solid	8021B	961
MB 880-961/5-A	Method Blank	Total/NA	Solid	8021B	961
LCS 880-961/1-A	Lab Control Sample	Total/NA	Solid	8021B	961
LCSD 880-961/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	961

Prep Batch: 1037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1037/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1037/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1037/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1037/5-A	Method Blank	Total/NA	Solid	8021B	1037
LCS 880-1037/1-A	Lab Control Sample	Total/NA	Solid	8021B	1037
LCSD 880-1037/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1037

Prep Batch: 1052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-3	FS03	Total/NA	Solid	5035	

Analysis Batch: 1053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-3	FS03	Total/NA	Solid	8021B	1052

GC Semi VOA

Analysis Batch: 792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-21	SW07	Total/NA	Solid	8015B NM	798
890-377-22	SW08	Total/NA	Solid	8015B NM	798
890-377-23	SW09	Total/NA	Solid	8015B NM	798
890-377-24	SW10	Total/NA	Solid	8015B NM	798
MB 880-798/1-A	Method Blank	Total/NA	Solid	8015B NM	798

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

GC Semi VOA (Continued)

Analysis Batch: 792 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-798/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	798
LCSD 880-798/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	798

Prep Batch: 797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Total/NA	Solid	8015NM Prep	
890-377-2	FS02	Total/NA	Solid	8015NM Prep	
890-377-3	FS03	Total/NA	Solid	8015NM Prep	
890-377-4	FS04	Total/NA	Solid	8015NM Prep	
890-377-5	FS05	Total/NA	Solid	8015NM Prep	
890-377-6	FS06	Total/NA	Solid	8015NM Prep	
890-377-7	FS07	Total/NA	Solid	8015NM Prep	
890-377-8	FS09	Total/NA	Solid	8015NM Prep	
890-377-9	FS10	Total/NA	Solid	8015NM Prep	
890-377-10	FS11	Total/NA	Solid	8015NM Prep	
890-377-11	FS12	Total/NA	Solid	8015NM Prep	
890-377-12	FS13	Total/NA	Solid	8015NM Prep	
890-377-13	FS14	Total/NA	Solid	8015NM Prep	
890-377-14	FS15	Total/NA	Solid	8015NM Prep	
890-377-15	SW01	Total/NA	Solid	8015NM Prep	
890-377-16	SW02	Total/NA	Solid	8015NM Prep	
890-377-17	SW03	Total/NA	Solid	8015NM Prep	
890-377-18	SW04	Total/NA	Solid	8015NM Prep	
890-377-19	SW05	Total/NA	Solid	8015NM Prep	
890-377-20	SW06	Total/NA	Solid	8015NM Prep	
LCS 880-797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-377-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-377-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Prep Batch: 798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-21	SW07	Total/NA	Solid	8015NM Prep	
890-377-22	SW08	Total/NA	Solid	8015NM Prep	
890-377-23	SW09	Total/NA	Solid	8015NM Prep	
890-377-24	SW10	Total/NA	Solid	8015NM Prep	
MB 880-798/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-798/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-798/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Total/NA	Solid	8015B NM	797
890-377-2	FS02	Total/NA	Solid	8015B NM	797
890-377-3	FS03	Total/NA	Solid	8015B NM	797
890-377-4	FS04	Total/NA	Solid	8015B NM	797
890-377-5	FS05	Total/NA	Solid	8015B NM	797
890-377-6	FS06	Total/NA	Solid	8015B NM	797
890-377-7	FS07	Total/NA	Solid	8015B NM	797
890-377-8	FS09	Total/NA	Solid	8015B NM	797
890-377-9	FS10	Total/NA	Solid	8015B NM	797

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

GC Semi VOA (Continued)

Analysis Batch: 843 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-10	FS11	Total/NA	Solid	8015B NM	797
890-377-11	FS12	Total/NA	Solid	8015B NM	797
890-377-12	FS13	Total/NA	Solid	8015B NM	797
890-377-13	FS14	Total/NA	Solid	8015B NM	797
890-377-14	FS15	Total/NA	Solid	8015B NM	797
890-377-15	SW01	Total/NA	Solid	8015B NM	797
890-377-16	SW02	Total/NA	Solid	8015B NM	797
890-377-17	SW03	Total/NA	Solid	8015B NM	797
890-377-18	SW04	Total/NA	Solid	8015B NM	797
890-377-19	SW05	Total/NA	Solid	8015B NM	797
890-377-20	SW06	Total/NA	Solid	8015B NM	797
LCS 880-797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	797
LCSD 880-797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	797
890-377-1 MS	FS01	Total/NA	Solid	8015B NM	797
890-377-1 MSD	FS01	Total/NA	Solid	8015B NM	797

HPLC/IC

Leach Batch: 628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-19	SW05	Soluble	Solid	DI Leach	
890-377-20	SW06	Soluble	Solid	DI Leach	
890-377-21	SW07	Soluble	Solid	DI Leach	
890-377-22	SW08	Soluble	Solid	DI Leach	
890-377-23	SW09	Soluble	Solid	DI Leach	
890-377-24	SW10	Soluble	Solid	DI Leach	
MB 880-628/1-B	Method Blank	Soluble	Solid	DI Leach	
LCS 880-628/2-B	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-628/3-B	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-377-19 MS	SW05	Soluble	Solid	DI Leach	
890-377-19 MSD	SW05	Soluble	Solid	DI Leach	

Leach Batch: 646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Soluble	Solid	DI Leach	
890-377-2	FS02	Soluble	Solid	DI Leach	
890-377-3	FS03	Soluble	Solid	DI Leach	
890-377-4	FS04	Soluble	Solid	DI Leach	
890-377-5	FS05	Soluble	Solid	DI Leach	
890-377-6	FS06	Soluble	Solid	DI Leach	
890-377-7	FS07	Soluble	Solid	DI Leach	
890-377-8	FS09	Soluble	Solid	DI Leach	
890-377-9	FS10	Soluble	Solid	DI Leach	
890-377-10	FS11	Soluble	Solid	DI Leach	
890-377-11	FS12	Soluble	Solid	DI Leach	
890-377-12	FS13	Soluble	Solid	DI Leach	
890-377-13	FS14	Soluble	Solid	DI Leach	
890-377-14	FS15	Soluble	Solid	DI Leach	
890-377-15	SW01	Soluble	Solid	DI Leach	
890-377-16	SW02	Soluble	Solid	DI Leach	
890-377-17	SW03	Soluble	Solid	DI Leach	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

HPLC/IC (Continued)

Leach Batch: 646 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-18	SW04	Soluble	Solid	DI Leach	
MB 880-646/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-646/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-646/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-377-9 MS	FS10	Soluble	Solid	DI Leach	
890-377-9 MSD	FS10	Soluble	Solid	DI Leach	

Analysis Batch: 660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-19	SW05	Soluble	Solid	300.0	628
890-377-20	SW06	Soluble	Solid	300.0	628
890-377-21	SW07	Soluble	Solid	300.0	628
890-377-22	SW08	Soluble	Solid	300.0	628
890-377-23	SW09	Soluble	Solid	300.0	628
890-377-24	SW10	Soluble	Solid	300.0	628
MB 880-628/1-B	Method Blank	Soluble	Solid	300.0	628
LCS 880-628/2-B	Lab Control Sample	Soluble	Solid	300.0	628
LCSD 880-628/3-B	Lab Control Sample Dup	Soluble	Solid	300.0	628
890-377-19 MS	SW05	Soluble	Solid	300.0	628
890-377-19 MSD	SW05	Soluble	Solid	300.0	628

Analysis Batch: 763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-377-1	FS01	Soluble	Solid	300.0	646
890-377-2	FS02	Soluble	Solid	300.0	646
890-377-3	FS03	Soluble	Solid	300.0	646
890-377-4	FS04	Soluble	Solid	300.0	646
890-377-5	FS05	Soluble	Solid	300.0	646
890-377-6	FS06	Soluble	Solid	300.0	646
890-377-7	FS07	Soluble	Solid	300.0	646
890-377-8	FS09	Soluble	Solid	300.0	646
890-377-9	FS10	Soluble	Solid	300.0	646
890-377-10	FS11	Soluble	Solid	300.0	646
890-377-11	FS12	Soluble	Solid	300.0	646
890-377-12	FS13	Soluble	Solid	300.0	646
890-377-13	FS14	Soluble	Solid	300.0	646
890-377-14	FS15	Soluble	Solid	300.0	646
890-377-15	SW01	Soluble	Solid	300.0	646
890-377-16	SW02	Soluble	Solid	300.0	646
890-377-17	SW03	Soluble	Solid	300.0	646
890-377-18	SW04	Soluble	Solid	300.0	646
MB 880-646/1-A	Method Blank	Soluble	Solid	300.0	646
LCS 880-646/2-A	Lab Control Sample	Soluble	Solid	300.0	646
LCSD 880-646/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	646
890-377-9 MS	FS10	Soluble	Solid	300.0	646
890-377-9 MSD	FS10	Soluble	Solid	300.0	646

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS01

Lab Sample ID: 890-377-1

Date Collected: 03/16/21 15:23

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		50	846	03/26/21 22:50	MR	XM
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		1	960	03/27/21 20:17	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:00	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/25/21 22:34	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:14	WP	XM

Client Sample ID: FS02

Lab Sample ID: 890-377-2

Date Collected: 03/16/21 15:25

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		50	846	03/26/21 23:17	MR	XM
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		20	960	03/27/21 20:42	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:00	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 00:06	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:20	WP	XM

Client Sample ID: FS03

Lab Sample ID: 890-377-3

Date Collected: 03/17/21 11:14

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1052	03/30/21 09:18	KL	XM
Total/NA	Analysis	8021B		200	1053	03/30/21 16:08	KL	XM
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		50	846	03/26/21 23:42	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:00	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 00:36	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:25	WP	XM

Client Sample ID: FS04

Lab Sample ID: 890-377-4

Date Collected: 03/17/21 09:45

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		50	846	03/27/21 00:08	MR	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS04

Lab Sample ID: 890-377-4

Date Collected: 03/17/21 09:45

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		50	960	03/27/21 21:08	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:00	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 01:08	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:40	WP	XM

Client Sample ID: FS05

Lab Sample ID: 890-377-5

Date Collected: 03/16/21 15:32

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		50	846	03/27/21 00:34	MR	XM
Total/NA	Prep	5035			905	03/26/21 11:28	MR	XM
Total/NA	Analysis	8021B		20	960	03/27/21 21:33	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 01:30	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:46	WP	XM

Client Sample ID: FS06

Lab Sample ID: 890-377-6

Date Collected: 03/17/21 09:48

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		20	904	03/26/21 19:37	MR	XM
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		5	960	03/27/21 21:59	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 01:51	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:51	WP	XM

Client Sample ID: FS07

Lab Sample ID: 890-377-7

Date Collected: 03/17/21 09:50

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		50	904	03/26/21 19:57	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		5	843	03/26/21 02:21	AM	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS07

Lab Sample ID: 890-377-7

Date Collected: 03/17/21 09:50

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 19:56	WP	XM

Client Sample ID: FS09

Lab Sample ID: 890-377-8

Date Collected: 03/16/21 14:50

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		10	904	03/26/21 20:18	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 02:46	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:01	WP	XM

Client Sample ID: FS10

Lab Sample ID: 890-377-9

Date Collected: 03/17/21 09:32

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		50	904	03/26/21 20:38	MR	XM
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		100	960	03/27/21 22:24	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 03:07	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:06	WP	XM

Client Sample ID: FS11

Lab Sample ID: 890-377-10

Date Collected: 03/17/21 09:35

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		50	904	03/26/21 20:59	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 03:41	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:22	WP	XM

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: FS12

Lab Sample ID: 890-377-11

Date Collected: 03/16/21 14:57

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		50	904	03/26/21 21:19	MR	XM
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		10	960	03/27/21 22:49	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 04:36	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:27	WP	XM

Client Sample ID: FS13

Lab Sample ID: 890-377-12

Date Collected: 03/16/21 15:00

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		20	904	03/26/21 21:39	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 05:07	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:43	WP	XM

Client Sample ID: FS14

Lab Sample ID: 890-377-13

Date Collected: 03/17/21 09:38

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		20	904	03/26/21 22:00	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 05:28	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:48	WP	XM

Client Sample ID: FS15

Lab Sample ID: 890-377-14

Date Collected: 03/17/21 09:40

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		50	904	03/26/21 22:20	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 05:49	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:53	WP	XM

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW01

Lab Sample ID: 890-377-15

Date Collected: 03/16/21 15:48

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			803	03/24/21 10:57	MR	XM
Total/NA	Analysis	8021B		20	904	03/26/21 22:41	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 06:21	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 20:58	WP	XM

Client Sample ID: SW02

Lab Sample ID: 890-377-16

Date Collected: 03/16/21 15:50

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 06:34	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 06:42	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 21:03	WP	XM

Client Sample ID: SW03

Lab Sample ID: 890-377-17

Date Collected: 03/16/21 15:52

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 11:37	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 02:10	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		5	843	03/26/21 07:04	AM	XM
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 21:08	WP	XM

Client Sample ID: SW04

Lab Sample ID: 890-377-18

Date Collected: 03/16/21 15:54

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 07:03	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 02:35	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 07:27	AM	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW04

Lab Sample ID: 890-377-18

Date Collected: 03/16/21 15:54

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			646	03/21/21 11:55	CH	XM
Soluble	Analysis	300.0		1	763	03/23/21 21:14	WP	XM

Client Sample ID: SW05

Lab Sample ID: 890-377-19

Date Collected: 03/17/21 14:05

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 07:23	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 03:01	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 07:54	AM	XM
Soluble	Leach	DI Leach			628	03/21/21 11:50	CH	XM
Soluble	Analysis	300.0		1	660	03/21/21 16:28	A1S	XM

Client Sample ID: SW06

Lab Sample ID: 890-377-20

Date Collected: 03/17/21 14:08

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 07:44	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 03:26	MR	XM
Total/NA	Prep	8015NM Prep			797	03/24/21 09:01	DM	XM
Total/NA	Analysis	8015B NM		1	843	03/26/21 08:23	AM	XM
Soluble	Leach	DI Leach			628	03/21/21 11:50	CH	XM
Soluble	Analysis	300.0		1	660	03/21/21 16:44	A1S	XM

Client Sample ID: SW07

Lab Sample ID: 890-377-21

Date Collected: 03/17/21 14:10

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 08:04	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 03:51	MR	XM
Total/NA	Prep	8015NM Prep			798	03/24/21 09:20	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/25/21 05:16	AJ	XM
Soluble	Leach	DI Leach			628	03/21/21 11:50	CH	XM
Soluble	Analysis	300.0		1	660	03/21/21 16:49	A1S	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Client Sample ID: SW08

Lab Sample ID: 890-377-22

Date Collected: 03/17/21 14:12

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 08:25	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 04:16	MR	XM
Total/NA	Prep	8015NM Prep			798	03/24/21 09:20	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/25/21 05:38	AJ	XM
Soluble	Leach	DI Leach			628	03/21/21 11:50	CH	XM
Soluble	Analysis	300.0		1	660	03/21/21 16:54	A1S	XM

Client Sample ID: SW09

Lab Sample ID: 890-377-23

Date Collected: 03/17/21 14:15

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 08:45	MR	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		5	960	03/28/21 04:42	MR	XM
Total/NA	Prep	8015NM Prep			798	03/24/21 09:20	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/25/21 05:59	AJ	XM
Soluble	Leach	DI Leach			628	03/21/21 11:50	CH	XM
Soluble	Analysis	300.0		1	660	03/21/21 16:59	A1S	XM

Client Sample ID: SW10

Lab Sample ID: 890-377-24

Date Collected: 03/17/21 14:18

Matrix: Solid

Date Received: 03/17/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			961	03/27/21 17:09	KL	XM
Total/NA	Analysis	8021B		5	963	03/28/21 01:16	KL	XM
Total/NA	Prep	5035			910	03/26/21 14:28	MR	XM
Total/NA	Analysis	8021B		20	904	03/27/21 09:06	MR	XM
Total/NA	Prep	8015NM Prep			798	03/24/21 09:20	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/25/21 06:20	AJ	XM
Soluble	Leach	DI Leach			628	03/21/21 11:50	CH	XM
Soluble	Analysis	300.0		1	660	03/21/21 17:15	A1S	XM

Laboratory References:

XM = 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: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

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

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 # 001

Job ID: 890-377-1
SDG: TE106521001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-377-1	FS01	Solid	03/16/21 15:23	03/17/21 16:53	
890-377-2	FS02	Solid	03/16/21 15:25	03/17/21 16:53	
890-377-3	FS03	Solid	03/17/21 11:14	03/17/21 16:53	
890-377-4	FS04	Solid	03/17/21 09:45	03/17/21 16:53	
890-377-5	FS05	Solid	03/16/21 15:32	03/17/21 16:53	
890-377-6	FS06	Solid	03/17/21 09:48	03/17/21 16:53	
890-377-7	FS07	Solid	03/17/21 09:50	03/17/21 16:53	
890-377-8	FS09	Solid	03/16/21 14:50	03/17/21 16:53	
890-377-9	FS10	Solid	03/17/21 09:32	03/17/21 16:53	
890-377-10	FS11	Solid	03/17/21 09:35	03/17/21 16:53	
890-377-11	FS12	Solid	03/16/21 14:57	03/17/21 16:53	
890-377-12	FS13	Solid	03/16/21 15:00	03/17/21 16:53	
890-377-13	FS14	Solid	03/17/21 09:38	03/17/21 16:53	
890-377-14	FS15	Solid	03/17/21 09:40	03/17/21 16:53	
890-377-15	SW01	Solid	03/16/21 15:48	03/17/21 16:53	
890-377-16	SW02	Solid	03/16/21 15:50	03/17/21 16:53	
890-377-17	SW03	Solid	03/16/21 15:52	03/17/21 16:53	
890-377-18	SW04	Solid	03/16/21 15:54	03/17/21 16:53	
890-377-19	SW05	Solid	03/17/21 14:05	03/17/21 16:53	
890-377-20	SW06	Solid	03/17/21 14:08	03/17/21 16:53	
890-377-21	SW07	Solid	03/17/21 14:10	03/17/21 16:53	
890-377-22	SW08	Solid	03/17/21 14:12	03/17/21 16:53	
890-377-23	SW09	Solid	03/17/21 14:15	03/17/21 16:53	
890-377-24	SW10	Solid	03/17/21 14:18	03/17/21 16:53	



Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager:	Kale Jennings	Bit to (if different):	→
Company Name:	WSP USA	Company Name:	→
Address:	3300 North A Street	Address:	→
City, State ZIP:	Midland, TX 79705	City, State ZIP:	→
Phone:	(817) 683-2503	Email:	kale.jennings@wsp.com, fahma.smith@wsp.com

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

Project Name:	Boyce 15#1001	Turn Around	Pres. Code
Project Number:	TE106521001	☒ Routine ☐ Rush	
Project Location:	Lea County	Due Date:	
Sampler's Name:	Fahma Smith	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			
SAMPLE RECEIPT	Temp Blank: ☒ No ☐ Yes	Wet Ice: ☒ Yes ☐ No	
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID: 1304007	
Cooler Custody Seals:	Yes ☐ No ☒ N/A	Correction Factor: 32/3.0	
Sample Custody Seals:	Yes ☐ No ☒ N/A	Temperature Reading:	
Total Containers:		Corrected Temperature:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters
FSO1	S	3/16/21	1523	8'		1	TPH (EPA 801.1)
FSO2		3/16/21	1525	8'			BTEX (EPA 801.5)
FSO3		3/17/21	1114	8'			Chloride (EPA 300.0)
FSO4		3/17/21	0945	9'			
FSO5		3/16/21	1532	8'			
FSO6		3/17/21	0948	9'			
FSO7		3/17/21	0950	9'			
FSO9		3/16/21	1450	8'			
FS10		3/17/21	0932	9'			
FS11	V	3/17/21	0935	9'			



890-377 Chain of Custody

Preservative Codes	Sample Comments
None: NO	
DI Water: H ₂ O	
Cool: Cool	
HCL: HC	
H ₂ SO ₄ : H ₂	
H ₃ PO ₄ : HP	
NaHSO ₄ : NABIS	
Na ₂ S ₂ O ₃ : NaSO ₃	
Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SAPC	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time



Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 3

Project Manager:	Kalel Jennings	Bill to: (if different)	>
Company Name:	WSP USA	Company Name:	>
Address:	3300 North A Street	Address:	>
City, State ZIP:	Midland, TX 79705	City, State ZIP:	>
Phone:	(817) 683-2503	Email:	Kalel.jennings@wsp.com, fatima.smith@wsp.com

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

Project Name:	Boyce IS #001	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number:	TE106521001	Due Date:			
Project Location:	Lea County	TAT starts the day received by the lab, if received by 4:30pm			
Sample's Name:	Fatima Smith				
PO #:					
SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice: Yes No			
Samples Received Intact:	Yes No	Thermometer ID:			
Cooler Custody Seals:	Yes No N/A	Correction Factor:			
Sample Custody Seals:	Yes No N/A	Temperature Reading:			
Total Containers:		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Preservative Codes	Sample Comments
FS12	S	3/16/21	1457	8'		1	TPH (EPA 8021)	None: NO DI Water: H ₂ O	
FS13		3/16/21	1500	8'			BTEX (EPA 8015)	Cool: Cool MeOH: Me	
FS14		3/17/21	0938	9'			Chloride (EPA 300.0)	HCL: HC HNO ₃ : HN	
FS15		3/17/21	0940	9'				H ₂ SO ₄ : H ₂ NaOH: Na	
SW01		3/16/21	1548	0-8'				H ₃ PO ₄ : HP	
SW02		3/16/21	1550	0-9'				NaHSO ₄ : NABIS	
SW03		3/16/21	1552	0-9'				Na ₂ S ₂ O ₃ : NaSO ₃	
SW04		3/16/21	1554	0-8'				Zn Acetate+NaOH: Zn	
SW05		3/17/21	1405	0-8'				NaOH+Ascorbic Acid: SAPC	
SW06	✓	3/17/21	1408	0-9'		✓			

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
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	Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Fatima	Cice Cice	3-17-21 11:53			
3					
5					



Environment Testing
Xenco

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

Chain of Custody

Work Order No:

www.xenco.com Page 3 of 3

Project Manager:	Kalei Jennings	Bill to: (if different)	>
Company Name:	WSP USA	Company Name:	>
Address:	3300 North A Street	Address:	>
City, State ZIP:	Midland, TX 79705	City, State ZIP:	>
Phone:	(817) 6683-2503	Email:	Kalei.jennings@wsp.com, fahma.smi@wsp.com

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

Project Name:		Boysca 16 #001		Turn Around			
Project Number:		TE1006521001		☒ Routine ☐ Rush			
Project Location:		Lee County		Due Date:			
Sampler's Name:		Fatima Smith		TAT starts the day received by the lab, if received by 4:30pm			
PO #:							
SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Samples Received Intact:		Yes	No		Thermometer ID:		
Cooler Custody Seals:		Yes	No	N/A	Correction Factor:		
Sample Custody Seals:		Yes	No	N/A	Temperature Reading:		
Total Containers:					Corrected Temperature:		
Parameters							
H ₂ O (EPA 9045-01)							
NH ₃ -N (EPA 8015)							
BOD ₅ (EPA 8010)							
DO (EPA 8010)							
pH (EPA 8010)							
Salinity (EPA 8010)							
Sulfate (EPA 8010)							
Total Hardness (EPA 8010)							
Total Suspended Solids (EPA 8010)							
Volatile Acids (EPA 8010)							
Water Activity (EPA 8010)							
Zinc (EPA 8010)							
Zinc Ascorbic Acid: SANC							
None: NO DI Water: H ₂ O							
Cool: Cool MeOH: Me							
HCL: HC HNO ₃ : HN							
H ₂ SO ₄ : H ₂ NaOH: Na							
H ₃ PO ₄ : HP							
NaHSO ₄ : NABIS							
Na ₂ S ₂ O ₃ : NASO ₃							
Zn Acetate+NaOH: Zn							
NaOH+Ascorbic Acid: SANC							

[illegible]

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	8RCRA TCLP / SPLP 6010:	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 Zr Hg: 1631 / 245.1 / 7470 / 7471

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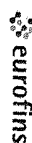
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	3-17-21 1653			
3 <i>[Signature]</i>					

Revised Date 08/24/2020 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]

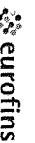
Eurofins Xenco, Carlsbad

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		State of Origin:		890-106 1	
Shipping/Receiving:		E-Mail:		jessica.kramer@eurofins.com		New Mexico		Page: 1 of 3	
Company:		Eurofins Xenco		Accreditations Required (See note):		NELAP - Texas		Job #: 890-377-1	
Address:		Due Date Requested:		Analysis Requested		Preservation Codes		Special Instructions/Note:	
1211 W. Florida Ave.		3/24/2021				A HCL B NaOH C - Zn Acetate D Nitric Acid E NaHSO ₄ F MeOH G - Arndorfer H Ascorbic Acid I - Ice J DI Water K EDTA L EDTA Other:		M Hexane N None O - AsNaO ₂ P - Na ₂ CO ₃ Q Na ₂ SO ₃ R - Na ₂ SO ₃ S - H ₂ SO ₄ T TSP Dodecylpylate U - Acetone V MCAA W - pH 4-5 Z other (Specify)	
City:		TAT Requested (days)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	
Midland				300_ORGFM_280/DI_LEACH Chloride		8015MOD_NM/8015NM_S_Prep Full TPH		8021B/6036FP_Calc BTEX	
State, Zip:		PO #							
TX, 79701		W/O #							
Phone:		Project #							
432-704-5440(Tel)		88000203							
Email:		SSOV#:							
Project Name:									
Boyce 15 #001									
Site:									
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=water/solid, B=bitumen, A=air)	
FS01 (890-377-1)		3/16/21		15 23		Solid		Solid	
FS02 (890-377-2)		3/16/21		15 25		Solid		Solid	
FS03 (890-377-3)		3/17/21		11 14		Solid		Solid	
FS04 (890-377-4)		3/17/21		09 45		Solid		Solid	
FS05 (890-377-5)		3/16/21		15 32		Solid		Solid	
FS06 (890-377-6)		3/17/21		09 48		Solid		Solid	
FS07 (890-377-7)		3/17/21		09 50		Solid		Solid	
FS10 (890-377-9)		3/17/21		09 32		Solid		Solid	
FS11 (890-377-10)		3/17/21		09 35		Solid		Solid	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our 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/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.

Possible Hazard Identification

Unconfirmed

Deliverable Requested I, II, III, IV Other (Specify) Primary Deliverable Rank 2

Empty Kit Relinquished by Date Time Company

Relinquished by Date Time Company

Relinquished by Date Time Company

Custody Seals Intact Δ Yes Δ No Custody Seal No

Cooler Temperature(s) °C and Other Remarks:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements:

Method of Shipment: Date Time Company

3/16/21 1100

Chain of Custody Record

Client Information (Sub Contract Lab) Client Contact: Kramer Jessica Shipping/Receiving: Jessica kramer@eurofinset.com Company: NELAP - Texas										Lab PM: Kramer Jessica E Mail: Jessica kramer@eurofinset.com Accreditations Required (See note): NELAP - Texas										Carrier Tracking No(s): 890-106 2 State of Origin: Page 2 of 3 Job #: 890-377-1																																																																																																			
Sample Information Address: 1211 W Florida Ave City: Midland State Zip: TX 79701 Phone: 432-704-5440(Tel) Email: Project Name: 88000203 Project Name: Boyce 15 #001 Site: SSOW#										Due Date Requested 3/24/2021 TAT Requested (days) PO # WO # Project # 88000203 SSOW#										Analysis Requested 8015MOD_NM/8015NM_S_Prep Full TPH 300_ORGFM_28D/DL_LEACH Chloride Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No)										Preservation Codes A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Amchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2S2O3 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Z other (specify)																																																																																									
Sample Identification - Client ID (Lab ID)										Sample Date										Sample Time										Sample Type (C=comp, G=grab)										Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air)										Field Filtered Sample (Yes or No)										Perform MS/MSD (Yes or No)										300_ORGFM_28D/DL_LEACH Chloride										8015MOD_NM/8015NM_S_Prep Full TPH										8021B/6036FP_Calc BTEX										Total Number of containers										Special Instructions/Note									
FS13 (890-377-12)										3/16/21										14 57										Solid										X										X										X										X										1																																							
FS14 (890-377-13)										3/16/21										15 00										Solid										X										X										X										X										1																																							
FS15 (890-377-14)										3/17/21										09 38										Solid										X										X										X										X										1																																							
SW01 (890-377 15)										3/17/21										09 40										Solid										X										X										X										X										1																																							
SW03 (890-377-17)										3/16/21										15 48										Solid										X										X										X										X										1																																							
SW04 (890-377-18)										3/16/21										15 52										Solid										X										X										X										X										1																																							
SW06 (890-377-20)										3/16/21										15 54										Solid										X										X										X										X										1																																							
SW07 (890-377-21)										3/17/21										14 08										Solid										X										X										X										X										1																																							
SW07 (890-377-21)										3/17/21										14 10										Solid										X										X										X										X										1																																							
Possible Hazard Identification Unconfirmed Deliverable Requested I II, III IV Other (specify) Primary Deliverable Rank 2										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months										Special Instructions/QC Requirements.										Method of Shipment:										Company										Date/Time:										Company																																																											
Empty Kit Relinquished by Joe Cape 3.18.21										Date										Company										Received by:										Date/Time:										Company																																																																					
Relinquished by Joe Cape 3.18.21										Date										Company										Received by:										Date/Time:										Company																																																																					
Relinquished by										Date										Company										Received by:										Date/Time:										Company																																																																					
Custody Seals Intact Yes No										Custody Seal No										Cooler Temperature(s) °C and Other Remarks.																																																																																																			

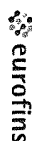
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

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

Chain of Custody Record



Environment Testing
America

[illegible]

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-377-1

SDG Number: TE106521001

Login Number: 377

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-377-1

SDG Number: TE106521001

Login Number: 377

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 03/18/21 11:50 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?	N/A	
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: 890-376-1

Laboratory Sample Delivery Group: TE106521001

Client Project/Site: Boyce 15 #001

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:
3/18/2021 9:50:07 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: Boyce 15 #001

Laboratory Job ID: 890-376-1
SDG: TE106521001

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Job ID: 890-376-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-376-1****Receipt**

The sample was received on 3/17/2021 4:55 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 3.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS08 (890-376-1).

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following sample: FS08 (890-376-1). The sample(s) shows evidence of matrix interference. Confirmed by re-analysis.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Client Sample ID: FS08

Lab Sample ID: 890-376-1

Date Collected: 03/17/21 12:18

Matrix: Solid

Date Received: 03/17/21 16:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0260		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Ethylbenzene	0.214		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Toluene	0.319		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Total BTEX	1.15		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
Xylenes, Total	0.591		0.00401	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
m-Xylene & p-Xylene	0.407		0.00401	mg/Kg		03/18/21 12:09	03/18/21 16:36	1
o-Xylene	0.184		0.00200	mg/Kg		03/18/21 12:09	03/18/21 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	22	S1-	70 - 130	03/18/21 12:09	03/18/21 16:36	1
1,4-Difluorobenzene (Surr)	10	S1-	70 - 130	03/18/21 12:09	03/18/21 16:36	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	419		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1
Total TPH	1450		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1
Diesel Range Organics (Over C10-C28)	906		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1
Oil Range Organics (Over C28-C36)	123		50.1	mg/Kg		03/18/21 12:03	03/18/21 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/18/21 12:03	03/18/21 13:46	1
o-Terphenyl	95		70 - 130	03/18/21 12:03	03/18/21 13:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.9		4.96	mg/Kg			03/18/21 17:17	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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)
890-376-1	FS08	22 S1-	10 S1-
LCS 880-508/1-B	Lab Control Sample	99	98
LCSD 880-508/2-B	Lab Control Sample Dup	100	100
MB 880-500/5-A	Method Blank	103	94
MB 880-508/5-B	Method Blank	100	95
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)
890-376-1	FS08	102	95
LCS 880-556/2-A	Lab Control Sample	122	109
LCSD 880-556/3-A	Lab Control Sample Dup	114	102
MB 880-556/1-A	Method Blank	96	91
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-500/5-A

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 500

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/17/21 15:42	03/18/21 02:06	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			03/17/21 15:42	03/18/21 02:06	1
1,4-Difluorobenzene (Surr)	94		70 - 130			03/17/21 15:42	03/18/21 02:06	1

Lab Sample ID: MB 880-508/5-B

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/16/21 15:47	03/18/21 12:22	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			03/16/21 15:47	03/18/21 12:22	1
1,4-Difluorobenzene (Surr)	95		70 - 130			03/16/21 15:47	03/18/21 12:22	1

Lab Sample ID: LCS 880-508/1-B

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08775		mg/Kg		88	70 - 130
Ethylbenzene	0.100	0.09672		mg/Kg		97	70 - 130
Toluene	0.100	0.09571		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1988		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09865		mg/Kg		99	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		70 - 130				
1,4-Difluorobenzene (Surr)	98		70 - 130				

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-508/2-B

Matrix: Solid

Analysis Batch: 528

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09498		mg/Kg		95	70 - 130	8	35
Ethylbenzene	0.100	0.1040		mg/Kg		104	70 - 130	7	35
Toluene	0.100	0.1015		mg/Kg		101	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2126		mg/Kg		106	70 - 130	7	35
o-Xylene	0.100	0.1053		mg/Kg		105	70 - 130	7	35

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

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

Lab Sample ID: MB 880-556/1-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 556

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1
Total TPH	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/18/21 09:00	03/18/21 11:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/18/21 09:00	03/18/21 11:19	1
o-Terphenyl	91		70 - 130	03/18/21 09:00	03/18/21 11:19	1

Lab Sample ID: LCS 880-556/2-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1117		mg/Kg		112	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1023		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-556/3-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1111		mg/Kg		111	70 - 130	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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

Lab Sample ID: LCSD 880-556/3-A

Matrix: Solid

Analysis Batch: 557

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	954.5		mg/Kg		95	70 - 130	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	114		70 - 130						
o-Terphenyl	102		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-560/1-A

Matrix: Solid

Analysis Batch: 562

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			03/18/21 16:14	1

Lab Sample ID: LCS 880-560/2-A

Matrix: Solid

Analysis Batch: 562

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-560/3-A

Matrix: Solid

Analysis Batch: 562

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	248.4		mg/Kg		99	90 - 110	6	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

GC VOA

Prep Batch: 500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-500/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	5035	
MB 880-508/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-508/1-B	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-508/2-B	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	8021B	508
MB 880-500/5-A	Method Blank	Total/NA	Solid	8021B	500
MB 880-508/5-B	Method Blank	Total/NA	Solid	8021B	508
LCS 880-508/1-B	Lab Control Sample	Total/NA	Solid	8021B	508
LCSD 880-508/2-B	Lab Control Sample Dup	Total/NA	Solid	8021B	508

GC Semi VOA

Prep Batch: 556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	8015NM Prep	
MB 880-556/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-556/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Total/NA	Solid	8015B NM	556
MB 880-556/1-A	Method Blank	Total/NA	Solid	8015B NM	556
LCS 880-556/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	556
LCSD 880-556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	556

HPLC/IC

Leach Batch: 560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Soluble	Solid	DI Leach	
MB 880-560/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-560/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-560/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-376-1	FS08	Soluble	Solid	300.0	560
MB 880-560/1-A	Method Blank	Soluble	Solid	300.0	560
LCS 880-560/2-A	Lab Control Sample	Soluble	Solid	300.0	560
LCSD 880-560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	560

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Client Sample ID: FS08

Lab Sample ID: 890-376-1

Date Collected: 03/17/21 12:18

Matrix: Solid

Date Received: 03/17/21 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			508	03/18/21 12:09	MR	XM
Total/NA	Analysis	8021B		1	528	03/18/21 16:36	MR	XM
Total/NA	Prep	8015NM Prep			556	03/18/21 12:03	DM	XM
Total/NA	Analysis	8015B NM		1	557	03/18/21 13:46	AM	XM
Soluble	Leach	DI Leach			560	03/18/21 12:58	CH	XM
Soluble	Analysis	300.0		1	562	03/18/21 17:17	CH	XM

Laboratory References:

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

Method Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

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

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:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-376-1
SDG: TE106521001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-376-1	FS08	Solid	03/17/21 12:18	03/17/21 16:55	

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



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Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 586-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No.:

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Project Manager: Kalei Jennings						Bill To: (if different)					
Company Name: WEP USA						Company Name:					
Address: 8300 North A Street						Address:					
City, State ZIP: Midland, TX 79705						City, State ZIP:					
Phone: (617) 683-2503						Email: kalei.jennings@wep.com fahmasmith@gmail.com					
Project Name: Boyce 15 #001						Turn Around					
Project Number: TE106521001						☐ Routine ☒ Rush					
Project Location: Lea County						Due Date: 24 hrs					
Sample's Name: Fahma Smith						TAT starts the day received by the lab, if received by 4:30pm					
PO #:											
SAMPLE RECEIPT						Temp Blank: Yes No Wet Ice: Yes No					
Samples Received Intact: Yes No						Thermometer ID: T-1004-9957					
Cooler Custody Seals: Yes No N/A						Correction Factor: 3.2/3.0					
Sample Custody Seals: Yes No N/A						Temperature Reading:					
Total Containers:						Corrected Temperature:					
Sample Identification						Matrix					
Date Sampled						Time Sampled					
Depth						Grab/Comp					
# of Cont											
TPH (EPA 8021)											
BTEX (EPA 8015)											
Chloride (EPA 300.0)											
ANALYSIS REQUEST											
Preservative Codes											
None, NO						DI Water, H ₂ O					
Cool: Cool						MeOH: Me					
HCL: HC						HNO ₃ : HN					
H ₂ SO ₄ : H ₂						NaOH: Na					
H ₃ PO ₄ : HP											
NaHSO ₄ : NABIS											
Na ₂ S ₂ O ₃ : NaSO ₃											
Zn Acetate+NaOH: Zn											
NaOH+Ascorbic Acid: SACP											
Sample Comments											

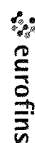
Eurofins Xenco, Carlsbad

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: 890-376-1

SDG Number: TE106521001

Login Number: 376

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-376-1

SDG Number: TE106521001

Login Number: 376

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 03/18/21 11:51 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?	N/A	
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: 890-405-1

Laboratory Sample Delivery Group: Lea County NM
Client Project/Site: Boyce 15 #001
Revision: 1

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:
4/22/2021 2:35:56 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: Boyce 15 #001

Laboratory Job ID: 890-405-1
SDG: Lea County NM

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

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
*+	LCS and/or LCSD is outside acceptance 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

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Case Narrative

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Job ID: 890-405-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-405-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 4/1/2021. The report (revision 1) is being revised due to: Per client email updated sample IDs. FS08 to FS08A.

Receipt

The sample was received on 3/22/2021 12:00 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 was 0.0° C.

Receipt Exceptions

Per client email updated sample IDs. FS08 to FS08A

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS08A (890-405-1).

GC VOA

Method 8021B: Surrogate 4-Bromofluorobenzene (Surr) recovery for the following samples were outside control limits: FS08A (890-405-1), (CCV 880-986/2), (CCV 880-986/20), (LCS 880-985/1-A), (MB 880-985/5-A), (880-509-A-1-D) and (880-509-A-1-D MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015B NM: The laboratory control sample (LCS) and the matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-834 and analytical batch 880-847 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10. These analytes were biased high in the LCS, MS/MSD and were not detected in the associated samples; therefore, the data have been reported.

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Client Sample ID: FS08A

Lab Sample ID: 890-405-1

Date Collected: 03/22/21 10:02

Matrix: Solid

Date Received: 03/22/21 12:00

Sample Depth: - 14

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 14:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 14:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 14:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/30/21 09:18	03/30/21 14:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 14:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/30/21 09:18	03/30/21 14:46	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	03/30/21 09:18	03/30/21 14:46	1
1,4-Difluorobenzene (Surr)	106		70 - 130	03/30/21 09:18	03/30/21 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *+	50.0		mg/Kg		03/25/21 09:19	03/25/21 16:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 16:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 16:36	1
Total TPH	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/25/21 09:19	03/25/21 16:36	1
o-Terphenyl	104		70 - 130	03/25/21 09:19	03/25/21 16:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.8		4.95		mg/Kg			03/31/21 17:42	1

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

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)
890-405-1	FS08A	118	106
LCS 880-1052/1-A	Lab Control Sample	97	206 S1+
LCSD 880-1052/2-A	Lab Control Sample Dup	99	103
MB 880-1052/5-A	Method Blank	100	101

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)
890-405-1	FS08A	102	104
LCS 880-834/2-A	Lab Control Sample	108	102
LCSD 880-834/3-A	Lab Control Sample Dup	103	95
MB 880-834/1-A	Method Blank	102	107

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1052/5-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/30/21 09:18	03/30/21 13:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/30/21 09:18	03/30/21 13:44	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/30/21 09:18	03/30/21 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/30/21 09:18	03/30/21 13:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/30/21 09:18	03/30/21 13:44	1

Lab Sample ID: LCS 880-1052/1-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07624		mg/Kg		76	70 - 130
Toluene	0.100	0.07294		mg/Kg		73	70 - 130
Ethylbenzene	0.100	0.07393		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1479		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07621		mg/Kg		76	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	206	S1+	70 - 130

Lab Sample ID: LCSD 880-1052/2-A

Matrix: Solid

Analysis Batch: 1053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1052

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08614		mg/Kg		86	70 - 130	12	35
Toluene	0.100	0.08256		mg/Kg		83	70 - 130	12	35
Ethylbenzene	0.100	0.08574		mg/Kg		86	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1714		mg/Kg		86	70 - 130	15	35
o-Xylene	0.100	0.08727		mg/Kg		87	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-834/1-A

Matrix: Solid

Analysis Batch: 847

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 834

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1
Total TPH	<50.0	U	50.0		mg/Kg		03/25/21 09:19	03/25/21 12:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/25/21 09:19	03/25/21 12:03	1
o-Terphenyl	107		70 - 130	03/25/21 09:19	03/25/21 12:03	1

Lab Sample ID: LCS 880-834/2-A

Matrix: Solid

Analysis Batch: 847

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 834

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1376	*+	mg/Kg		138	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1123		mg/Kg		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: LCSD 880-834/3-A

Matrix: Solid

Analysis Batch: 847

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 834

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1230		mg/Kg		123	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1109		mg/Kg		111	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	95		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1019/1-A

Matrix: Solid

Analysis Batch: 1121

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/31/21 15:42	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1019/2-A

Matrix: Solid

Analysis Batch: 1121

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.0		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-1019/3-A

Matrix: Solid

Analysis Batch: 1121

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	252.0		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

GC VOA

Prep Batch: 1052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-405-1	FS08A	Total/NA	Solid	5035	
MB 880-1052/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-405-1	FS08A	Total/NA	Solid	8021B	1052
MB 880-1052/5-A	Method Blank	Total/NA	Solid	8021B	1052
LCS 880-1052/1-A	Lab Control Sample	Total/NA	Solid	8021B	1052
LCSD 880-1052/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1052

GC Semi VOA

Prep Batch: 834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-405-1	FS08A	Total/NA	Solid	8015NM Prep	
MB 880-834/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-834/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-405-1	FS08A	Total/NA	Solid	8015B NM	834
MB 880-834/1-A	Method Blank	Total/NA	Solid	8015B NM	834
LCS 880-834/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	834
LCSD 880-834/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	834

HPLC/IC

Leach Batch: 1019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-405-1	FS08A	Soluble	Solid	DI Leach	
MB 880-1019/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1019/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1019/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-405-1	FS08A	Soluble	Solid	300.0	1019
MB 880-1019/1-A	Method Blank	Soluble	Solid	300.0	1019
LCS 880-1019/2-A	Lab Control Sample	Soluble	Solid	300.0	1019
LCSD 880-1019/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1019

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Client Sample ID: FS08A**Lab Sample ID: 890-405-1****Date Collected: 03/22/21 10:02****Matrix: Solid****Date Received: 03/22/21 12:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1052	03/30/21 09:18	KL	XM
Total/NA	Analysis	8021B		1	1053	03/30/21 14:46	KL	XM
Total/NA	Prep	8015NM Prep			834	03/25/21 09:19	DM	XM
Total/NA	Analysis	8015B NM		1	847	03/25/21 16:36	AM	XM
Soluble	Leach	DI Leach			1019	03/29/21 14:40	CH	XM
Soluble	Analysis	300.0		1	1121	03/31/21 17:42	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Eurofins Xenco, Carlsbad

Method Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

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

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:

XM = 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: Boyce 15 #001

Job ID: 890-405-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-405-1	FS08A	Solid	03/22/21 10:02	03/22/21 12:00	- 14

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



Environment Testing
Xenco

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

Chain of Custody

Work Order No: 405

www.xenco.com Page 1 of 1

Project Manager:	Kaleil Jennings	Bill to (if different)	→
Company Name:	WSP USA	Company Name:	→
Address:	3300 North A Street	Address:	→
City, State ZIP:	Mt Laurel, TX 79705	City, State ZIP:	→
Phone:	(817) 6883-2503	Email:	Kaleil.jennings@wsp.com, fahma.siddiqui@wsp.com

Work Order Comments	
Program:	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:	
Reporting:	Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables:	EDD ☐ ADAPT ☐ Other: _____

Project Name:		Page 15 #001		Turn Around	
Project Number:		TE1006521001		☒ Routine ☐ Rush	
Project Location:		Lee County		Due Date:	
Sampler's Name:		Fatma Smith		TAT starts the day received by the lab, if received by 4:30pm	
PO #:					
SAMPLE RECEIPT		Temp Blank:		Wet Ice:	
Samples Received Intact:		☒ Yes ☐ No		☒ Yes ☐ No	
Cooler Custody Seals:		☒ Yes ☐ No		Thermometer ID: T-N4-007	
Sample Custody Seals:		☒ Yes ☐ No		Correction Factor: -6.2	
Total Containers:		1		Temperature Reading: 0.2	
				Corrected Temperature: 0.0	
Parameters					
H (EPA 0-8021)		Pres. Code			
EX (EPA 8015)					
oxide (EPA 300.0)					
ANALYSIS REQUEST					
 890-405 Chain of Custody					
Preservative Codes					
None: NO		DI Water: H ₂ O			
Cool: Cool		MeOH: Me			
HCL: HC		HNO ₃ : HN			
H ₂ SO ₄ : H ₂		NaOH: Na			
H ₃ PO ₄ : HP					
NaHSO ₄ : NABIS					
Na ₂ S ₂ O ₃ : NaSO ₃					
Zn Acetate+NaOH: Zn					
NaOH+Ascorbic Acid: SASC					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	BTE	chl	Sample Comments
FS08	S	3/22/14	1002	14'		1	X	X	X	
1000A										

[illegible]

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>			2		
3 <i>[Signature]</i>		3.22.21	4		
5			6		

Printed Date: 03/25/2020 Rev 2005

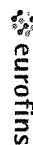
Eurofins Xenco, Carlsbad

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: 890-405-1

SDG Number: Lea County NM

Login Number: 405**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-405-1

SDG Number: Lea County NM

Login Number: 405**List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Midland****List Creation: 03/23/21 03:14 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	
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: 890-509-1

Laboratory Sample Delivery Group: TE106521001

Client Project/Site: Boyce 15 #001

Revision: 1

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:

4/22/2021 1:51:26 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: Boyce 15 #001

Laboratory Job ID: 890-509-1
SDG: TE106521001

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Qualifiers

GC VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Job ID: 890-509-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-509-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 4/19/2021. The report (revision 1) is being revised due to: Per client email updated sample IDs.

FS01 to FS01A

FS02 to FS02A

FS03 to FS03A

FS04 to FS04A

FS06 to FS06A

FS07 to FS07A

SW02 to SW11

SW03 to SW12

SW04 to SW13

SW09 to SW17

Receipt

The samples were received on 4/9/2021 11:30 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 was 11.4° C.

Receipt Exceptions

Per client email updated sample IDs

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SW11 (890-509-1), SW12 (890-509-2), SW13 (890-509-3), SW14 (890-509-4), FS01A (890-509-5), FS02A (890-509-6), FS03A (890-509-7), FS04A (890-509-8), FS06A (890-509-9) and FS07A (890-509-10).

GC VOA

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

GC Semi VOA

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: SW11

Lab Sample ID: 890-509-1

Date Collected: 04/09/21 09:25

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: 0 - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		04/12/21 09:50	04/12/21 17:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 17:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 17:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 17:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 17:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 17:16	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 17:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	04/12/21 09:50	04/12/21 17:16	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/12/21 09:50	04/12/21 17:16	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 F2	49.9	mg/Kg		04/12/21 11:22	04/12/21 13:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 13:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 13:32	1
Total TPH	<49.9	U F1	49.9	mg/Kg		04/12/21 11:22	04/12/21 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	04/12/21 11:22	04/12/21 13:32	1
o-Terphenyl	82		70 - 130	04/12/21 11:22	04/12/21 13:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		5.00	mg/Kg			04/17/21 19:31	1

Client Sample ID: SW12

Lab Sample ID: 890-509-2

Date Collected: 04/09/21 09:27

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: 0 - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *1	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:36	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:36	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:36	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		04/12/21 09:50	04/12/21 17:36	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:36	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		04/12/21 09:50	04/12/21 17:36	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	04/12/21 09:50	04/12/21 17:36	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/12/21 09:50	04/12/21 17:36	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: SW12

Lab Sample ID: 890-509-2

Date Collected: 04/09/21 09:27

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: 0 - 10.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	81.2		49.9	mg/Kg		04/12/21 11:22	04/12/21 14:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 14:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 14:36	1
Total TPH	81.2		49.9	mg/Kg		04/12/21 11:22	04/12/21 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/12/21 11:22	04/12/21 14:36	1
o-Terphenyl	88		70 - 130	04/12/21 11:22	04/12/21 14:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.0		4.96	mg/Kg			04/17/21 19:46	1

Client Sample ID: SW13

Lab Sample ID: 890-509-3

Date Collected: 04/09/21 09:30

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: 0 - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *1	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:57	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:57	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:57	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 17:57	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:57	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 17:57	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 17:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	04/12/21 09:50	04/12/21 17:57	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/12/21 09:50	04/12/21 17:57	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	87.5		49.8	mg/Kg		04/12/21 11:22	04/12/21 14:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		04/12/21 11:22	04/12/21 14:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/12/21 11:22	04/12/21 14:57	1
Total TPH	87.5		49.8	mg/Kg		04/12/21 11:22	04/12/21 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	04/12/21 11:22	04/12/21 14:57	1
o-Terphenyl	87		70 - 130	04/12/21 11:22	04/12/21 14:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.95	mg/Kg			04/17/21 19:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: SW17

Lab Sample ID: 890-509-4

Date Collected: 04/09/21 09:32

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: 0 - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *1	0.00198	mg/Kg		04/12/21 09:50	04/12/21 18:17	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 18:17	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 18:17	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 18:17	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 18:17	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 18:17	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	04/12/21 09:50	04/12/21 18:17	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/12/21 09:50	04/12/21 18:17	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	83.1		49.9	mg/Kg		04/12/21 11:22	04/12/21 15:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 15:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 15:18	1
Total TPH	83.1		49.9	mg/Kg		04/12/21 11:22	04/12/21 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	04/12/21 11:22	04/12/21 15:18	1
o-Terphenyl	85		70 - 130	04/12/21 11:22	04/12/21 15:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	108		5.05	mg/Kg			04/17/21 19:57	1

Client Sample ID: FS01A

Lab Sample ID: 890-509-5

Date Collected: 04/09/21 09:34

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/12/21 09:50	04/12/21 18:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:38	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/12/21 09:50	04/12/21 18:38	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	04/12/21 09:50	04/12/21 18:38	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/12/21 09:50	04/12/21 18:38	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: FS01A

Lab Sample ID: 890-509-5

Date Collected: 04/09/21 09:34

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	74.7		50.0	mg/Kg		04/12/21 11:22	04/12/21 15:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 15:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 15:39	1
Total TPH	74.7		50.0	mg/Kg		04/12/21 11:22	04/12/21 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/12/21 11:22	04/12/21 15:39	1
o-Terphenyl	86		70 - 130	04/12/21 11:22	04/12/21 15:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.7		4.98	mg/Kg			04/17/21 20:02	1

Client Sample ID: FS02A

Lab Sample ID: 890-509-6

Date Collected: 04/09/21 09:38

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *1	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:00	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:00	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:00	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		04/12/21 09:50	04/12/21 20:00	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:00	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/12/21 09:50	04/12/21 20:00	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	04/12/21 09:50	04/12/21 20:00	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/12/21 09:50	04/12/21 20:00	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	<50.1	U	50.1	mg/Kg		04/12/21 11:22	04/12/21 16:00	1
Diesel Range Organics (Over C10-C28)	51.5		50.1	mg/Kg		04/12/21 11:22	04/12/21 16:00	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		04/12/21 11:22	04/12/21 16:00	1
Total TPH	51.5		50.1	mg/Kg		04/12/21 11:22	04/12/21 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	04/12/21 11:22	04/12/21 16:00	1
o-Terphenyl	94		70 - 130	04/12/21 11:22	04/12/21 16:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.4		5.00	mg/Kg			04/17/21 20:17	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: FS03A

Lab Sample ID: 890-509-7

Date Collected: 04/09/21 09:40

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:20	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:20	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 20:20	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:20	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 20:20	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	04/12/21 09:50	04/12/21 20:20	1
1,4-Difluorobenzene (Surr)	104		70 - 130	04/12/21 09:50	04/12/21 20:20	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	63.0		49.9	mg/Kg		04/12/21 11:22	04/12/21 16:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 16:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 16:21	1
Total TPH	63.0		49.9	mg/Kg		04/12/21 11:22	04/12/21 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	04/12/21 11:22	04/12/21 16:21	1
o-Terphenyl	96		70 - 130	04/12/21 11:22	04/12/21 16:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.2		5.00	mg/Kg			04/17/21 20:22	1

Client Sample ID: FS04A

Lab Sample ID: 890-509-8

Date Collected: 04/09/21 09:42

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/12/21 09:50	04/12/21 20:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:40	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/12/21 09:50	04/12/21 20:40	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	04/12/21 09:50	04/12/21 20:40	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/12/21 09:50	04/12/21 20:40	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: FS04A

Lab Sample ID: 890-509-8

Date Collected: 04/09/21 09:42

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	58.4		49.9	mg/Kg		04/12/21 11:22	04/12/21 16:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 16:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 16:43	1
Total TPH	58.4		49.9	mg/Kg		04/12/21 11:22	04/12/21 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/12/21 11:22	04/12/21 16:43	1
o-Terphenyl	88		70 - 130	04/12/21 11:22	04/12/21 16:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.8		5.02	mg/Kg			04/17/21 20:27	1

Client Sample ID: FS06A

Lab Sample ID: 890-509-9

Date Collected: 04/09/21 09:45

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *1	0.00201	mg/Kg		04/12/21 09:50	04/12/21 21:01	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/12/21 09:50	04/12/21 21:01	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/12/21 09:50	04/12/21 21:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/12/21 09:50	04/12/21 21:01	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/12/21 09:50	04/12/21 21:01	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/12/21 09:50	04/12/21 21:01	1
Total BTEX	<0.00201	U	0.00201	mg/Kg		04/12/21 09:50	04/12/21 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	04/12/21 09:50	04/12/21 21:01	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/12/21 09:50	04/12/21 21:01	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		04/12/21 11:22	04/12/21 17:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 17:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 17:04	1
Total TPH	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	04/12/21 11:22	04/12/21 17:04	1
o-Terphenyl	99		70 - 130	04/12/21 11:22	04/12/21 17:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.5		5.03	mg/Kg			04/17/21 20:32	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: FS07A

Lab Sample ID: 890-509-10

Date Collected: 04/09/21 09:48

Matrix: Solid

Date Received: 04/09/21 11:30

Sample Depth: - 10.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		04/12/21 09:50	04/12/21 21:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 21:21	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 21:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 21:21	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 21:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 21:21	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 21:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	04/12/21 09:50	04/12/21 21:21	1
1,4-Difluorobenzene (Surr)	102		70 - 130	04/12/21 09:50	04/12/21 21:21	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	82.9		49.9	mg/Kg		04/12/21 11:22	04/12/21 17:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 17:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/12/21 11:22	04/12/21 17:25	1
Total TPH	82.9		49.9	mg/Kg		04/12/21 11:22	04/12/21 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	04/12/21 11:22	04/12/21 17:25	1
o-Terphenyl	89		70 - 130	04/12/21 11:22	04/12/21 17:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.0		5.00	mg/Kg			04/17/21 20:37	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

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)
890-509-1	SW11	129	103
890-509-2	SW12	127	103
890-509-3	SW13	120	103
890-509-4	SW17	126	103
890-509-5	FS01A	125	105
890-509-6	FS02A	123	106
890-509-7	FS03A	118	104
890-509-8	FS04A	125	103
890-509-9	FS06A	114	95
890-509-10	FS07A	116	102
LCS 880-1645/1-A	Lab Control Sample	140 S1+	106
LCSD 880-1645/2-A	Lab Control Sample Dup	115	104
MB 880-1645/5-A	Method Blank	98	98

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)
890-509-1	SW11	89	82
890-509-1 MS	SW11	102	86
890-509-1 MSD	SW11	114	94
890-509-2	SW12	95	88
890-509-3	SW13	93	87
890-509-4	SW17	91	85
890-509-5	FS01A	95	86
890-509-6	FS02A	100	94
890-509-7	FS03A	104	96
890-509-8	FS04A	95	88
890-509-9	FS06A	111	99
890-509-10	FS07A	95	89
LCS 880-1666/2-A	Lab Control Sample	93	80
LCSD 880-1666/3-A	Lab Control Sample Dup	97	83
MB 880-1666/1-A	Method Blank	93	92

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1645/5-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1645

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/12/21 09:50	04/12/21 15:13	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/12/21 09:50	04/12/21 15:13	1

Lab Sample ID: LCS 880-1645/1-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1236		mg/Kg		124	70 - 130
Toluene	0.100	0.08929		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08838		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1707		mg/Kg		85	70 - 130
o-Xylene	0.100	0.08714		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-1645/2-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1645

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08050	*1	mg/Kg		80	70 - 130	42	35
Toluene	0.100	0.08131		mg/Kg		81	70 - 130	9	35
Ethylbenzene	0.100	0.09256		mg/Kg		93	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1873		mg/Kg		94	70 - 130	9	35
o-Xylene	0.100	0.09958		mg/Kg		100	70 - 130	13	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

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

Lab Sample ID: MB 880-1666/1-A

Matrix: Solid

Analysis Batch: 1664

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1666

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		04/12/21 11:22	04/12/21 12:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 12:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 12:28	1
Total TPH	<50.0	U	50.0	mg/Kg		04/12/21 11:22	04/12/21 12:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	04/12/21 11:22	04/12/21 12:28	1
o-Terphenyl	92		70 - 130	04/12/21 11:22	04/12/21 12:28	1

Lab Sample ID: LCS 880-1666/2-A

Matrix: Solid

Analysis Batch: 1664

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1072		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	855.9		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: LCSD 880-1666/3-A

Matrix: Solid

Analysis Batch: 1664

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1196		mg/Kg		120	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	927.7		mg/Kg		93	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: 890-509-1 MS

Matrix: Solid

Analysis Batch: 1664

Client Sample ID: SW11

Prep Type: Total/NA

Prep Batch: 1666

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 F2	998	1222		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1043		mg/Kg		104	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

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

Lab Sample ID: 890-509-1 MS

Matrix: Solid

Analysis Batch: 1664

Client Sample ID: SW11

Prep Type: Total/NA

Prep Batch: 1666

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 890-509-1 MSD

Matrix: Solid

Analysis Batch: 1664

Client Sample ID: SW11

Prep Type: Total/NA

Prep Batch: 1666

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 F2	998	1502	F1 F2	mg/Kg		147	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1154		mg/Kg		116	70 - 130	10	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	94		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1892/1-A

Matrix: Solid

Analysis Batch: 1933

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			04/17/21 19:16	1

Lab Sample ID: LCS 880-1892/2-A

Matrix: Solid

Analysis Batch: 1933

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-1892/3-A

Matrix: Solid

Analysis Batch: 1933

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	251.7		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-509-1 MS

Matrix: Solid

Analysis Batch: 1933

Client Sample ID: SW11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	105		250	334.7		mg/Kg		92	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-509-1 MSD							Client Sample ID: SW11					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 1933												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	105		250	339.1		mg/Kg		94	90 - 110	1	20	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

GC VOA

Analysis Batch: 1640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1	SW11	Total/NA	Solid	8021B	1645
890-509-2	SW12	Total/NA	Solid	8021B	1645
890-509-3	SW13	Total/NA	Solid	8021B	1645
890-509-4	SW17	Total/NA	Solid	8021B	1645
890-509-5	FS01A	Total/NA	Solid	8021B	1645
890-509-6	FS02A	Total/NA	Solid	8021B	1645
890-509-7	FS03A	Total/NA	Solid	8021B	1645
890-509-8	FS04A	Total/NA	Solid	8021B	1645
890-509-9	FS06A	Total/NA	Solid	8021B	1645
890-509-10	FS07A	Total/NA	Solid	8021B	1645
MB 880-1645/5-A	Method Blank	Total/NA	Solid	8021B	1645
LCS 880-1645/1-A	Lab Control Sample	Total/NA	Solid	8021B	1645
LCSD 880-1645/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1645

Prep Batch: 1645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1	SW11	Total/NA	Solid	5035	
890-509-2	SW12	Total/NA	Solid	5035	
890-509-3	SW13	Total/NA	Solid	5035	
890-509-4	SW17	Total/NA	Solid	5035	
890-509-5	FS01A	Total/NA	Solid	5035	
890-509-6	FS02A	Total/NA	Solid	5035	
890-509-7	FS03A	Total/NA	Solid	5035	
890-509-8	FS04A	Total/NA	Solid	5035	
890-509-9	FS06A	Total/NA	Solid	5035	
890-509-10	FS07A	Total/NA	Solid	5035	
MB 880-1645/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1645/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1645/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 1664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1	SW11	Total/NA	Solid	8015B NM	1666
890-509-2	SW12	Total/NA	Solid	8015B NM	1666
890-509-3	SW13	Total/NA	Solid	8015B NM	1666
890-509-4	SW17	Total/NA	Solid	8015B NM	1666
890-509-5	FS01A	Total/NA	Solid	8015B NM	1666
890-509-6	FS02A	Total/NA	Solid	8015B NM	1666
890-509-7	FS03A	Total/NA	Solid	8015B NM	1666
890-509-8	FS04A	Total/NA	Solid	8015B NM	1666
890-509-9	FS06A	Total/NA	Solid	8015B NM	1666
890-509-10	FS07A	Total/NA	Solid	8015B NM	1666
MB 880-1666/1-A	Method Blank	Total/NA	Solid	8015B NM	1666
LCS 880-1666/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1666
LCSD 880-1666/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1666
890-509-1 MS	SW11	Total/NA	Solid	8015B NM	1666
890-509-1 MSD	SW11	Total/NA	Solid	8015B NM	1666

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

GC Semi VOA

Prep Batch: 1666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1	SW11	Total/NA	Solid	8015NM Prep	
890-509-2	SW12	Total/NA	Solid	8015NM Prep	
890-509-3	SW13	Total/NA	Solid	8015NM Prep	
890-509-4	SW17	Total/NA	Solid	8015NM Prep	
890-509-5	FS01A	Total/NA	Solid	8015NM Prep	
890-509-6	FS02A	Total/NA	Solid	8015NM Prep	
890-509-7	FS03A	Total/NA	Solid	8015NM Prep	
890-509-8	FS04A	Total/NA	Solid	8015NM Prep	
890-509-9	FS06A	Total/NA	Solid	8015NM Prep	
890-509-10	FS07A	Total/NA	Solid	8015NM Prep	
MB 880-1666/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1666/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1666/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-509-1 MS	SW11	Total/NA	Solid	8015NM Prep	
890-509-1 MSD	SW11	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1	SW11	Soluble	Solid	DI Leach	
890-509-2	SW12	Soluble	Solid	DI Leach	
890-509-3	SW13	Soluble	Solid	DI Leach	
890-509-4	SW17	Soluble	Solid	DI Leach	
890-509-5	FS01A	Soluble	Solid	DI Leach	
890-509-6	FS02A	Soluble	Solid	DI Leach	
890-509-7	FS03A	Soluble	Solid	DI Leach	
890-509-8	FS04A	Soluble	Solid	DI Leach	
890-509-9	FS06A	Soluble	Solid	DI Leach	
890-509-10	FS07A	Soluble	Solid	DI Leach	
MB 880-1892/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1892/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1892/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-509-1 MS	SW11	Soluble	Solid	DI Leach	
890-509-1 MSD	SW11	Soluble	Solid	DI Leach	

Analysis Batch: 1933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1	SW11	Soluble	Solid	300.0	1892
890-509-2	SW12	Soluble	Solid	300.0	1892
890-509-3	SW13	Soluble	Solid	300.0	1892
890-509-4	SW17	Soluble	Solid	300.0	1892
890-509-5	FS01A	Soluble	Solid	300.0	1892
890-509-6	FS02A	Soluble	Solid	300.0	1892
890-509-7	FS03A	Soluble	Solid	300.0	1892
890-509-8	FS04A	Soluble	Solid	300.0	1892
890-509-9	FS06A	Soluble	Solid	300.0	1892
890-509-10	FS07A	Soluble	Solid	300.0	1892
MB 880-1892/1-A	Method Blank	Soluble	Solid	300.0	1892
LCS 880-1892/2-A	Lab Control Sample	Soluble	Solid	300.0	1892
LCSD 880-1892/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1892

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

HPLC/IC (Continued)

Analysis Batch: 1933 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-509-1 MS	SW11	Soluble	Solid	300.0	1892
890-509-1 MSD	SW11	Soluble	Solid	300.0	1892

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Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: SW11

Lab Sample ID: 890-509-1

Date Collected: 04/09/21 09:25

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 17:16	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 13:32	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 19:31	WP	XM

Client Sample ID: SW12

Lab Sample ID: 890-509-2

Date Collected: 04/09/21 09:27

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 17:36	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 14:36	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 19:46	WP	XM

Client Sample ID: SW13

Lab Sample ID: 890-509-3

Date Collected: 04/09/21 09:30

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 17:57	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 14:57	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 19:51	WP	XM

Client Sample ID: SW17

Lab Sample ID: 890-509-4

Date Collected: 04/09/21 09:32

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 18:17	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 15:18	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 19:57	WP	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: FS01A

Lab Sample ID: 890-509-5

Date Collected: 04/09/21 09:34

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 18:38	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 15:39	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 20:02	WP	XM

Client Sample ID: FS02A

Lab Sample ID: 890-509-6

Date Collected: 04/09/21 09:38

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 20:00	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 16:00	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 20:17	WP	XM

Client Sample ID: FS03A

Lab Sample ID: 890-509-7

Date Collected: 04/09/21 09:40

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 20:20	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 16:21	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 20:22	WP	XM

Client Sample ID: FS04A

Lab Sample ID: 890-509-8

Date Collected: 04/09/21 09:42

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 20:40	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 16:43	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 20:27	WP	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Client Sample ID: FS06A

Lab Sample ID: 890-509-9

Date Collected: 04/09/21 09:45

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 21:01	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 17:04	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 20:32	WP	XM

Client Sample ID: FS07A

Lab Sample ID: 890-509-10

Date Collected: 04/09/21 09:48

Matrix: Solid

Date Received: 04/09/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 21:21	KL	XM
Total/NA	Prep	8015NM Prep			1666	04/12/21 11:22	DM	XM
Total/NA	Analysis	8015B NM		1	1664	04/12/21 17:25	AJ	XM
Soluble	Leach	DI Leach			1892	04/16/21 11:52	SC	XM
Soluble	Analysis	300.0		1	1933	04/17/21 20:37	WP	XM

Laboratory References:

XM = 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: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

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

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:

XM = 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: Boyce 15 #001

Job ID: 890-509-1
SDG: TE106521001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-509-1	SW11	Solid	04/09/21 09:25	04/09/21 11:30	0 - 10.5
890-509-2	SW12	Solid	04/09/21 09:27	04/09/21 11:30	0 - 10.5
890-509-3	SW13	Solid	04/09/21 09:30	04/09/21 11:30	0 - 10.5
890-509-4	SW17	Solid	04/09/21 09:32	04/09/21 11:30	0 - 10.5
890-509-5	FS01A	Solid	04/09/21 09:34	04/09/21 11:30	- 10.5
890-509-6	FS02A	Solid	04/09/21 09:38	04/09/21 11:30	- 10.5
890-509-7	FS03A	Solid	04/09/21 09:40	04/09/21 11:30	- 10.5
890-509-8	FS04A	Solid	04/09/21 09:42	04/09/21 11:30	- 10.5
890-509-9	FS06A	Solid	04/09/21 09:45	04/09/21 11:30	- 10.5
890-509-10	FS07A	Solid	04/09/21 09:48	04/09/21 11:30	- 10.5

Eurofins Xenco, Carlsbad



Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 968-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalel Jennings	Bill-to: (if different)	
Company Name:	WESP USA	Company Name:	
Address:	3300 North Acacia	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(817) 683-2503	Email:	Kalel.jennings@wesp.com

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

Project Name:	Bouca 15 #1001	Turn Around	Pres. Code
Project Number:	TE060521001	☒ Routine ☐ Rush	
Project Location:	Lea County	Due Date:	
Sampler's Name:	Fatima Smith	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			
SAMPLE RECEIPT		Temp Blank:	Well:
Samples Received Intact:	Yes ☒ No ☐	Thermometer ID:	7 NM 007
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:	11.4
Sample Custody Seals:	Yes ☐ No ☒	Temperature Reading:	11.4
Total Containers:		Corrected Temperature:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Cont	# of	Parameters
SW02	CS	4/9/21	0925	0-10.5	1		TPH (EPA 0-8021)
SW03			0927	0-10.5			BTEX (EPA 8015)
SW04			0930	0-10.5			Chloride (EPA 3000)
SW09			0932	0-10.5			
ES01			0934	10.5			
ES02			0938	10.5			
ES03			0940	10.5			
ES04			0942	10.5			
ES06			0945	10.5			
ES07			0948	10.5			



890-509 Chain of Custody

Sample Comments

Preservative Codes

None: NO DI Water: H₂O
Cool: Cool MeOH: Me
HCL: HC HNO₃: HN
H₂SO₄: H₂ NaOH: Na
H₃PO₄: HP
NaHSO₄: NABIS
Na₂S₂O₃: NaSO₃
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SACP

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Matrix(es) 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
TCPT/SP/BU/ 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
fat	One Corp	4.9.21 1130			

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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			890-157 1
Shipping/Receiving	E-Mail:	jessica.kramer@eurofins.com	State of Origin:		Page 1 of 2
Company	Address:	Accreditations Required (See note)	NE LAP - Louisiana NE LAP - Texas	Job #:	890-509-1
Eurofins Xenco	1211 W Florida Ave	Due Date Requested	4/15/2021	Analysis Requested	
City	Midland	TAT Requested (days)			
State, Zip	TX, 79701	PO #:			
Phone	432-704-5440(Te)	MO #:			
Email		Project #:	89000048		
Project Name	Boyce 15 #001	Site:	SSOW#		
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab, BT=Tissue, A=Air)	Matrix (W=Water, S=Solid, O=Waste/oli)
SWM2 (890-509-1)	4/9/21	09 25		Solid	
SWM3 (890-509-2)	4/9/21	09 27		Solid	
SWM4 (890-509-3)	4/9/21	09 30		Solid	
SWM9 (890-509-4)	4/9/21	09 32		Solid	
FS01 (890-509-5)	4/9/21	09 34		Solid	
FS02 (890-509-6)	4/9/21	09 38		Solid	
FS03 (890-509-7)	4/9/21	09 40		Solid	
FS04 (890-509-8)	4/9/21	09 42		Solid	
FS06 (890-509-9)	4/9/21	09 45		Solid	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our 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/assessments 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.					
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Unconfirmed		☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Deliverable Requested I II III IV Other (specify)		Primary Deliverable Rank 2		Special Instructions/QC Requirements.	
Empty Kit Relinquished by	Date/Time	Company	Time	Method of Shipment:	
Relinquished by	4.9.21			Received by	4-12-21 WBBM
Relinquished by	Date/Time	Company		Received by	Date/Time
Relinquished by	Date/Time	Company		Received by	Date/Time
Custody Seals Intact:	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.			
Δ Yes Δ No					

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-509-1

SDG Number: TE106521001

Login Number: 509**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-509-1
SDG Number: TE106521001**Login Number: 509****List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Midland****List Creation: 04/12/21 10:57 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: 890-508-1

Laboratory Sample Delivery Group: TE106521001

Client Project/Site: Boyce 15#001

Revision: 1

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:

4/22/2021 2:28:38 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: Boyce 15#001

Laboratory Job ID: 890-508-1
SDG: TE106521001

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Qualifiers

GC VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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
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: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Job ID: 890-508-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative**

Job Narrative
890-508-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 4/19/2021. The report (revision 1) is being revised due to: Per client email updated sample IDs.

FS10 to FS10A

FS11 to FS11A

FS12 to FS12A

FS13 to FS13A

FS15 to FS15A

SW05 to SW14

SW07 to SW15

SW08 to SW16

SW10 to SW18

SW11 to SW19

SW12 to SW20

SW13 to SW21

SW14 to SW22

SW15 to SW23

SW16 to SW24.

Receipt

The samples were received on 4/8/2021 4:30 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 was 13.2° C.

Receipt Exceptions

Per client email updated sample IDs. FS10 to FS10A FS11 to FS11A FS12 to FS12A FS13 to FS13A FS15 to FS15A SW05 to SW14 SW07 to SW15 SW08 to SW16 SW10 to SW18 SW11 to SW19 SW12 to SW20 SW13 to SW21 SW14 to SW22 SW15 to SW23 SW16 to SW24

The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar:

FS10A (890-508-1), FS11A (890-508-2), FS12A (890-508-3), FS13A (890-508-4), FS15A (890-508-5), SW14 (890-508-6), SW16 (890-508-7), FS16 (890-508-8), FS17 (890-508-9), SW19 (890-508-10), SW20 (890-508-11), SW21 (890-508-12), SW22 (890-508-13), SW23 (890-508-14), SW24 (890-508-15), SW25 (890-508-16), SW26 (890-508-17), SW27 (890-508-18), SW18 (890-508-19) and SW15 (890-508-20).

BTEX 8021

GC VOA

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

GC Semi VOA

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS10A

Lab Sample ID: 890-508-1

Date Collected: 04/08/21 08:52

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:35	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:35	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/12/21 09:50	04/12/21 16:35	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:35	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/12/21 09:50	04/12/21 16:35	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	04/12/21 09:50	04/12/21 16:35	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/12/21 09:50	04/12/21 16:35	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		04/09/21 16:00	04/10/21 13:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 13:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 13:05	1
Total TPH	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	04/09/21 16:00	04/10/21 13:05	1
o-Terphenyl	97		70 - 130	04/09/21 16:00	04/10/21 13:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.6		4.95	mg/Kg			04/18/21 16:08	1

Client Sample ID: FS11A

Lab Sample ID: 890-508-2

Date Collected: 04/08/21 08:53

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *1	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:56	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:56	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:56	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 16:56	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:56	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 16:56	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	04/12/21 09:50	04/12/21 16:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130	04/12/21 09:50	04/12/21 16:56	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS11A

Lab Sample ID: 890-508-2

Date Collected: 04/08/21 08:53

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

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		04/09/21 16:00	04/10/21 14:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 14:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 14:09	1
Total TPH	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 14:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	04/09/21 16:00	04/10/21 14:09	1
o-Terphenyl	99		70 - 130	04/09/21 16:00	04/10/21 14:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.89		5.05	mg/Kg			04/18/21 16:13	1

Client Sample ID: FS12A

Lab Sample ID: 890-508-3

Date Collected: 04/08/21 08:55

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:30	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:30	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:30	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		04/12/21 09:00	04/12/21 16:30	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:30	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		04/12/21 09:00	04/12/21 16:30	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/12/21 09:00	04/12/21 16:30	1
1,4-Difluorobenzene (Surr)	107		70 - 130	04/12/21 09:00	04/12/21 16:30	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		04/09/21 16:00	04/10/21 14:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 14:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 14:30	1
Total TPH	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	04/09/21 16:00	04/10/21 14:30	1
o-Terphenyl	113		70 - 130	04/09/21 16:00	04/10/21 14:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.61		5.05	mg/Kg			04/18/21 16:18	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS13A

Lab Sample ID: 890-508-4

Date Collected: 04/08/21 08:58

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:51	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:51	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:51	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		04/12/21 09:00	04/12/21 16:51	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:51	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		04/12/21 09:00	04/12/21 16:51	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:00	04/12/21 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/12/21 09:00	04/12/21 16:51	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/12/21 09:00	04/12/21 16:51	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		04/09/21 16:00	04/10/21 14:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 14:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 14:52	1
Total TPH	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	04/09/21 16:00	04/10/21 14:52	1
o-Terphenyl	100		70 - 130	04/09/21 16:00	04/10/21 14:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.7		4.98	mg/Kg			04/18/21 16:23	1

Client Sample ID: FS15A

Lab Sample ID: 890-508-5

Date Collected: 04/08/21 09:00

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 14:52	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 14:52	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 14:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 14:52	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 14:52	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/12/21 09:50	04/12/21 14:52	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	04/12/21 09:50	04/12/21 14:52	1
1,4-Difluorobenzene (Surr)	124		70 - 130	04/12/21 09:50	04/12/21 14:52	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS15A

Lab Sample ID: 890-508-5

Date Collected: 04/08/21 09:00

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 12'

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		04/09/21 16:00	04/10/21 15:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 15:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 15:13	1
Total TPH	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	04/09/21 16:00	04/10/21 15:13	1
o-Terphenyl	108		70 - 130	04/09/21 16:00	04/10/21 15:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.9		5.00	mg/Kg			04/18/21 16:29	1

Client Sample ID: SW14

Lab Sample ID: 890-508-6

Date Collected: 04/08/21 09:05

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/12/21 09:50	04/12/21 15:13	1
1,4-Difluorobenzene (Surr)	118		70 - 130	04/12/21 09:50	04/12/21 15:13	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		04/09/21 16:00	04/10/21 15:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 15:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 15:34	1
Total TPH	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	04/09/21 16:00	04/10/21 15:34	1
o-Terphenyl	105		70 - 130	04/09/21 16:00	04/10/21 15:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.1		5.03	mg/Kg			04/18/21 04:32	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW16

Lab Sample ID: 890-508-7

Date Collected: 04/08/21 09:03

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 15:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 15:33	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	04/12/21 09:50	04/12/21 15:33	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/12/21 09:50	04/12/21 15:33	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		04/09/21 16:00	04/10/21 15:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 15:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 15:56	1
Total TPH	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	04/09/21 16:00	04/10/21 15:56	1
o-Terphenyl	98		70 - 130	04/09/21 16:00	04/10/21 15:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.9		5.05	mg/Kg			04/18/21 04:37	1

Client Sample ID: FS16

Lab Sample ID: 890-508-8

Date Collected: 04/08/21 11:48

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 15:54	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 15:54	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 15:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		04/12/21 09:50	04/12/21 15:54	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 15:54	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		04/12/21 09:50	04/12/21 15:54	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	04/12/21 09:50	04/12/21 15:54	1
1,4-Difluorobenzene (Surr)	119		70 - 130	04/12/21 09:50	04/12/21 15:54	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS16

Lab Sample ID: 890-508-8

Date Collected: 04/08/21 11:48

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 10.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:17	1
Total TPH	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	04/09/21 16:00	04/10/21 16:17	1
o-Terphenyl	99		70 - 130	04/09/21 16:00	04/10/21 16:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.5		4.96	mg/Kg			04/18/21 04:53	1

Client Sample ID: FS17

Lab Sample ID: 890-508-9

Date Collected: 04/08/21 11:50

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:15	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/12/21 09:50	04/12/21 16:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:15	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/12/21 09:50	04/12/21 16:15	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 16:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	04/12/21 09:50	04/12/21 16:15	1
1,4-Difluorobenzene (Surr)	114		70 - 130	04/12/21 09:50	04/12/21 16:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:38	1
Total TPH	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	04/09/21 16:00	04/10/21 16:38	1
o-Terphenyl	103		70 - 130	04/09/21 16:00	04/10/21 16:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.0		4.95	mg/Kg			04/18/21 04:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW19

Lab Sample ID: 890-508-10

Date Collected: 04/08/21 11:08

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00209		0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:36	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:36	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:36	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		04/12/21 09:50	04/12/21 16:36	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:36	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		04/12/21 09:50	04/12/21 16:36	1
Total BTEX	0.00209		0.00198	mg/Kg		04/12/21 09:50	04/12/21 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	04/12/21 09:50	04/12/21 16:36	1
1,4-Difluorobenzene (Surr)	123		70 - 130	04/12/21 09:50	04/12/21 16:36	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		04/09/21 16:00	04/10/21 16:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:59	1
Total TPH	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	04/09/21 16:00	04/10/21 16:59	1
o-Terphenyl	105		70 - 130	04/09/21 16:00	04/10/21 16:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.6		4.95	mg/Kg			04/18/21 05:13	1

Client Sample ID: SW20

Lab Sample ID: 890-508-11

Date Collected: 04/08/21 11:10

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00226		0.00200	mg/Kg		04/12/21 09:50	04/12/21 17:58	1
Toluene	0.0496		0.00200	mg/Kg		04/12/21 09:50	04/12/21 17:58	1
Ethylbenzene	0.0388		0.00200	mg/Kg		04/12/21 09:50	04/12/21 17:58	1
m-Xylene & p-Xylene	0.0601		0.00399	mg/Kg		04/12/21 09:50	04/12/21 17:58	1
o-Xylene	0.0269		0.00200	mg/Kg		04/12/21 09:50	04/12/21 17:58	1
Xylenes, Total	0.0870		0.00399	mg/Kg		04/12/21 09:50	04/12/21 17:58	1
Total BTEX	0.178		0.00200	mg/Kg		04/12/21 09:50	04/12/21 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/12/21 09:50	04/12/21 17:58	1
1,4-Difluorobenzene (Surr)	110		70 - 130	04/12/21 09:50	04/12/21 17:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW20

Lab Sample ID: 890-508-11

Date Collected: 04/08/21 11:10

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 17:41	1
Diesel Range Organics (Over C10-C28)	81.0		49.9	mg/Kg		04/09/21 16:00	04/10/21 17:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 17:41	1
Total TPH	81.0		49.9	mg/Kg		04/09/21 16:00	04/10/21 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	04/09/21 16:00	04/10/21 17:41	1
o-Terphenyl	99		70 - 130	04/09/21 16:00	04/10/21 17:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.37		4.98	mg/Kg			04/18/21 05:18	1

Client Sample ID: SW21

Lab Sample ID: 890-508-12

Date Collected: 04/08/21 11:13

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/12/21 09:50	04/12/21 18:19	1
Toluene	0.0457		0.00201	mg/Kg		04/12/21 09:50	04/12/21 18:19	1
Ethylbenzene	0.0323		0.00201	mg/Kg		04/12/21 09:50	04/12/21 18:19	1
m-Xylene & p-Xylene	0.0545		0.00402	mg/Kg		04/12/21 09:50	04/12/21 18:19	1
o-Xylene	0.0230		0.00201	mg/Kg		04/12/21 09:50	04/12/21 18:19	1
Xylenes, Total	0.0775		0.00402	mg/Kg		04/12/21 09:50	04/12/21 18:19	1
Total BTEX	0.156		0.00201	mg/Kg		04/12/21 09:50	04/12/21 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	04/12/21 09:50	04/12/21 18:19	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/12/21 09:50	04/12/21 18:19	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		04/09/21 16:00	04/10/21 18:02	1
Diesel Range Organics (Over C10-C28)	157		49.9	mg/Kg		04/09/21 16:00	04/10/21 18:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 18:02	1
Total TPH	157		49.9	mg/Kg		04/09/21 16:00	04/10/21 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	04/09/21 16:00	04/10/21 18:02	1
o-Terphenyl	102		70 - 130	04/09/21 16:00	04/10/21 18:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			04/19/21 15:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW22

Lab Sample ID: 890-508-13

Date Collected: 04/08/21 11:15

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:40	1
Toluene	0.0261		0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:40	1
Ethylbenzene	0.0200		0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:40	1
m-Xylene & p-Xylene	0.0397		0.00401	mg/Kg		04/12/21 09:50	04/12/21 18:40	1
o-Xylene	0.0174		0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:40	1
Xylenes, Total	0.0571		0.00401	mg/Kg		04/12/21 09:50	04/12/21 18:40	1
Total BTEX	0.103		0.00200	mg/Kg		04/12/21 09:50	04/12/21 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/12/21 09:50	04/12/21 18:40	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/12/21 09:50	04/12/21 18:40	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		04/09/21 16:00	04/10/21 18:24	1
Diesel Range Organics (Over C10-C28)	122		50.0	mg/Kg		04/09/21 16:00	04/10/21 18:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 18:24	1
Total TPH	122		50.0	mg/Kg		04/09/21 16:00	04/10/21 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/09/21 16:00	04/10/21 18:24	1
o-Terphenyl	109		70 - 130	04/09/21 16:00	04/10/21 18:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99	mg/Kg			04/19/21 15:08	1

Client Sample ID: SW23

Lab Sample ID: 890-508-14

Date Collected: 04/08/21 11:20

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:00	1
Toluene	0.0400		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:00	1
Ethylbenzene	0.0317		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:00	1
m-Xylene & p-Xylene	0.0547		0.00404	mg/Kg		04/12/21 09:50	04/12/21 19:00	1
o-Xylene	0.0253		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:00	1
Xylenes, Total	0.0800		0.00404	mg/Kg		04/12/21 09:50	04/12/21 19:00	1
Total BTEX	0.152		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/12/21 09:50	04/12/21 19:00	1
1,4-Difluorobenzene (Surr)	115		70 - 130	04/12/21 09:50	04/12/21 19:00	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW23

Lab Sample ID: 890-508-14

Date Collected: 04/08/21 11:20

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

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		04/09/21 16:00	04/10/21 18:45	1
Diesel Range Organics (Over C10-C28)	149		50.0	mg/Kg		04/09/21 16:00	04/10/21 18:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 18:45	1
Total TPH	149		50.0	mg/Kg		04/09/21 16:00	04/10/21 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	04/09/21 16:00	04/10/21 18:45	1
o-Terphenyl	106		70 - 130	04/09/21 16:00	04/10/21 18:45	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			04/19/21 15:14	1

Client Sample ID: SW24

Lab Sample ID: 890-508-15

Date Collected: 04/08/21 11:22

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:21	1
Toluene	0.0493		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:21	1
Ethylbenzene	0.0375		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:21	1
m-Xylene & p-Xylene	0.0604		0.00404	mg/Kg		04/12/21 09:50	04/12/21 19:21	1
o-Xylene	0.0270		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:21	1
Xylenes, Total	0.0874		0.00404	mg/Kg		04/12/21 09:50	04/12/21 19:21	1
Total BTEX	0.174		0.00202	mg/Kg		04/12/21 09:50	04/12/21 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/12/21 09:50	04/12/21 19:21	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/12/21 09:50	04/12/21 19:21	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		04/09/21 16:00	04/10/21 19:07	1
Diesel Range Organics (Over C10-C28)	62.7		50.0	mg/Kg		04/09/21 16:00	04/10/21 19:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 19:07	1
Total TPH	62.7		50.0	mg/Kg		04/09/21 16:00	04/10/21 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	04/09/21 16:00	04/10/21 19:07	1
o-Terphenyl	103		70 - 130	04/09/21 16:00	04/10/21 19:07	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			04/19/21 15:19	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW25

Lab Sample ID: 890-508-16

Date Collected: 04/08/21 11:25

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 19:42	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 19:42	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 19:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 19:42	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 19:42	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 19:42	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 19:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/12/21 09:50	04/12/21 19:42	1
1,4-Difluorobenzene (Surr)	120		70 - 130	04/12/21 09:50	04/12/21 19:42	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		04/09/21 16:00	04/10/21 19:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 19:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 19:28	1
Total TPH	<49.9	U	49.9	mg/Kg		04/09/21 16:00	04/10/21 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	04/09/21 16:00	04/10/21 19:28	1
o-Terphenyl	106		70 - 130	04/09/21 16:00	04/10/21 19:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.7		4.97	mg/Kg			04/18/21 05:23	1

Client Sample ID: SW26

Lab Sample ID: 890-508-17

Date Collected: 04/08/21 11:27

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:02	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:02	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:02	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		04/12/21 09:50	04/12/21 20:02	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:02	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/12/21 09:50	04/12/21 20:02	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		04/12/21 09:50	04/12/21 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	04/12/21 09:50	04/12/21 20:02	1
1,4-Difluorobenzene (Surr)	116		70 - 130	04/12/21 09:50	04/12/21 20:02	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW26

Lab Sample ID: 890-508-17

Date Collected: 04/08/21 11:27

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 19:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 19:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 19:50	1
Total TPH	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/09/21 16:00	04/10/21 19:50	1
o-Terphenyl	106		70 - 130	04/09/21 16:00	04/10/21 19:50	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			04/18/21 05:28	1

Client Sample ID: SW27

Lab Sample ID: 890-508-18

Date Collected: 04/08/21 11:29

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/12/21 09:50	04/12/21 20:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:23	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/12/21 09:50	04/12/21 20:23	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/12/21 09:50	04/12/21 20:23	1
1,4-Difluorobenzene (Surr)	123		70 - 130	04/12/21 09:50	04/12/21 20:23	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		04/09/21 16:00	04/10/21 20:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 20:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 20:10	1
Total TPH	<49.8	U	49.8	mg/Kg		04/09/21 16:00	04/10/21 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	04/09/21 16:00	04/10/21 20:10	1
o-Terphenyl	101		70 - 130	04/09/21 16:00	04/10/21 20:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.6		5.00	mg/Kg			04/18/21 05:33	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW18

Lab Sample ID: 890-508-19

Date Collected: 04/08/21 13:46

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 10.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 20:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/12/21 09:50	04/12/21 20:44	1
Total BTEX	<0.00199	U	0.00199	mg/Kg		04/12/21 09:50	04/12/21 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	04/12/21 09:50	04/12/21 20:44	1
1,4-Difluorobenzene (Surr)	118		70 - 130	04/12/21 09:50	04/12/21 20:44	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		04/09/21 16:00	04/10/21 20:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 20:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 20:32	1
Total TPH	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	04/09/21 16:00	04/10/21 20:32	1
o-Terphenyl	116		70 - 130	04/09/21 16:00	04/10/21 20:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.5		5.00	mg/Kg			04/18/21 05:38	1

Client Sample ID: SW15

Lab Sample ID: 890-508-20

Date Collected: 04/08/21 13:48

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/13/21 08:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/13/21 08:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/13/21 08:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/13/21 08:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/13/21 08:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/13/21 08:49	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/13/21 08:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/12/21 09:50	04/13/21 08:49	1
1,4-Difluorobenzene (Surr)	119		70 - 130	04/12/21 09:50	04/13/21 08:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW15

Lab Sample ID: 890-508-20

Date Collected: 04/08/21 13:48

Matrix: Solid

Date Received: 04/08/21 16:30

Sample Depth: 0 - 12'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		04/09/21 16:00	04/10/21 20:53	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		04/09/21 16:00	04/10/21 20:53	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		04/09/21 16:00	04/10/21 20:53	1
Total TPH	<50.1	U	50.1	mg/Kg		04/09/21 16:00	04/10/21 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	04/09/21 16:00	04/10/21 20:53	1
o-Terphenyl	99		70 - 130	04/09/21 16:00	04/10/21 20:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.5		4.99	mg/Kg			04/18/21 05:43	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-508-1	FS10A	126	105
890-508-2	FS11A	126	104
890-508-3	FS12A	106	107
890-508-4	FS13A	110	105
890-508-5	FS15A	94	124
890-508-6	SW14	98	118
890-508-7	SW16	93	109
890-508-8	FS16	92	119
890-508-9	FS17	92	114
890-508-10	SW19	97	123
890-508-11	SW20	101	110
890-508-12	SW21	95	105
890-508-13	SW22	101	109
890-508-14	SW23	104	115
890-508-15	SW24	99	109
890-508-16	SW25	98	120
890-508-17	SW26	89	116
890-508-18	SW27	102	123
890-508-19	SW18	94	118
890-508-20	SW15	101	119
LCS 880-1644/1-A	Lab Control Sample	100	105
LCS 880-1645/1-A	Lab Control Sample	140 S1+	106
LCS 880-1646/1-A	Lab Control Sample	89	120
LCSD 880-1644/2-A	Lab Control Sample Dup	101	104
LCSD 880-1645/2-A	Lab Control Sample Dup	115	104
LCSD 880-1646/2-A	Lab Control Sample Dup	90	110
MB 880-1641/7	Method Blank	99	102
MB 880-1645/5-A	Method Blank	98	98
MB 880-1646/5-A	Method Blank	111	103
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-508-1	FS10A	96	97
890-508-1 MS	FS10A	107	102
890-508-1 MSD	FS10A	104	101
890-508-2	FS11A	97	99
890-508-3	FS12A	103	113
890-508-4	FS13A	93	100
890-508-5	FS15A	100	108
890-508-6	SW14	99	105
890-508-7	SW16	96	98
890-508-8	FS16	97	99

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

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)
890-508-9	FS17	97	103
890-508-10	SW19	100	105
890-508-11	SW20	97	99
890-508-12	SW21	99	102
890-508-13	SW22	101	109
890-508-14	SW23	97	106
890-508-15	SW24	96	103
890-508-16	SW25	103	106
890-508-17	SW26	101	106
890-508-18	SW27	92	101
890-508-19	SW18	111	116
890-508-20	SW15	98	99
LCS 880-1600/2-A	Lab Control Sample	95	93
LCSD 880-1600/3-A	Lab Control Sample Dup	96	95
MB 880-1600/1-A	Method Blank	94	110

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1641/7

Matrix: Solid

Analysis Batch: 1641

Client Sample ID: Method Blank

Prep Type: Total/NA

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		04/12/21 13:04	1
1,4-Difluorobenzene (Surr)	102		70 - 130		04/12/21 13:04	1

Lab Sample ID: LCS 880-1644/1-A

Matrix: Solid

Analysis Batch: 1641

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1644

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09645		mg/Kg		96	70 - 130
Toluene	0.100	0.1011		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1048		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2133		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1025		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-1644/2-A

Matrix: Solid

Analysis Batch: 1641

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1644

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09553		mg/Kg		96	70 - 130	1	35
Toluene	0.100	0.1010		mg/Kg		101	70 - 130	0	35
Ethylbenzene	0.100	0.1043		mg/Kg		104	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2138		mg/Kg		107	70 - 130	0	35
o-Xylene	0.100	0.1034		mg/Kg		103	70 - 130	1	35

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

Lab Sample ID: MB 880-1645/5-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1645

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

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

Lab Sample ID: MB 880-1645/5-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1645

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/12/21 15:13	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 15:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/12/21 09:50	04/12/21 15:13	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/12/21 09:50	04/12/21 15:13	1

Lab Sample ID: LCS 880-1645/1-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1236		mg/Kg		124	70 - 130
Toluene	0.100	0.08929		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08838		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1707		mg/Kg		85	70 - 130
o-Xylene	0.100	0.08714		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-1645/2-A

Matrix: Solid

Analysis Batch: 1640

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1645

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08050	*1	mg/Kg		80	70 - 130	42	35
Toluene	0.100	0.08131		mg/Kg		81	70 - 130	9	35
Ethylbenzene	0.100	0.09256		mg/Kg		93	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1873		mg/Kg		94	70 - 130	9	35
o-Xylene	0.100	0.09958		mg/Kg		100	70 - 130	13	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-1646/5-A

Matrix: Solid

Analysis Batch: 1642

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1646

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 13:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 13:07	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

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

Lab Sample ID: MB 880-1646/5-A

Matrix: Solid

Analysis Batch: 1642

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1646

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 13:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/12/21 13:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 13:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/12/21 09:50	04/12/21 13:07	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		04/12/21 09:50	04/12/21 13:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	04/12/21 09:50	04/12/21 13:07	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/12/21 09:50	04/12/21 13:07	1

Lab Sample ID: LCS 880-1646/1-A

Matrix: Solid

Analysis Batch: 1642

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1029		mg/Kg		103	70 - 130
Toluene	0.100	0.1115		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.09876		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2031		mg/Kg		102	70 - 130
o-Xylene	0.100	0.09699		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

Lab Sample ID: LCSD 880-1646/2-A

Matrix: Solid

Analysis Batch: 1642

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1646

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09682		mg/Kg		97	70 - 130	6	35
Toluene	0.100	0.1044		mg/Kg		104	70 - 130	7	35
Ethylbenzene	0.100	0.09723		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1969		mg/Kg		98	70 - 130	3	35
o-Xylene	0.100	0.09536		mg/Kg		95	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

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

Lab Sample ID: MB 880-1600/1-A

Matrix: Solid

Analysis Batch: 1610

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1600

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		04/09/21 16:00	04/10/21 12:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 12:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 12:02	1
Total TPH	<50.0	U	50.0	mg/Kg		04/09/21 16:00	04/10/21 12:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	04/09/21 16:00	04/10/21 12:02	1
o-Terphenyl	110		70 - 130	04/09/21 16:00	04/10/21 12:02	1

Lab Sample ID: LCS 880-1600/2-A

Matrix: Solid

Analysis Batch: 1610

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	977.0		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-1600/3-A

Matrix: Solid

Analysis Batch: 1610

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1600

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1076		mg/Kg		108	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1000		mg/Kg		100	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-508-1 MS

Matrix: Solid

Analysis Batch: 1610

Client Sample ID: FS10A

Prep Type: Total/NA

Prep Batch: 1600

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	998	1160		mg/Kg		115	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1106		mg/Kg		111	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

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

Lab Sample ID: 890-508-1 MS

Matrix: Solid

Analysis Batch: 1610

Client Sample ID: FS10A

Prep Type: Total/NA

Prep Batch: 1600

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-508-1 MSD

Matrix: Solid

Analysis Batch: 1610

Client Sample ID: FS10A

Prep Type: Total/NA

Prep Batch: 1600

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	998	1186		mg/Kg		117	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1079		mg/Kg		108	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	101		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1729/1-A

Matrix: Solid

Analysis Batch: 1856

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			04/19/21 12:33	1

Lab Sample ID: LCS 880-1729/2-A

Matrix: Solid

Analysis Batch: 1856

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	251.3		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-1729/3-A

Matrix: Solid

Analysis Batch: 1856

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	251.4		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-1888/1-A

Matrix: Solid

Analysis Batch: 1950

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			04/18/21 14:06	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1888/2-A

Matrix: Solid

Analysis Batch: 1950

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	264.8		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-1888/3-A

Matrix: Solid

Analysis Batch: 1950

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	265.1		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-1890/1-A

Matrix: Solid

Analysis Batch: 1953

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			04/18/21 03:11	1

Lab Sample ID: LCS 880-1890/2-A

Matrix: Solid

Analysis Batch: 1953

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	248.6		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-1890/3-A

Matrix: Solid

Analysis Batch: 1953

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	257.9		mg/Kg		103	90 - 110	4	20

Lab Sample ID: 890-508-7 MS

Matrix: Solid

Analysis Batch: 1953

Client Sample ID: SW16

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	47.9		253	298.5		mg/Kg		99	90 - 110

Lab Sample ID: 890-508-7 MSD

Matrix: Solid

Analysis Batch: 1953

Client Sample ID: SW16

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	47.9		253	311.0		mg/Kg		104	90 - 110	4	20

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

GC VOA

Analysis Batch: 1640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-1	FS10A	Total/NA	Solid	8021B	1645
890-508-2	FS11A	Total/NA	Solid	8021B	1645
MB 880-1645/5-A	Method Blank	Total/NA	Solid	8021B	1645
LCS 880-1645/1-A	Lab Control Sample	Total/NA	Solid	8021B	1645
LCSD 880-1645/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1645

Analysis Batch: 1641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-3	FS12A	Total/NA	Solid	8021B	1644
890-508-4	FS13A	Total/NA	Solid	8021B	1644
MB 880-1641/7	Method Blank	Total/NA	Solid	8021B	
LCS 880-1644/1-A	Lab Control Sample	Total/NA	Solid	8021B	1644
LCSD 880-1644/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1644

Analysis Batch: 1642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-5	FS15A	Total/NA	Solid	8021B	1646
890-508-6	SW14	Total/NA	Solid	8021B	1646
890-508-7	SW16	Total/NA	Solid	8021B	1646
890-508-8	FS16	Total/NA	Solid	8021B	1646
890-508-9	FS17	Total/NA	Solid	8021B	1646
890-508-10	SW19	Total/NA	Solid	8021B	1646
890-508-11	SW20	Total/NA	Solid	8021B	1646
890-508-12	SW21	Total/NA	Solid	8021B	1646
890-508-13	SW22	Total/NA	Solid	8021B	1646
890-508-14	SW23	Total/NA	Solid	8021B	1646
890-508-15	SW24	Total/NA	Solid	8021B	1646
890-508-16	SW25	Total/NA	Solid	8021B	1646
890-508-17	SW26	Total/NA	Solid	8021B	1646
890-508-18	SW27	Total/NA	Solid	8021B	1646
890-508-19	SW18	Total/NA	Solid	8021B	1646
890-508-20	SW15	Total/NA	Solid	8021B	1646
MB 880-1646/5-A	Method Blank	Total/NA	Solid	8021B	1646
LCS 880-1646/1-A	Lab Control Sample	Total/NA	Solid	8021B	1646
LCSD 880-1646/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1646

Prep Batch: 1644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-3	FS12A	Total/NA	Solid	5035	
890-508-4	FS13A	Total/NA	Solid	5035	
LCS 880-1644/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1644/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 1645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-1	FS10A	Total/NA	Solid	5035	
890-508-2	FS11A	Total/NA	Solid	5035	
MB 880-1645/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1645/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1645/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

GC VOA

Prep Batch: 1646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-5	FS15A	Total/NA	Solid	5035	
890-508-6	SW14	Total/NA	Solid	5035	
890-508-7	SW16	Total/NA	Solid	5035	
890-508-8	FS16	Total/NA	Solid	5035	
890-508-9	FS17	Total/NA	Solid	5035	
890-508-10	SW19	Total/NA	Solid	5035	
890-508-11	SW20	Total/NA	Solid	5035	
890-508-12	SW21	Total/NA	Solid	5035	
890-508-13	SW22	Total/NA	Solid	5035	
890-508-14	SW23	Total/NA	Solid	5035	
890-508-15	SW24	Total/NA	Solid	5035	
890-508-16	SW25	Total/NA	Solid	5035	
890-508-17	SW26	Total/NA	Solid	5035	
890-508-18	SW27	Total/NA	Solid	5035	
890-508-19	SW18	Total/NA	Solid	5035	
890-508-20	SW15	Total/NA	Solid	5035	
MB 880-1646/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1646/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1646/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 1600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-1	FS10A	Total/NA	Solid	8015NM Prep	
890-508-2	FS11A	Total/NA	Solid	8015NM Prep	
890-508-3	FS12A	Total/NA	Solid	8015NM Prep	
890-508-4	FS13A	Total/NA	Solid	8015NM Prep	
890-508-5	FS15A	Total/NA	Solid	8015NM Prep	
890-508-6	SW14	Total/NA	Solid	8015NM Prep	
890-508-7	SW16	Total/NA	Solid	8015NM Prep	
890-508-8	FS16	Total/NA	Solid	8015NM Prep	
890-508-9	FS17	Total/NA	Solid	8015NM Prep	
890-508-10	SW19	Total/NA	Solid	8015NM Prep	
890-508-11	SW20	Total/NA	Solid	8015NM Prep	
890-508-12	SW21	Total/NA	Solid	8015NM Prep	
890-508-13	SW22	Total/NA	Solid	8015NM Prep	
890-508-14	SW23	Total/NA	Solid	8015NM Prep	
890-508-15	SW24	Total/NA	Solid	8015NM Prep	
890-508-16	SW25	Total/NA	Solid	8015NM Prep	
890-508-17	SW26	Total/NA	Solid	8015NM Prep	
890-508-18	SW27	Total/NA	Solid	8015NM Prep	
890-508-19	SW18	Total/NA	Solid	8015NM Prep	
890-508-20	SW15	Total/NA	Solid	8015NM Prep	
MB 880-1600/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1600/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1600/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-508-1 MS	FS10A	Total/NA	Solid	8015NM Prep	
890-508-1 MSD	FS10A	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

GC Semi VOA

Analysis Batch: 1610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-1	FS10A	Total/NA	Solid	8015B NM	1600
890-508-2	FS11A	Total/NA	Solid	8015B NM	1600
890-508-3	FS12A	Total/NA	Solid	8015B NM	1600
890-508-4	FS13A	Total/NA	Solid	8015B NM	1600
890-508-5	FS15A	Total/NA	Solid	8015B NM	1600
890-508-6	SW14	Total/NA	Solid	8015B NM	1600
890-508-7	SW16	Total/NA	Solid	8015B NM	1600
890-508-8	FS16	Total/NA	Solid	8015B NM	1600
890-508-9	FS17	Total/NA	Solid	8015B NM	1600
890-508-10	SW19	Total/NA	Solid	8015B NM	1600
890-508-11	SW20	Total/NA	Solid	8015B NM	1600
890-508-12	SW21	Total/NA	Solid	8015B NM	1600
890-508-13	SW22	Total/NA	Solid	8015B NM	1600
890-508-14	SW23	Total/NA	Solid	8015B NM	1600
890-508-15	SW24	Total/NA	Solid	8015B NM	1600
890-508-16	SW25	Total/NA	Solid	8015B NM	1600
890-508-17	SW26	Total/NA	Solid	8015B NM	1600
890-508-18	SW27	Total/NA	Solid	8015B NM	1600
890-508-19	SW18	Total/NA	Solid	8015B NM	1600
890-508-20	SW15	Total/NA	Solid	8015B NM	1600
MB 880-1600/1-A	Method Blank	Total/NA	Solid	8015B NM	1600
LCS 880-1600/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1600
LCSD 880-1600/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1600
890-508-1 MS	FS10A	Total/NA	Solid	8015B NM	1600
890-508-1 MSD	FS10A	Total/NA	Solid	8015B NM	1600

HPLC/IC

Leach Batch: 1729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-12	SW21	Soluble	Solid	DI Leach	
890-508-13	SW22	Soluble	Solid	DI Leach	
890-508-14	SW23	Soluble	Solid	DI Leach	
890-508-15	SW24	Soluble	Solid	DI Leach	
MB 880-1729/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1729/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1729/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-12	SW21	Soluble	Solid	300.0	1729
890-508-13	SW22	Soluble	Solid	300.0	1729
890-508-14	SW23	Soluble	Solid	300.0	1729
890-508-15	SW24	Soluble	Solid	300.0	1729
MB 880-1729/1-A	Method Blank	Soluble	Solid	300.0	1729
LCS 880-1729/2-A	Lab Control Sample	Soluble	Solid	300.0	1729
LCSD 880-1729/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1729

Leach Batch: 1888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-1	FS10A	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

HPLC/IC (Continued)

Leach Batch: 1888 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-2	FS11A	Soluble	Solid	DI Leach	
890-508-3	FS12A	Soluble	Solid	DI Leach	
890-508-4	FS13A	Soluble	Solid	DI Leach	
890-508-5	FS15A	Soluble	Solid	DI Leach	
MB 880-1888/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1888/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1888/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 1890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-6	SW14	Soluble	Solid	DI Leach	
890-508-7	SW16	Soluble	Solid	DI Leach	
890-508-8	FS16	Soluble	Solid	DI Leach	
890-508-9	FS17	Soluble	Solid	DI Leach	
890-508-10	SW19	Soluble	Solid	DI Leach	
890-508-11	SW20	Soluble	Solid	DI Leach	
890-508-16	SW25	Soluble	Solid	DI Leach	
890-508-17	SW26	Soluble	Solid	DI Leach	
890-508-18	SW27	Soluble	Solid	DI Leach	
890-508-19	SW18	Soluble	Solid	DI Leach	
890-508-20	SW15	Soluble	Solid	DI Leach	
MB 880-1890/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1890/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1890/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-508-7 MS	SW16	Soluble	Solid	DI Leach	
890-508-7 MSD	SW16	Soluble	Solid	DI Leach	

Analysis Batch: 1950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-1	FS10A	Soluble	Solid	300.0	1888
890-508-2	FS11A	Soluble	Solid	300.0	1888
890-508-3	FS12A	Soluble	Solid	300.0	1888
890-508-4	FS13A	Soluble	Solid	300.0	1888
890-508-5	FS15A	Soluble	Solid	300.0	1888
MB 880-1888/1-A	Method Blank	Soluble	Solid	300.0	1888
LCS 880-1888/2-A	Lab Control Sample	Soluble	Solid	300.0	1888
LCSD 880-1888/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1888

Analysis Batch: 1953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-508-6	SW14	Soluble	Solid	300.0	1890
890-508-7	SW16	Soluble	Solid	300.0	1890
890-508-8	FS16	Soluble	Solid	300.0	1890
890-508-9	FS17	Soluble	Solid	300.0	1890
890-508-10	SW19	Soluble	Solid	300.0	1890
890-508-11	SW20	Soluble	Solid	300.0	1890
890-508-16	SW25	Soluble	Solid	300.0	1890
890-508-17	SW26	Soluble	Solid	300.0	1890
890-508-18	SW27	Soluble	Solid	300.0	1890
890-508-19	SW18	Soluble	Solid	300.0	1890
890-508-20	SW15	Soluble	Solid	300.0	1890

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

HPLC/IC (Continued)

Analysis Batch: 1953 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1890/1-A	Method Blank	Soluble	Solid	300.0	1890
LCS 880-1890/2-A	Lab Control Sample	Soluble	Solid	300.0	1890
LCSD 880-1890/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1890
890-508-7 MS	SW16	Soluble	Solid	300.0	1890
890-508-7 MSD	SW16	Soluble	Solid	300.0	1890

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS10A

Lab Sample ID: 890-508-1

Date Collected: 04/08/21 08:52

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 16:35	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 13:05	AJ	XM
Soluble	Leach	DI Leach			1888	04/16/21 11:44	SC	XM
Soluble	Analysis	300.0		1	1950	04/18/21 16:08	WP	XM

Client Sample ID: FS11A

Lab Sample ID: 890-508-2

Date Collected: 04/08/21 08:53

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1645	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1640	04/12/21 16:56	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 14:09	AJ	XM
Soluble	Leach	DI Leach			1888	04/16/21 11:44	SC	XM
Soluble	Analysis	300.0		1	1950	04/18/21 16:13	WP	XM

Client Sample ID: FS12A

Lab Sample ID: 890-508-3

Date Collected: 04/08/21 08:55

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1644	04/12/21 09:00	KL	XM
Total/NA	Analysis	8021B		1	1641	04/12/21 16:30	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 14:30	AJ	XM
Soluble	Leach	DI Leach			1888	04/16/21 11:44	SC	XM
Soluble	Analysis	300.0		1	1950	04/18/21 16:18	WP	XM

Client Sample ID: FS13A

Lab Sample ID: 890-508-4

Date Collected: 04/08/21 08:58

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1644	04/12/21 09:00	KL	XM
Total/NA	Analysis	8021B		1	1641	04/12/21 16:51	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 14:52	AJ	XM
Soluble	Leach	DI Leach			1888	04/16/21 11:44	SC	XM
Soluble	Analysis	300.0		1	1950	04/18/21 16:23	WP	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS15A

Lab Sample ID: 890-508-5

Date Collected: 04/08/21 09:00

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 14:52	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 15:13	AJ	XM
Soluble	Leach	DI Leach			1888	04/16/21 11:44	SC	XM
Soluble	Analysis	300.0		1	1950	04/18/21 16:29	WP	XM

Client Sample ID: SW14

Lab Sample ID: 890-508-6

Date Collected: 04/08/21 09:05

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 15:13	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 15:34	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 04:32	WP	XM

Client Sample ID: SW16

Lab Sample ID: 890-508-7

Date Collected: 04/08/21 09:03

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 15:33	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 15:56	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 04:37	WP	XM

Client Sample ID: FS16

Lab Sample ID: 890-508-8

Date Collected: 04/08/21 11:48

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 15:54	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 16:17	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 04:53	WP	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: FS17

Lab Sample ID: 890-508-9

Date Collected: 04/08/21 11:50

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 16:15	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 16:38	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 04:58	WP	XM

Client Sample ID: SW19

Lab Sample ID: 890-508-10

Date Collected: 04/08/21 11:08

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 16:36	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 16:59	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:13	WP	XM

Client Sample ID: SW20

Lab Sample ID: 890-508-11

Date Collected: 04/08/21 11:10

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 17:58	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 17:41	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:18	WP	XM

Client Sample ID: SW21

Lab Sample ID: 890-508-12

Date Collected: 04/08/21 11:13

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 18:19	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 18:02	AJ	XM
Soluble	Leach	DI Leach			1729	04/13/21 12:45	SC	XM
Soluble	Analysis	300.0		1	1856	04/19/21 15:03	SC	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW22

Lab Sample ID: 890-508-13

Date Collected: 04/08/21 11:15

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 18:40	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 18:24	AJ	XM
Soluble	Leach	DI Leach			1729	04/13/21 12:45	SC	XM
Soluble	Analysis	300.0		1	1856	04/19/21 15:08	SC	XM

Client Sample ID: SW23

Lab Sample ID: 890-508-14

Date Collected: 04/08/21 11:20

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 19:00	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 18:45	AJ	XM
Soluble	Leach	DI Leach			1729	04/13/21 12:45	SC	XM
Soluble	Analysis	300.0		1	1856	04/19/21 15:14	SC	XM

Client Sample ID: SW24

Lab Sample ID: 890-508-15

Date Collected: 04/08/21 11:22

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 19:21	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 19:07	AJ	XM
Soluble	Leach	DI Leach			1729	04/13/21 12:45	SC	XM
Soluble	Analysis	300.0		1	1856	04/19/21 15:19	SC	XM

Client Sample ID: SW25

Lab Sample ID: 890-508-16

Date Collected: 04/08/21 11:25

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 19:42	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 19:28	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:23	WP	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Client Sample ID: SW26

Lab Sample ID: 890-508-17

Date Collected: 04/08/21 11:27

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 20:02	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 19:50	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:28	WP	XM

Client Sample ID: SW27

Lab Sample ID: 890-508-18

Date Collected: 04/08/21 11:29

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 20:23	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 20:10	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:33	WP	XM

Client Sample ID: SW18

Lab Sample ID: 890-508-19

Date Collected: 04/08/21 13:46

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/12/21 20:44	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 20:32	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:38	WP	XM

Client Sample ID: SW15

Lab Sample ID: 890-508-20

Date Collected: 04/08/21 13:48

Matrix: Solid

Date Received: 04/08/21 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1646	04/12/21 09:50	KL	XM
Total/NA	Analysis	8021B		1	1642	04/13/21 08:49	KL	XM
Total/NA	Prep	8015NM Prep			1600	04/09/21 16:00	DM	XM
Total/NA	Analysis	8015B NM		1	1610	04/10/21 20:53	AJ	XM
Soluble	Leach	DI Leach			1890	04/16/21 11:48	SC	XM
Soluble	Analysis	300.0		1	1953	04/18/21 05:43	WP	XM

Laboratory References:

XM = 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: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Eurofins Xenco, Carlsbad

Method Summary

Client: WSP USA Inc.
Project/Site: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

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

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:

XM = 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: Boyce 15#001

Job ID: 890-508-1
SDG: TE106521001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-508-1	FS10A	Solid	04/08/21 08:52	04/08/21 16:30	- 12'
890-508-2	FS11A	Solid	04/08/21 08:53	04/08/21 16:30	- 12'
890-508-3	FS12A	Solid	04/08/21 08:55	04/08/21 16:30	- 12'
890-508-4	FS13A	Solid	04/08/21 08:58	04/08/21 16:30	- 12'
890-508-5	FS15A	Solid	04/08/21 09:00	04/08/21 16:30	- 12'
890-508-6	SW14	Solid	04/08/21 09:05	04/08/21 16:30	0 - 12'
890-508-7	SW16	Solid	04/08/21 09:03	04/08/21 16:30	0 - 12'
890-508-8	FS16	Solid	04/08/21 11:48	04/08/21 16:30	- 10.5'
890-508-9	FS17	Solid	04/08/21 11:50	04/08/21 16:30	- 10.5'
890-508-10	SW19	Solid	04/08/21 11:08	04/08/21 16:30	0 - 10.5'
890-508-11	SW20	Solid	04/08/21 11:10	04/08/21 16:30	0 - 10.5'
890-508-12	SW21	Solid	04/08/21 11:13	04/08/21 16:30	0 - 12'
890-508-13	SW22	Solid	04/08/21 11:15	04/08/21 16:30	0 - 12'
890-508-14	SW23	Solid	04/08/21 11:20	04/08/21 16:30	0 - 12'
890-508-15	SW24	Solid	04/08/21 11:22	04/08/21 16:30	0 - 12'
890-508-16	SW25	Solid	04/08/21 11:25	04/08/21 16:30	0 - 12'
890-508-17	SW26	Solid	04/08/21 11:27	04/08/21 16:30	0 - 10.5'
890-508-18	SW27	Solid	04/08/21 11:29	04/08/21 16:30	0 - 10.5'
890-508-19	SW18	Solid	04/08/21 13:46	04/08/21 16:30	0 - 10.5'
890-508-20	SW15	Solid	04/08/21 13:48	04/08/21 16:30	0 - 12'

Eurofins Xenco, Carlsbad



Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

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Page

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FS

2

FS

FS

Project Manager:	Kalei Jennings	Bill to: (if different)	→
Company Name:	WESP USA	Company Name:	→
Address:	3300 North A Street	Address:	→
City, State ZIP:	Midland, TX 79705	City, State ZIP:	→
Phone:	(817) 683-2503	Email:	Kalei.jennings@wesp.com

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

Project Name:	Bourgeois #001	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number:	TEH06521001	☒ Routine ☐ Rush			None: NO
Project Location:	Lee County	Due Date:			DI Water: H ₂ O
Sampler's Name:	Fatima Smith	TAT starts the day received by the lab, if received by 4:30pm			Cool: Cool
PO #:					HCL, HC
SAMPLE RECEIPT		Temp Blank:	Yes No		H ₂ SO ₄ : H ₂
Samples Received Intact:	Yes No	Thermometer ID:	Yes No		H ₃ PO ₄ : HP
Cooler Custody Seals:	Yes No	Correction Factor:			NaHSO ₄ : NABIS
Sample Custody Seals:	Yes No	Temperature Reading:			Na ₂ S ₂ O ₃ : NaSO ₃
Total Containers:		Corrected Temperature:			Zn Acetate+NaOH: Zn
					NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH (EPA 8021)	BTEX (EPA 8015)	Chloride (EPA 8000)	Sample Comments
SM12	3	4/8/21	1110	0-10.5'		1				
SM13			1113	0-12'						
SM14			1115	0-12'						
SM15			1120	0-12'						
SM16			1122	0-12'						
SM17			1125	0-12'						
SM18			1127	0-10.5'						
SM19			1129	0-10.5'						
SM20			1346	0-10.5'						
SM21			1348	0-12'						

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: ICAP, EPA 6010, 8RCRA, Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

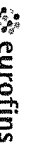
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
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Eurofins Xenco, Carlsbad

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	State of Origin	890-156-1	Page:
Shipping/Receiving	E-Mail	jessica.kramer@eurofinsnet.com	New Mexico	Page 1 of 3	Job #:
Company	Eurofins Xenco	Accreditations Required (See note)		890-508-1	Preservation Codes
Address:	1211 W Florida Ave.	NELAP - Louisiana NELAP - Texas			A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ammonia H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:
City:	Midland	Due Date Requested	4/14/2021	M - Hexane N - None O - Acetic Acid P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
State Zip:	TX 79701	FAT Requested (days)			
Phone:	432-704-6440(Tel)	PO #:			
Email:		WFO #:			
Project Name:	Boyce 15#001	Project #:	89000048		
Site:		SSOV#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Solid, O=Organic, BT=Tissue, Acid)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
FS10 (890-508-1)	4/8/21	08 52		Solid	X	X	8015MOD_NM/8016NM_S_Prep Full TPH	X	
FS11 (890-508-2)	4/8/21	08 53		Solid	X	X	300_ORGFN_28D/DI_LEACH Chloride	X	
FS12 (890-508-3)	4/8/21	08 55		Solid	X	X	8021B/6036FP_Calc BTEX	X	
FS13 (890-508-4)	4/8/21	08 58		Solid	X	X		X	
FS15 (890-508-5)	4/8/21	09 00		Solid	X	X		X	
SW05 (890-508-6)	4/8/21	09 05		Solid	X	X		X	
SW08 (890-508-7)	4/8/21	09 03		Solid	X	X		X	
FS16 (890-508-8)	4/8/21	11 48		Solid	X	X		X	
FS17 (890-508-9)	4/8/21	11 50		Solid	X	X		X	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our 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/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.

Possible Hazard Identification

Unconfirmed

Deliverable Requested I II III IV, Other (specify) _____ Primary Deliverable Rank 2 _____

Empty Kit Relinquished by _____ Date _____

Relinquished by _____ Date/Time: _____ Company _____

Relinquished by _____ Date/Time: _____ Company _____

Relinquished by _____ Date/Time: _____ Company _____

Custody Seals Intact _____ Custody Seal No _____

Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements: _____

Method of Shipment: _____

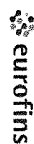
Received by _____ Date/Time: 4-8-21 2:40pm Company _____

Received by _____ Date/Time: _____ Company _____

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: 890-508-1

SDG Number: TE106521001

Login Number: 508**List Number: 1****Creator: Ordonez, Gabby****List Source: Eurofins Carlsbad**

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-508-1
SDG Number: TE106521001**Login Number: 508****List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Midland****List Creation: 04/09/21 02:47 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	
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 25933

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 25933
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	6/23/2021