



WSP USA

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

November 11, 2021

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

**RE: Closure Request  
Fez Fee 011H  
Incident Number NAPP2118732077  
Lea County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of COG Operating, LLC (COG), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Fez Fee 011H (Site) located in Unit D, Section 09, Township 25 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 a release of produced water at the Site. Based on excavation activities and soil sample laboratory analytical results, COG is submitting this Closure Request and requesting no further action (NFA) for Incident Number NAPP2118732077.

#### **RELEASE BACKGROUND**

On June 22, 2021, a hole formed in the riser due to internal corrosion, resulting in the release of approximately 8 barrels (bbls) of produced water onto the pipeline right-of-way (ROW) and adjacent pasture. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 5 bbls of produced water were recovered. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) and subsequently submitted a Release Notification and Corrective Action Form C-141 (Form C-141) on July 6, 2021. The release was assigned Incident Number NAPP2118732077.

#### **SITE CHARACTERIZATION**

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C 02388, located approximately 0.84 miles northwest of the Site. The groundwater well has a reported depth to groundwater of 165 feet bgs and a total depth of 180 feet bgs. Ground surface



elevation at the groundwater well location is 4,443 feet amsl, which is approximately 225 feet higher in elevation than the Site.

On November 1, 2021, in an effort to confirm depth to water in the area, a borehole (BH01) was advanced to a depth of 105 feet bgs via air rotary drilling rig. The borehole was located approximately 295 feet northwest of the Site. The location of borehole BH01 is provided on Figure 1. An WSP geologist logged and described soils continuously. The borehole lithologic/soil sampling log is included in Attachment 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned utilizing hydrated bentonite chips.

The closest continuously flowing water or significant watercourse to the Site is a precipitation fed stock pond, located approximately 0.81 miles east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

## CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation closure standard of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

## SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On August 19, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected three preliminary assessment soil samples (SS01 through SS03) within the release extent from a depth



of approximately 0.5 feet bgs to assess the lateral extent of impacted soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

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

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

### **DELINEATION ACTIVITIES AND SOIL SAMPLE ANALYTICAL RESULTS**

Between October 6, 2021 and October 18, 2021, WSP personnel were at the Site to oversee delineation and excavation activities. Potholes were advanced via backhoe at seven locations within and around the release extent to assess the lateral and vertical extent of impacted soil. Potholes PH01 through PH07 were advanced to depths ranging from 3 feet to 4 feet bgs. Delineation soil samples were collected every 1 foot from each pothole. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 1. The pothole and delineation soil sample locations are depicted on Figure 3.

Laboratory analytical results for delineation samples from potholes PH05 through PH07, advanced within the release extent, indicated that chloride concentrations exceeded the reclamation standard in the top four feet. Laboratory analytical results for the delineation samples from potholes PH01 through PH04, advanced around the release extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and reclamation standard, and successfully defined the extent of the release.



## EXCAVATION ACTIVITIES AND SOIL SAMPLE ANALYTICAL RESULTS

Impacted soil was excavated from the release area as indicated by visible staining, field screening activities, and laboratory analytical results for the preliminary and delineation soil samples. Excavation activities were performed using track hoe, transport vehicle, and hydrovac. The excavation occurred within the ROW. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Photographic documentation is included in Attachment 2.

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. Composite soil samples SW01 through SW04 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 4 feet bgs. Composite soil samples FS01 through FS04 were collected from the floor of the excavation from a depth of 4 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 4.

The excavation area totaled approximately 771 square feet. A total of approximately 114 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at R30 Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation area was backfilled.

Laboratory analytical results for excavation sidewall samples SW01 through SW04 and excavation floor samples FS01 through FS04, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and compliant with the reclamation standard in samples collected from the top four feet of the subsurface. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 3.

## CLOSURE REQUEST

Site assessment and excavation activities were conducted to address the June 22, 2021 release of produced water at the Site. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, soil samples collected in the pasture from the top four feet of the subsurface were compliant with the reclamation standard. Based on the soil sample analytical results, no further remediation is required. COG backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.



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Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. WSP and COG believe these remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests no further action for Incident Number NAPP2118732077. The finalized version of the Form C-141 is included in Attachment 4.

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

Sincerely,

WSP USA Inc.

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

Kalei Jennings  
Associate Consultant

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

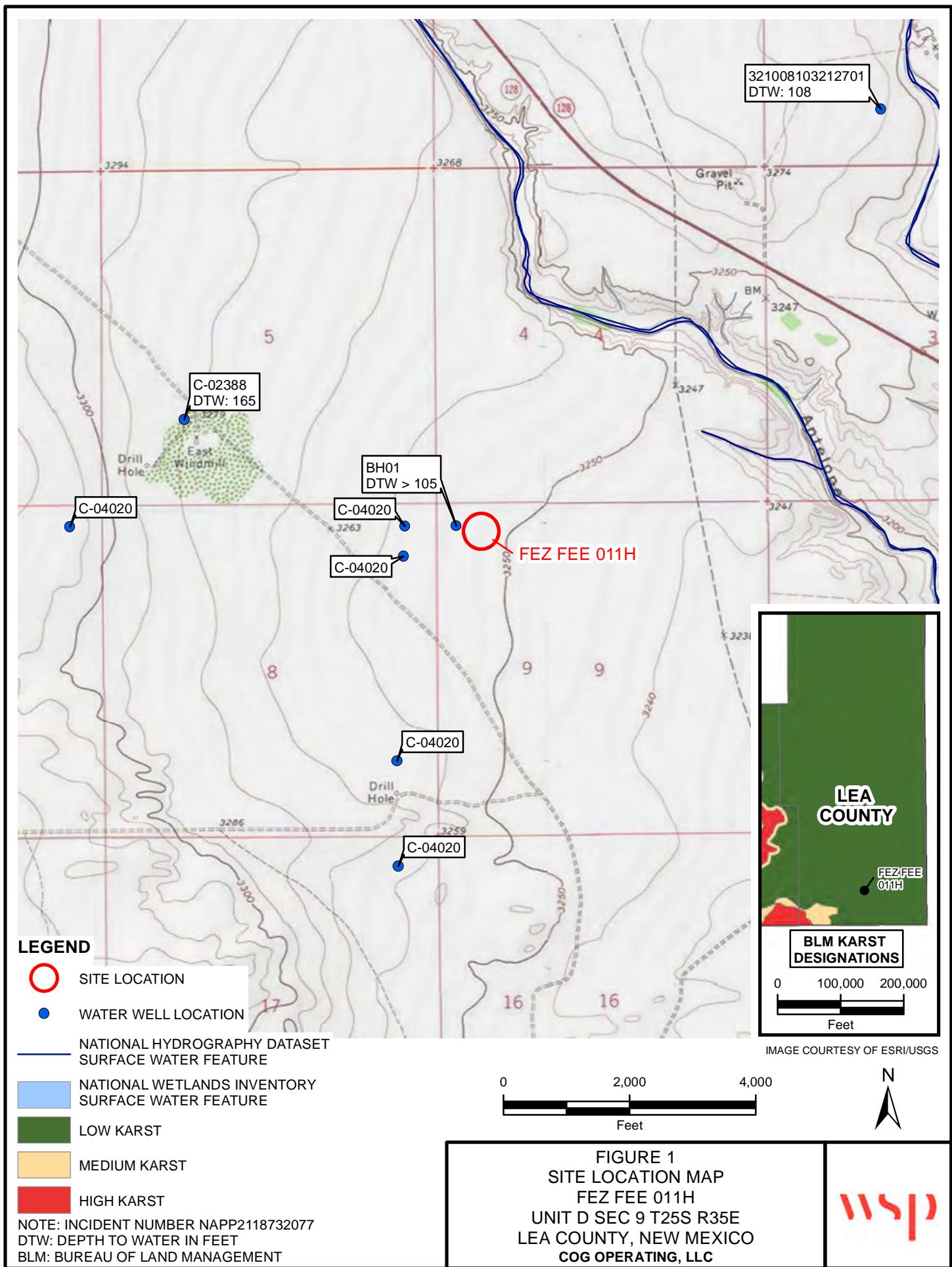
Ashley L. Ager, P.G.  
Managing Director, Geologist

cc: Kelsy Waggaman, COG Operating, LLC

Attachments:

- Figure 1 Site Location Map
- Figure 2 Preliminary Soil Sample Locations
- Figure 3 Delineation Soil sample Locations
- Figure 4 Excavation Soil Sample Locations
- Table 1 Soil Analytical Results
- Attachment 1 Lithologic/Sampling Log
- Attachment 2 Photographic Log
- Attachment 3 Laboratory Analytical Reports
- Attachment 4 Final C-141

FIGURES





NOTE: INCIDENT NUMBER NAPP2118732077  
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)  
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE  
THAT WAS REMOVED

**FIGURE 2**  
**PRELIMINARY SOIL SAMPLE LOCATIONS**  
**FEZ FEE 011H**  
**UNIT D SEC 9 T25S R35E**  
**LEA COUNTY, NEW MEXICO**  
**COG OPERATING, LLC**



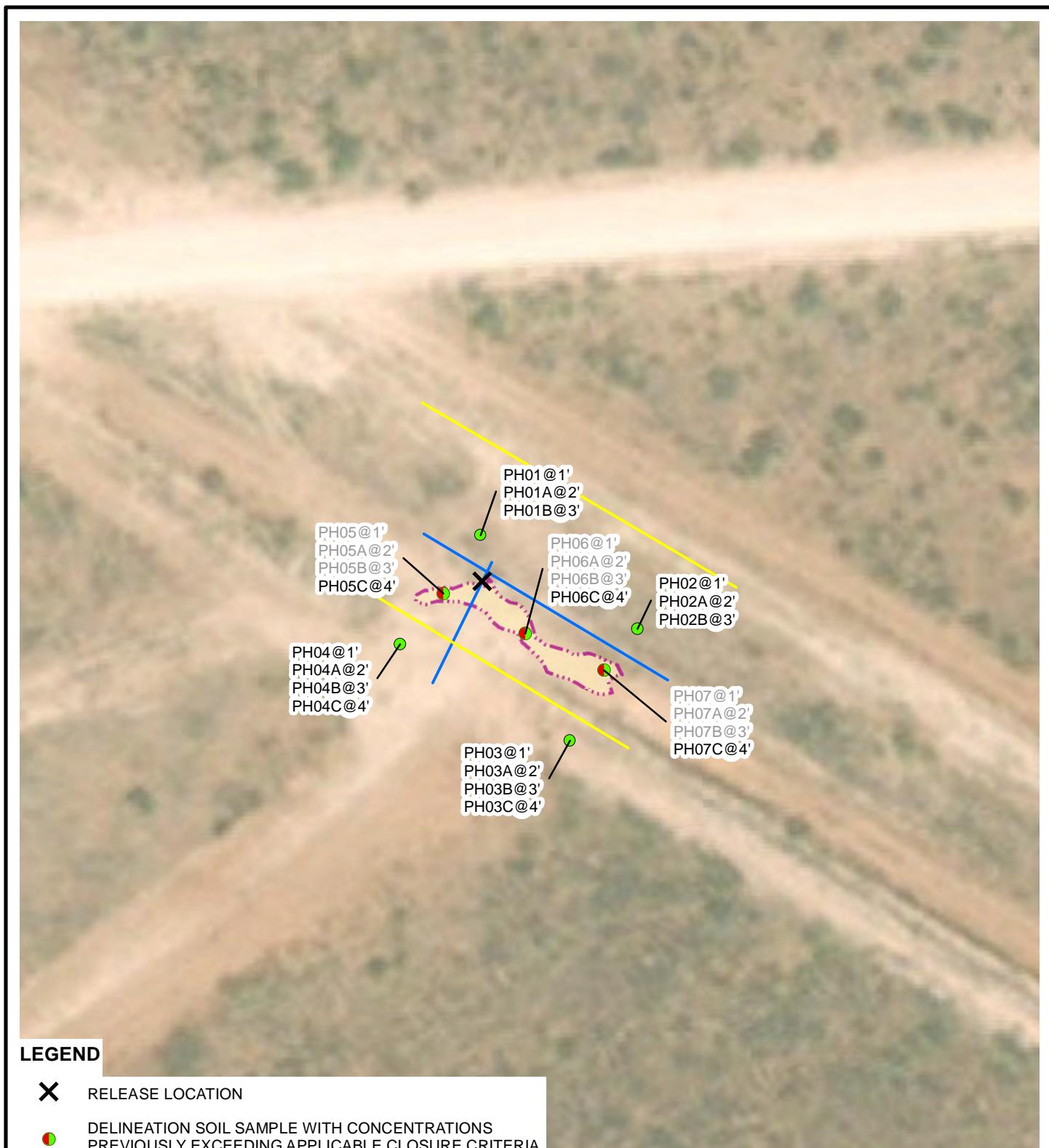
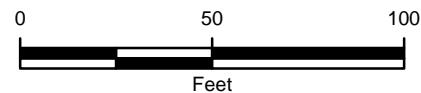


IMAGE COURTESY OF ESRI



NOTE: INCIDENT NUMBER NAPP2118732077  
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)  
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE  
THAT WAS REMOVED

**FIGURE 3**  
**DELINEATION SOIL SAMPLE LOCATIONS**  
**FEZ FEE 011H**  
**UNIT D SEC 9 T25S R35E**  
**LEA COUNTY, NEW MEXICO**  
**COG OPERATING, LLC**

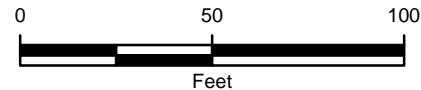


**LEGEND**

- X** RELEASE LOCATION
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- GAS LINE
- WATER LINE
- [Shaded Box]** EXCAVATION EXTENT

NOTE: INCIDENT NUMBER NAPP2118732077  
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI



**FIGURE 4**  
**EXCAVATION SOIL SAMPLE LOCATIONS**  
**FEZ FEE 011H**  
**UNIT D SEC 9 T25S R35E**  
**LEA COUNTY, NEW MEXICO**  
**COG OPERATING, LLC**

TABLES

**Table 1****Soil Analytical Results****Fez Fee 011H**

**Incident Number NAPP2118732077**  
**COG Operating, LLC.**  
**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)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			10	50	NE	NE	NE	1,000	2,500	20,000
<b>Surface Samples</b>										
SS01	08/19/2021	0.5	0.00215	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	62.8*
SS02	08/19/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	841*
SS03	08/19/2021	0.5	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	102*
<b>Delineation Samples</b>										
PH01	10/05/2021	1	<0.00202	0.00437	<49.9	<49.9	<49.9	<49.9	<49.9	16.4*
PH01A	10/05/2021	2	<0.00201	<0.00402	59.4	<49.8	<49.8	59.4	59.4	16.7*
PH01B	10/05/2021	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	76.8*
PH02	10/05/2021	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	13.9*
PH02A	10/05/2021	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	12.1*
PH02B	10/05/2021	3	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	9.59*
PH03	10/05/2021	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	11.2*
PH03A	10/05/2021	2	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	8.33*
PH03B	10/05/2021	3	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	8.14*
PH03C	10/05/2021	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	10.4
PH04	10/05/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	7.62*
PH04A	10/05/2021	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	9.41*
PH04B	10/05/2021	3	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	8.27*
PH04C	10/05/2021	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	10.5

**Table 1**

**Soil Analytical Results  
Fez Fee 011H  
Incident Number NAPP2118732077  
Concho Operating, LLC.  
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)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			10	50	NE	NE	NE	1,000	2,500	20,000
PH05	10/05/2021	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	15.8*
PH05A	10/05/2021	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	18.4*
PH05B	10/05/2021	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	727*
PH05C	10/05/2021	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	585
PH06	10/05/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	140*
PH06A	10/05/2021	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	859*
PH06B	10/05/2021	3	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	7,480*
PH06C	10/05/2021	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	3,110
PH07	10/05/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	640*
PH07A	10/05/2021	2	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	722*
PH07B	10/05/2021	3	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	5,020*
PH07C	10/05/2021	4	<0.00198	<0.00397	<49.9	53.1	<49.9	53.1	53.1	487
<b>Excavation Floor Samples</b>										
FS01	10/18/2021	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5,390
FS02	10/18/2021	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	6,560
FS03	10/18/2021	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	6,560
FS04	10/18/2021	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	1,360

**Table 1**

**Soil Analytical Results**  
**Fez Fee 011H**  
**Incident Number NAPP2118732077**  
**Concho Operating, LLC.**  
**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)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			10	50	NE	NE	NE	1,000	2,500	20,000
<b>Excavation Sidewall Samples</b>										
SW01	10/18/2021	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	188*
SW02	10/18/2021	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	126*
SW03	10/18/2021	0 - 4	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	163*
SW04	10/18/2021	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	36.9*

**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

&lt; - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

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

Text impacted soil was excavated

\* - indicates a reclamation closure criteria of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

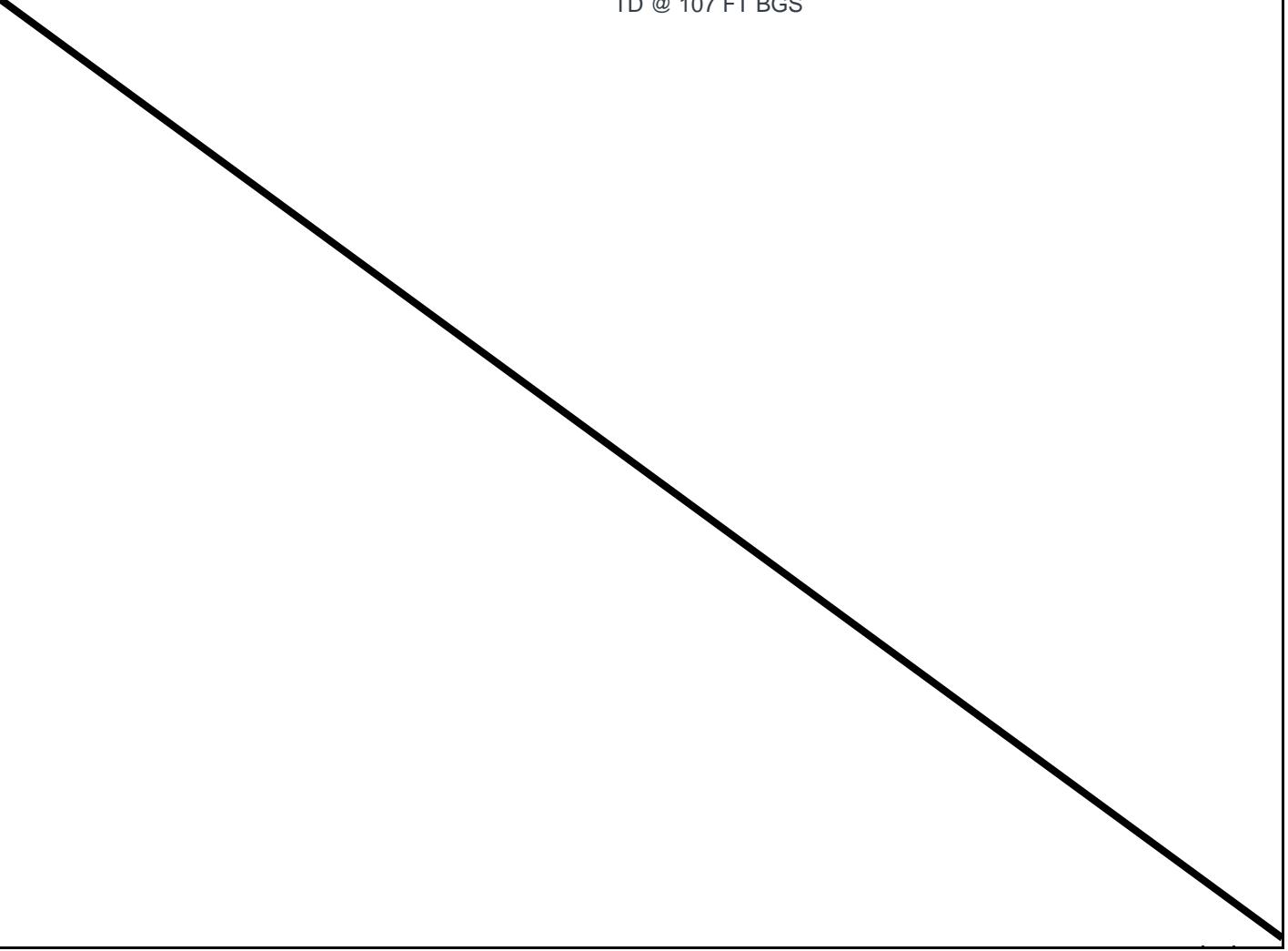
ATTACHMENT 1: LITHOLOGIC/SOIL SAMPLING LOG

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220							BH or MW Name: BH01	Date: 11-01-2021	
							Site Name: Fez Fee 011H		
							RP or Incident Number: NAPP2118732077		
							WSP Job Number: 31402909.110		
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>							Logged By	Method: Air Rotery	
Lat/Long: 32.15092, -103.37879			Field Screening: N/A			Hole Diameter: 6"	Total Depth: 105'		
						Depth to Water:			
Backfill or Well Construction Materials / Comments: Temporary 2" monitoring well set at 107' bgs, screen from 107-87', Borehole sealed at the surface to prevent runoff									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D					0-2	1	CCHE	CALICHE, DRY, OFF-WHITE TO TAN, WELL CONSOLIDATED, SOME REDDISH-BROWN FINE GRAINED SAND, NO STAIN, NO ODOR SAND ABSENT, MODERATELY-PORRILY CONSOLIDATED, VERY SILTY	
M					2-7	2			
M					7-18	3	SW-S	SANDSTONE, MOIST, BROWN-LIGHT BROWN POORLY-MODERATELY CONSOLIDATED, WELL GRADED, FINE-MEDIUM GRAINED, TRACE-SUBANGULAR GRAVEL, NO STAIN, NO ODOR	
M					18-43	4			
M					18	5	SP-S	SANDSTONE, MOIST, TAN-LIGHT BROWN, MODERATELY CONSOLIDATED, POORLY-GRADED, FINE GRAIN, TRACE SMALL OFF-WHITE COBBLE, NO STAIN, NO ODOR	
M					19	6			
M					20	7			
M					21	8			
M					22	9			
M					23	10			
M					24	11			
M					25	12			

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>							BH or MW Name: BH01	Date: 11-01-2021			
							Site Name: Fez Fee 011H				
							RP or Incident Number: NAPP2118732077				
							WSP Job Number: 31402909.110				
LITHOLOGIC / SOIL SAMPLING LOG							Logged By	Method: Air Rotery			
Lat/Long: 32.15092, -103.37879			Field Screening: N/A			Hole Diameter: 6"	Total Depth: 105'				
							Depth to Water:				
Backfill or Well Construction Materials / Comments: Temporary 2" monitoring well set at 107' bgs, screen from 107-87', Borehole sealed at the surface to prevent runoff											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion		
M					18-43	26	SP-S	SANDSTONE, MOIST, TAN-LIGHT BROWN, MODERATELY CONSOLIDATED, POORLY-GRADED, FINE GRAIN, TRACE SMALL OFF-WHITE COBBLE, NO STAIN, NO ODOR			
						27					
						28					
						29					
						30					
						31					
						32				SOME OFF-WHITE GREY, ROUNDED, SMALL GRAVEL	
						33					
						34					
						35					
					43-48	43	SW-S	SANDSTONE, DRY, OFF-WHITE TO LIGHT GREY, MODERATELY-WELL CONSOLIDATED, FINE-VERY FINE GRAIN, WELL GRADED, NO STAIN, NO ODOR			
						44					
						45					
						46					
						47					
						48				SANDSTONE, DRY, LIGHT BROWN-LIGHT YELLOW, MODERATELY-WELL CONSOLIDATED, FINE-MEDIUM GRAIN, WELL GRADED NO STAIN, NO ODOR	
						49					
						50					

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>							BH or MW Name: BH01	Date: 11-01-2021	
							Site Name: Fez Fee 011H		
							RP or Incident Number: NAPP2118732077		
							WSP Job Number: 31402909.110		
LITHOLOGIC / SOIL SAMPLING LOG							Logged By	Method: Air Rotery	
Lat/Long: 32.15092, -103.37879			Field Screening: N/A			Hole Diameter: 6"	Total Depth: 105'		
							Depth to Water:		
Backfill or Well Construction Materials / Comments: Temporary 2" monitoring well set at 107' bgs, screen from 107-87', Borehole sealed at the surface to prevent runoff									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
D					51	51	SW-S		
D					52-58	52	SW-S	SANDSTONE, DRY, OFF-WHITE TO TAN, MODERATE-WELL CONSOLIDATED, WELL-GRADED, FINE GRAIN, NO STAIN, NO ODOR	
						53			
						54			
						55			
						56			
						57			
D					58-101	58	SW-S	SANDSTONE, DRY, BROWN-LIGHT BROWN, MODERATELY CONSOLIDATED, WELL GRADED FINE-MEDIUM GRAIN, NO STAIN, NO ODOR	
						59			
						60			
						61			
						62			
						63			
						64			
						65			
						66			
						67			
						68			
						69			
						70			
						71			
						72			
						73			
						74			
						75		BEGIN ADDING WATER DOWNHOLE TO COOL OFF THE DRILL BIT	

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220							BH or MW Name: BH01	Date: 11-01-2021	
							Site Name: Fez Fee 011H		
							RP or Incident Number: NAPP2118732077		
							WSP Job Number: 31402909.110		
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>							Logged By	Method: Air Rotery	
Lat/Long: 32.15092, -103.37879			Field Screening: N/A			Hole Diameter: 6"	Total Depth: 105'		
						Depth to Water:			
Backfill or Well Construction Materials / Comments: Temporary 2" monitoring well set at 107' bgs, screen from 107-87', Borehole sealed at the surface to prevent runoff									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
						76	SW-S		
						77			
						78			
						79			
						80			
						81			
						82			
						83			
						84			
						85			
						86			
						87			
						88			
						89			
						90			
						91			
						92			
						93			
						94			
						95	VERY FINE GRAIN		
						96			
						97			
						98			
						99			
						100			

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220							BH or MW Name: BH01	Date: 11-01-2021	
							Site Name: Fez Fee 011H		
							RP or Incident Number: NAPP2118732077		
							WSP Job Number: 31402909.110		
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>							Logged By	Method: Air Rotery	
Lat/Long: 32.15092, -103.37879			Field Screening: N/A			Hole Diameter: 6"	Total Depth: 105'		
							Depth to Water:		
Backfill or Well Construction Materials / Comments: Temporary 2" monitoring well set at 107' bgs, screen from 107-87', Borehole sealed at the surface to prevent runoff									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
M					101-107	101 102 103 104 105 106 107	CH-S	CLAYSTONE, MOIST, DARK REDDISH BROWN, WELL CONSOLIDATED, HIGH PLASTICITY, COHESIVE, TRACE VERY FINE GRAIN SAND, NO STAIN, NO ODOR	
TD @ 107 FT BGS									
									

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>							BH or PH Name: PH01	Date: 10/05/2021
							Site Name: Fez Fee 011H	
							RP or Incident Number: NAPP2118732077	
							WSP Job Number: 31402909.110	
LITHOLOGIC / SOIL SAMPLING LOG							Logged By: FS	Method: Backhoe
Lat/Long: 32.150975, -103.378855			Field Screening: Hach chloride strips, PID			Hole Diameter: NA	Total Depth: 3 feet bgs	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<179	0.1	N	PH01	0.5	0.5	SP	0-3' SAND, dry, reddish brown, poorly graded, fine-very fine grain no stain, no odor
D	<179	0.2	N	PH01A	1	1		
D	<179	1.0	N	PH01B	2	2		
D	<179	0.6	N	PH01B	3	3	CCHE	3' CALICHE, dry, tan-off white, well consolidated, no stain, no odor
Backhoe refusal @ 3 feet bgs								

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>							BH or PH Name: PH02	Date: 10/05/2021
							Site Name: Fez Fee 011H	
							RP or Incident Number: NAPP2118732077	
							WSP Job Number: 31402909.110	
LITHOLOGIC / SOIL SAMPLING LOG							Logged By: FS	Method: Backhoe
Lat/Long: 32.150881, -103.378675			Field Screening: Hach chloride strips, PID			Hole Diameter: NA	Total Depth: 3 feet bgs	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<179	0	N	PH02	0.5		SP	0-3' SAND, dry, reddish brown, poorly graded, fine-very fine grain no stain, no odor
D	<179	0.4	N	PH02A	1	1		
D	<179	0.4	N	PH02B	2	2		
D	<179	0.2	N	PH02B	3	3	CCHE	3' CALICHE, dry, tan-off white, well consolidated, no stain, no odor
Backhoe refusal @ 3 feet bgs								

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>							BH or PH Name: PH03	Date: 10/05/2021
							Site Name: Fez Fee 011H	
							RP or Incident Number: NAPP2118732077	
							WSP Job Number: 31402909.110	
LITHOLOGIC / SOIL SAMPLING LOG							Logged By: FS	Method: Backhoe
Lat/Long: 32.150772, -103.378754			Field Screening: Hach chloride strips, PID			Hole Diameter: NA	Total Depth: 4 feet bgs	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<179	0.0	N	PH03	0.5	0.5	SP	0-3' SAND, dry, reddish brown, poorly graded, fine-very fine grain, no stain, no odor
D	<179	0.6	N	PH03A	1	1		
D	<179	0.3	N	PH03B	2	2		
D	<179	0.1	N	PH03C	3	3	CCHE	3-4' CALICHE, dry, tan-off white, well consolidated, no stain, no odor
D	<179	0.2	N		4	4		
TD @ 4 feet bgs								

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>							BH or PH Name: PH04	Date: 10/05/2021
							Site Name: Fez Fee 011H	
							RP or Incident Number: NAPP2118732077	
							WSP Job Number: 31402909.110	
LITHOLOGIC / SOIL SAMPLING LOG							Logged By: FS	Method: Backhoe
Lat/Long: 32.150868, -103.378950			Field Screening: Hach chloride strips, PID			Hole Diameter: NA	Total Depth: 4 feet bgs	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<179	0.2	N	PH04	0.5	0.5	SP	0-4' SAND, dry, reddish brown, poorly graded, fine-very fine grain, no stain, no odor
D	<179	0.5	N		1	1		
D	<179	0.2	N	PH04A	2	2		
D	<179	0.2	N	PH04B	3	3		
D	<179	0.1	N	PH04C	4	4	CCHE	4' CALICHE, dry, tan-off white, well consolidated, no stain, no odor
TD @ 4 feet bgs								

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>								BH or PH Name: PH05	Date: 10/05/2021
								Site Name: Fez Fee 011H	
								RP or Incident Number: NAPP2118732077	
								WSP Job Number: 31402909.110	
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: FS	Method: Backhoe
Lat/Long: 32.150918, -103.378899				Field Screening: Hach chloride strips, PID				Hole Diameter: NA	Total Depth: 4 feet bgs
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
D			N	PH05	—	0	SP	0-4' SAND, dry, reddish brown, poorly graded, fine-very fine grain, no stain, no odor	
D	<179	0.4	N	PH05A	1	—	1		
D	<179	0.6	N	PH05B	2	—	2		
D	834	0.4	N	PH05C	3	—	3	CCHE	3-10' CALICHE, dry, tan-off white, moderately consolidated, no odor
D	963	0.4	N		4	—	4		
TD @ 4 feet bgs									

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>								BH or PH Name: PH06	Date: 10/05/2021
								Site Name: Fez Fee 011H	
								RP or Incident Number: NAPP2118732077	
								WSP Job Number: 31402909.110	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: FS	Method: Backhoe
Lat/Long: 32.150878, -103.378804				Field Screening: Hach chloride strips, PID				Hole Diameter: NA	Total Depth: 4 feet bgs
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
D	212	0.6	N	PH06	1	0	SP	0-4' SAND, dry, reddish brown, poorly graded, fine-very fine grain, no stain, no odor	
D	8,405	1.0	N	PH06A	2	1			
D	6,171	0.6	N	PH06B	3	2	CCHE	3-5.3' CALICHE, dry, tan-off white, moderately consolidated, no stain, no	
D	5,700	0.9	N	PH06C	4	3			
								TD @ 4 feet bgs	

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>								BH or PH Name: PH07	Date: 10/05/2021
								Site Name: Fez Fee 011H	
								RP or Incident Number: NAPP2118732077	
								WSP Job Number: 31402909.110	
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: FS	Method: Backhoe
Lat/Long: 32.150841, -103.378714				Field Screening: Hach chloride strips, PID				Hole Diameter: NA	Total Depth: 4 feet bgs
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
D			N	PH07	—	0	SP	0-4' SAND, dry, reddish brown, poorly graded, fine-very fine grain, no stain, no odor	
D	504	0.6	N	PH07A	1	— 1			
D	6,171	0.6	N	PH07B	2	— 2			
D	5,700	0.3	N	PH07C	3	— 3	CCHE	3-7' CALICHE, dry, tan-off white, moderately consolidated, no stain no odor	
D	7,212	0.7	N		4	— 4			
TD @ 4 feet bgs									

ATTACHMENT 2: PHOTOGRAPHIC LOG



## PHOTOGRAPHIC LOG

COG Operating, LLC	Fez Fee 011H Lea County, NM	NAPP2118732077
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Photo No.	Date	
1	August 20, 2021	
Northern view of point of release within pipeline right-of-way.		

Photo No.	Date	
2	August 20, 2021	
Western view of release extent.		



## PHOTOGRAPHIC LOG

COG Operating, LLC	Fez Fee 011H Lea County, NM	NAPP2118732077
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Photo No.	Date	
3	August 20, 2021	
Eastern view of initial extent.		



Photo No.	Date	
4	October 6 – 18, 2021	
Southern view of pothole PH01 during delineation activities.		





## PHOTOGRAPHIC LOG

COG Operating, LLC	Fez Fee 011H Lea County, NM	NAPP2118732077
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Photo No. 5	Date October 6 – 18, 2021	
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Photo No. 6	Date October 6 – 18, 2021	
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## PHOTOGRAPHIC LOG

COG Operating, LLC	Fez Fee 011H Lea County, NM	NAPP2118732077
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**ATTACHMENT 3: LABORATORY ANALYTICAL RESULTS**



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1133-1

Laboratory Sample Delivery Group: Lea County NM  
Client Project/Site: Fez Fee #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:  
8/24/2021 4:29:11 PM

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

### LINKS

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The  
Expert

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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: Fez Fee #1

Laboratory Job ID: 890-1133-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

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

**Case Narrative**

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

**Job ID: 890-1133-1**

**Laboratory:** Eurofins Xenco, Carlsbad

**Narrative****Job Narrative**  
**890-1133-1****Receipt**

The samples were received on 8/19/2021 2:41 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 2.0°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-6784 and 880-6784 and analytical batch 880-6831 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS02 (890-1133-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS01 (890-1133-1). 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 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-6885 and analytical batch 880-6906 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**HPLC/IC**

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

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

**Client Sample ID: SS01**  
Date Collected: 08/19/21 12:05  
Date Received: 08/19/21 14:41  
Sample Depth: - 0.5

**Lab Sample ID: 890-1133-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00215		0.00201	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
Toluene	<0.00201	U	0.00201	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
o-Xylene	<0.00201	U	0.00201	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
Total BTEX	<0.00402	U	0.00402	mg/Kg	08/20/21 09:30	08/21/21 04:23		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130			08/20/21 09:30	08/21/21 04:23	1
1,4-Difluorobenzene (Surr)	103		70 - 130			08/20/21 09:30	08/21/21 04:23	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	<50.0	U F1	50.0	mg/Kg	08/21/21 11:29	08/22/21 17:45		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	08/21/21 11:29	08/22/21 17:45		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	08/21/21 11:29	08/22/21 17:45		1
Total TPH	<50.0	U	50.0	mg/Kg	08/21/21 11:29	08/22/21 17:45		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	103		70 - 130			08/21/21 11:29	08/22/21 17:45	1
o-Terphenyl	114		70 - 130			08/21/21 11:29	08/22/21 17:45	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.8		5.00	mg/Kg			08/23/21 23:03	1

**Client Sample ID: SS02**

Date Collected: 08/19/21 12:10  
Date Received: 08/19/21 14:41  
Sample Depth: - 0.5

**Lab Sample ID: 890-1133-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
Toluene	<0.00199	U	0.00199	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
o-Xylene	<0.00199	U	0.00199	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
Total BTEX	<0.00398	U	0.00398	mg/Kg	08/20/21 09:30	08/21/21 05:45		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101		70 - 130			08/20/21 09:30	08/21/21 05:45	1
1,4-Difluorobenzene (Surr)	60	S1-	70 - 130			08/20/21 09:30	08/21/21 05:45	1

Eurofins Xenco, Carlsbad

**Client Sample Results**

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

**Client Sample ID: SS02**  
Date Collected: 08/19/21 12:10  
Date Received: 08/19/21 14:41  
Sample Depth: - 0.5

**Lab Sample ID: 890-1133-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg	08/21/21 11:29	08/22/21 18:49		1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg	08/21/21 11:29	08/22/21 18:49		1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	08/21/21 11:29	08/22/21 18:49		1
Total TPH	<49.9	U	49.9	mg/Kg	08/21/21 11:29	08/22/21 18:49		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	115		70 - 130			08/21/21 11:29	08/22/21 18:49	1
o-Terphenyl	129		70 - 130			08/21/21 11:29	08/22/21 18:49	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	841		5.01	mg/Kg			08/23/21 23:08	1

**Client Sample ID: SS03**  
Date Collected: 08/19/21 12:15  
Date Received: 08/19/21 14:41  
Sample Depth: - 0.5

**Lab Sample ID: 890-1133-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
Toluene	<0.00198	U	0.00198	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
o-Xylene	<0.00198	U	0.00198	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
Total BTEX	<0.00396	U	0.00396	mg/Kg	08/20/21 09:30	08/21/21 06:06		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	107		70 - 130			08/20/21 09:30	08/21/21 06:06	1
1,4-Difluorobenzene (Surr)	91		70 - 130			08/20/21 09:30	08/21/21 06:06	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	08/21/21 11:29	08/22/21 19:10		1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg	08/21/21 11:29	08/22/21 19:10		1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg	08/21/21 11:29	08/22/21 19:10		1
Total TPH	<49.8	U	49.8	mg/Kg	08/21/21 11:29	08/22/21 19:10		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	88		70 - 130			08/21/21 11:29	08/22/21 19:10	1
o-Terphenyl	102		70 - 130			08/21/21 11:29	08/22/21 19:10	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102		5.05	mg/Kg			08/23/21 23:14	1

Eurofins Xenco, Carlsbad

**Surrogate Summary**

Client: WSP USA Inc.

Job ID: 890-1133-1

Project/Site: Fez Fee #1

SDG: Lea County NM

**Method: 8021B - Volatile Organic Compounds (GC)****Matrix: Solid****Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1121-A-1-H MS	Matrix Spike	129	89
890-1121-A-1-I MSD	Matrix Spike Duplicate	90	86
890-1133-1	SS01	155 S1+	103
890-1133-2	SS02	101	60 S1-
890-1133-3	SS03	107	91
LCS 880-6784/1-A	Lab Control Sample	97	80
LCSD 880-6784/2-A	Lab Control Sample Dup	95	79
MB 880-6784/5-A	Method Blank	100	72
MB 880-6785/5-A	Method Blank	103	84

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1133-1	SS01	103	114
890-1133-1 MS	SS01	99	102
890-1133-1 MSD	SS01	107	108
890-1133-2	SS02	115	129
890-1133-3	SS03	88	102
LCS 880-6885/2-A	Lab Control Sample	125	133 S1+
LCSD 880-6885/3-A	Lab Control Sample Dup	121	128
MB 880-6885/1-A	Method Blank	108	124

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1133-1

Project/Site: Fez Fee #1

SDG: Lea County NM

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-6784/5-A****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 6784**

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
2benzene	n0.00g00	U	0.00g00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
Eoluene	n0.00g00	U	0.00g00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
htXylbenzene	n0.00g00	U	0.00g00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
K-pylene s , -pylene	n0.00&00	U	0.00&00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
o-pylene	n0.00g00	U	0.00g00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
pyleneBREtotal	n0.00&00	U	0.00&00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
Etotal 2Ehp	n0.00&00	U	0.00&00		K4/T4		08/g0/g1 09:30	08/g1/g1 00:<3	1
Surrogate	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	155		+5 - 175				503531 59/75	503131 55/27	1
1:4-, Fluorobenzene (Surr)	+8		+5 - 175				503531 59/75	503131 55/27	1

**Lab Sample ID: LCS 880-6784/1-A****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 6784**

Analyte	Spike		LCS		Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier						
2benzene	0.100	0.08<g1			K4/T4		8<	00 - 130	
Eoluene	0.100	0.0838O			K4/T4		8&	00 - 130	
htXylbenzene	0.100	0.089( &			K4/T4		90	00 - 130	
K-pylene s , -pylene	0.g00	0.1<33			K4/T4		00	00 - 130	
o-pylene	0.100	0.00<<0			K4/T4		00	00 - 130	
Surrogate	LCS		LCS		Unit	D	%Rec	Limits	%Rec.
	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	9+		+5 - 175						
1:4-, Fluorobenzene (Surr)	05		+5 - 175						

**Lab Sample ID: LCSD 880-6784/2-A****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 6784**

Analyte	Spike		LCSD		Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier							
2benzene	0.100	0.098&g			K4/T4		9&	00 - 130	10	3<
Eoluene	0.100	0.00<1&			K4/T4		0<	00 - 130	11	3<
htXylbenzene	0.100	0.08801			K4/T4		8&	00 - 130	(	3<
K-pylene s , -pylene	0.g00	0.1&11			K4/T4		01	00 - 130	8	3<
o-pylene	0.100	0.00g&1			K4/T4		0g	00 - 130	(	3<
Surrogate	LCSD		LCSD		Unit	D	%Rec	Limits	RPD	Limit
	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	92		+5 - 175							
1:4-, Fluorobenzene (Surr)	+9		+5 - 175							

**Lab Sample ID: 890-1121-A-1-H MS****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 6784**

Analyte	Sample		Spike		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result						
2benzene	n0.00199	U F1	0.100	0.0&<8(	F1		&(	00 - 130		

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## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1133-1

Project/Site: Fez Fee #1

SDG: Lea County NM

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 890-1121-A-1-H MS****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 6784**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier					
Eoluene	m0.00199	U F1	0.100	0.0( Q8	F1	K4/T4		( O	00 - 130	
htXylbenzene	m0.00199	U Fg F1	0.100	0.0C09		K4/T4		08	00 - 130	
K-pylene s , -pylene	m0.00398	U Fg F1	0.g00	0.1318	F1	K4/T4		((	00 - 130	
o-pylene	m0.00199	U Fg F1	0.100	0.0( 10<	F1	K4/T4		( g	00 - 130	
<b>Surrogate</b>										
4-Bromofluorobenzene (Surr)	189	%Recovery	Qualifier							
1:4-, Fluorobenzene (Surr)	09			Limits						

**Lab Sample ID: 890-1121-A-1-I MSD****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 6784**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
2enzene	m0.00199	U F1	0.0998	0.0&<( 1	F1	K4/T4		&(	00 - 130	1	3<
Eoluene	m0.00199	U F1	0.0998	0.0&08	F1	K4/T4		88	00 - 130	3&	3<
htXylbenzene	m0.00199	U Fg F1	0.0998	0.0&&g9	Fg F1	K4/T4		&&	00 - 130	89	3<
K-pylene s , -pylene	m0.00398	U Fg F1	0.g00	0.0000<	Fg F1	K4/T4		39	00 - 130	<g	3<
o-pylene	m0.00199	U Fg F1	0.0998	0.03( gg	Fg F1	K4/T4		3(	00 - 130	<g	3<
<b>Surrogate</b>											
4-Bromofluorobenzene (Surr)	95	%Recovery	Qualifier	Limits							
1:4-, Fluorobenzene (Surr)	0i			+5 - 175							

**Lab Sample ID: MB 880-6785/5-A****Matrix: Solid****Analysis Batch: 6831****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 6785**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
2enzene	m0.00g00	U	0.00g00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
Eoluene	m0.00g00	U	0.00g00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
htXylbenzene	m0.00g00	U	0.00g00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
K-pylene s , -pylene	m0.00&00	U	0.00&00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
o-pylene	m0.00g00	U	0.00g00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
pylyeneBREtotal	m0.00&00	U	0.00&00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
Total 2Ehp	m0.00&00	U	0.00&00	K4/T4		08/g0/g1 0Q30	08/g0/g1 11:11	1		
<b>Surrogate</b>										
4-Bromofluorobenzene (Surr)	157	%Recovery	Qualifier	Limits						
1:4-, Fluorobenzene (Surr)	04			+5 - 175						

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## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1133-1

Project/Site: Fez Fee #1

SDG: Lea County NM

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-6885/1-A****Matrix: Solid****Analysis Batch: 6906****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 6885**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GaBoline 5 an4e 7 r4anicB	m<0.0	U	<0.0	K4/T4		08/g1/g1 11:g9	08/gg/g1 1(:&1	1
vG5 7 HC(-C10								
DieBel 5 an4e 7 r4anicBv7 f er	m<0.0	U	<0.0	K4/T4		08/g1/g1 11:g9	08/gg/g1 1(:&1	1
C10-Cg8H								
7 II 5 an4e 7 r4anicBv7 f er Cg8-C3(H	m<0.0	U	<0.0	K4/T4		08/g1/g1 11:g9	08/gg/g1 1(:&1	1
Etal EPd	m<0.0	U	<0.0	K4/T4		08/g1/g1 11:g9	08/gg/g1 1(:&1	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	150		+5 - 175	50381381 11/89	50388381 1i/41	1
o-Terphenyl	184		+5 - 175	50381381 11/89	50388381 1i/41	1

**Lab Sample ID: LCS 880-6885/2-A****Matrix: Solid****Analysis Batch: 6906****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 6885**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
GaBoline 5 an4e 7 r4anicB	1000	11<0		K4/T4		11(	00 - 130
vG5 7 HC(-C10							
DieBel 5 an4e 7 r4anicBv7 f er	1000	10&0		K4/T4		10&	00 - 130
C10-Cg8H							

Surrogate	LCS	LCS	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	182		+5 - 175			
o-Terphenyl	177	S16	+5 - 175			

**Lab Sample ID: LCSD 880-6885/3-A****Matrix: Solid****Analysis Batch: 6906****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 6885**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	RPD	Limit
	Added	Result	Qualifier					
GaBoline 5 an4e 7 r4anicB	1000	99(.1		K4/T4		100	00 - 130	1< g0
vG5 7 HC(-C10								
DieBel 5 an4e 7 r4anicBv7 f er	1000	99.&		K4/T4		100	00 - 130	& g0
C10-Cg8H								

Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	181		+5 - 175			
o-Terphenyl	180		+5 - 175			

**Lab Sample ID: 890-1133-1 MS****Matrix: Solid****Analysis Batch: 6906****Client Sample ID: SS01****Prep Type: Total/NA****Prep Batch: 6885**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
GaBoline 5 an4e 7 r4anicB	m<0.0	U F1	99<	18g3	F1	K4/T4		1&1	00 - 130
vG5 7 HC(-C10									
DieBel 5 an4e 7 r4anicBv7 f er	m<0.0	U	99<	80( .<		K4/T4		81	00 - 130
C10-Cg8H									

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

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

Lab Sample ID: 890-1133-1 MS

Matrix: Solid

Analysis Batch: 6906

Client Sample ID: SS01  
Prep Type: Total/NA  
Prep Batch: 6885

Surrogate	MS	MS	%Recovery	Qualifier	Limits
1-Chlorooctane	99				+5 - 175
o-Terphenyl	158				+5 - 175

Lab Sample ID: 890-1133-1 MSD

Matrix: Solid

Analysis Batch: 6906

Client Sample ID: SS01  
Prep Type: Total/NA  
Prep Batch: 6885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD
GaBoline 5 an4e 7 r4anicB	m<0.0	U F1	998	1gOO		K4/T4		1g(	11
vG5 7 HC(-C10								OO - 130	g0
DieBel 5 an4e 7 r4anicBv7 fer	m<0.0	U	998	888.<		K4/T4	89	OO - 130	10
C10-Cg8H									

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
1-Chlorooctane	15+		+5 - 175
o-Terphenyl	150		+5 - 175

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-6877/1-A

Matrix: Solid

Analysis Batch: 6948

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
CXlori6e	m<.00	U	<.00	K4/T4			08/g3/g1 g1:<0	1

Lab Sample ID: LCS 880-6877/2-A

Matrix: Solid

Analysis Batch: 6948

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
CXlori6e	g<0	gO1.<		K4/T4	109	90 - 110	

Lab Sample ID: LCSD 880-6877/3-A

Matrix: Solid

Analysis Batch: 6948

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
CXlori6e	g<0	gO1.<		K4/T4	109	90 - 110	0

Lab Sample ID: 880-5282-A-3-D MS

Matrix: Solid

Analysis Batch: 6948

Client Sample ID: Matrix Spike  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	RPD
CXlori6e	83.0		g<0	300.1		K4/T4	103	90 - 110	

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**QC Sample Results**

Client: WSP USA Inc.

Job ID: 890-1133-1

Project/Site: Fez Fee #1

SDG: Lea County NM

**Method: 300.0 - Anions, Ion Chromatography (Continued)****Lab Sample ID: 880-5282-A-3-E MSD****Client Sample ID: Matrix Spike Duplicate****Matrix: Solid****Prep Type: Soluble****Analysis Batch: 6948**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
CXlori6e	&3.0		g<0	300.<		K4/T4		103	90 - 110	0	g0

**QC Association Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

**GC VOA****Prep Batch: 6784**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1133-1	SS01	Total/NA	Solid	5035	
890-1133-2	SS02	Total/NA	Solid	5035	
890-1133-3	SS03	Total/NA	Solid	5035	
MB 880-6784/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6784/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6784/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1121-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
890-1121-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Prep Batch: 6785**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-6785/5-A	Method Blank	Total/NA	Solid	5035	

**Analysis Batch: 6831**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1133-1	SS01	Total/NA	Solid	8021B	6784
890-1133-2	SS02	Total/NA	Solid	8021B	6784
890-1133-3	SS03	Total/NA	Solid	8021B	6784
MB 880-6784/5-A	Method Blank	Total/NA	Solid	8021B	6784
MB 880-6785/5-A	Method Blank	Total/NA	Solid	8021B	6785
LCS 880-6784/1-A	Lab Control Sample	Total/NA	Solid	8021B	6784
LCSD 880-6784/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6784
890-1121-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	6784
890-1121-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	6784

**GC Semi VOA****Prep Batch: 6885**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1133-1	SS01	Total/NA	Solid	8015NM Prep	
890-1133-2	SS02	Total/NA	Solid	8015NM Prep	
890-1133-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-6885/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6885/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6885/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1133-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-1133-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 6906**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1133-1	SS01	Total/NA	Solid	8015B NM	6885
890-1133-2	SS02	Total/NA	Solid	8015B NM	6885
890-1133-3	SS03	Total/NA	Solid	8015B NM	6885
MB 880-6885/1-A	Method Blank	Total/NA	Solid	8015B NM	6885
LCS 880-6885/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6885
LCSD 880-6885/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6885
890-1133-1 MS	SS01	Total/NA	Solid	8015B NM	6885
890-1133-1 MSD	SS01	Total/NA	Solid	8015B NM	6885

Eurofins Xenco, Carlsbad

**QC Association Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

**HPLC/IC****Leach Batch: 6877**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1133-1	SS01	Soluble	Solid	DI Leach	
890-1133-2	SS02	Soluble	Solid	DI Leach	
890-1133-3	SS03	Soluble	Solid	DI Leach	
MB 880-6877/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6877/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6877/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5282-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5282-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 6948**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1133-1	SS01	Soluble	Solid	300.0	6877
890-1133-2	SS02	Soluble	Solid	300.0	6877
890-1133-3	SS03	Soluble	Solid	300.0	6877
MB 880-6877/1-A	Method Blank	Soluble	Solid	300.0	6877
LCS 880-6877/2-A	Lab Control Sample	Soluble	Solid	300.0	6877
LCSD 880-6877/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6877
880-5282-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	6877
880-5282-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	6877

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**Lab Chronicle**

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

**Client Sample ID: SS01**

Date Collected: 08/19/21 12:05

Date Received: 08/19/21 14:41

**Lab Sample ID: 890-1133-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	6784	08/20/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/21/21 04:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6885	08/21/21 11:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6906	08/22/21 17:45	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6877	08/20/21 15:19	SC	XEN MID
Soluble	Analysis	300.0		1			6948	08/23/21 23:03	CH	XEN MID

**Client Sample ID: SS02**

Date Collected: 08/19/21 12:10

Date Received: 08/19/21 14:41

**Lab Sample ID: 890-1133-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	6784	08/20/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/21/21 05:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6885	08/21/21 11:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6906	08/22/21 18:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	6877	08/20/21 15:19	SC	XEN MID
Soluble	Analysis	300.0		1			6948	08/23/21 23:08	CH	XEN MID

**Client Sample ID: SS03**

Date Collected: 08/19/21 12:15

Date Received: 08/19/21 14:41

**Lab Sample ID: 890-1133-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	6784	08/20/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6831	08/21/21 06:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6885	08/21/21 11:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6906	08/22/21 19:10	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	6877	08/20/21 15:19	SC	XEN MID
Soluble	Analysis	300.0		1			6948	08/23/21 23:14	CH	XEN MID

**Laboratory References:**

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

Eurofins Xenco, Carlsbad

## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1133-1

Project/Site: Fez Fee #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	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

**Method Summary**

Client: WSP USA Inc.  
 Project/Site: Fez Fee #1

Job ID: 890-1133-1  
 SDG: Lea County NM

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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

Eurofins Xenco, Carlsbad

**Sample Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee #1

Job ID: 890-1133-1  
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1133-1	SS01	Solid	08/19/21 12:05	08/19/21 14:41	- 0.5
890-1133-2	SS02	Solid	08/19/21 12:10	08/19/21 14:41	- 0.5
890-1133-3	SS03	Solid	08/19/21 12:15	08/19/21 14:41	- 0.5

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Environment Testing  
Xencq

**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:

<b>Project Manager:</b>	KALEI JENNINGS	
<b>Company Name:</b>	VSSP USA	
<b>Address:</b>	235 E. NJ A ST.	
<b>City, State ZIP:</b>	MIDLAND, TX 79705	
<b>Phone:</b>	817-683-2223	<b>Email:</b> <a href="mailto:Kalei.Jennings@vssp.com">Kalei.Jennings@vssp.com</a>
	<b>Bill to: (if different)</b>	(CCG)
	<b>Company Name:</b>	
	<b>Address:</b>	
	<b>City, State ZIP:</b>	

Project Name:	FED EX H	Turn Around	ANALYSIS REQUEST
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code
Project Location:	LIA COUNTY	Due Date:	
Sampler's Name:	FLUINA BYELES	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			
<b>SAMPLE RECEIPT</b>		Parameters	
Samples Received Intact:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Temp Blank:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Cooler Custody Seals:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Thermometer ID:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Sample Custody Seals:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Correction Factor:	-0.7
Total Containers:		Temperature Reading:	7.2
		Corrected Temperature:	7.0
(EPA 8045 Mod)			
X (EPA 8021 B)			
wide (FAT 3820)			
 890-1133 Chain of Custody			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab Comp	# of Cont
TPH						
BSIE						
Cl. n/a						

Temperature Reading: 7.2  
Corrected Temperature: 7.0

Sample Received Intact: Yes No Thermometer ID: T-NN-001  
Holder Custody Seals: Yes No Correction Factor: -0.2  
890-1133 Chain of Custody

5#  
SAMPLE RECEIPT Temp Blank:  Yes No  
Wet Ice:  Yes No  
MAY 19, 1970 BY D. W. HOPPER  
meters  
5 M  
821  
A 38

Project Location:	LEA COUNTY	Due Date:	
Impaler's Name:	FLU MA BYE 25	TAT starts the day received by the lab if received by 4:30pm	

Object Name:	I - L - V - P - T		
Project Number:			
	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code

Phone:	877-683-2553	Email:	<a href="mailto:client.ec@asp.com">client.ec@asp.com</a>
Deliverables:	EDU	<input type="checkbox"/>	

Reporting: Level II  Level III   
DRAFT - FEB 2000

Program: USTIPST  PRP   
State of Project:

Work Order No.: **W000000000** | Date: **2023-10-01** | Status: **Pending Approval**

Xenco  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

**eurofins**  
Environment Testing  
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
**Work Order**

## **Chain of Custody**

A GUIDE TO THE USE OF THE HANDBOOK OF PRACTICAL INFORMATION

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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<sub>2</sub> Na Sr Ti Sn U V Zn  
 Circle-Methed(s) and Methed(s) to be analyzed      1C1PP/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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Hans Breyer	N. Ode	8/10/2017:41			
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Revised Date: 05/25/2020 Rev. 2020.2

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1133-1

SDG Number: Lea County NM

**Login Number:** 1133**List Source:** Eurofins Xenco, Carlsbad**List Number:** 1**Creator:** Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1133-1

SDG Number: Lea County NM

**Login Number:** 1133**List Source:** Eurofins Xenco, Midland**List Number:** 2**List Creation:** 08/20/21 11:38 AM**Creator:** Kramer, Jessica

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	1.6/2.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1402-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/19/2021 1:32:41 PM

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

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Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Laboratory Job ID: 890-1402-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, 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
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: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Job ID: 890-1402-1**

**Laboratory: Eurofins Xenco, Carlsbad**

**Narrative****Job Narrative  
890-1402-1****Receipt**

The samples were received on 10/12/2021 2:04 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 2.4°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9467 and analytical batch 880-9527 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (MB 880-9467/5-A) and (MB 880-9500/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9534 and analytical batch 880-9521 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-1402-A-2-C MS) and (890-1402-A-2-D MSD). Evidence of matrix interferences is not obvious.

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

**GC Semi VOA**

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: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Client Sample ID: PH02**  
Date Collected: 10/05/21 10:45  
Date Received: 10/12/21 14:04  
Sample Depth: 1

**Lab Sample ID: 890-1402-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/15/21 10:00	10/16/21 14:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/15/21 10:00	10/16/21 14:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/15/21 10:00	10/16/21 14:33	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/15/21 10:00	10/16/21 14:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/15/21 10:00	10/16/21 14:33	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/15/21 10:00	10/16/21 14:33	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		117		70 - 130		10/15/21 10:00	10/16/21 14:33	1
1,4-Difluorobenzene (Surr)		99		70 - 130		10/15/21 10:00	10/16/21 14:33	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/19/21 13:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/14/21 14:29	10/17/21 16:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/14/21 14:29	10/17/21 16:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 14:29	10/17/21 16:15	1
<b>Surrogate</b>								
1-Chlorooctane	105		70 - 130			10/14/21 14:29	10/17/21 16:15	1
<i>o</i> -Terphenyl	114		70 - 130			10/14/21 14:29	10/17/21 16:15	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.9		5.03	mg/Kg			10/18/21 17:17	1

**Client Sample ID: PH02A**

Date Collected: 10/05/21 10:49  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1402-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:10	1
Toluene	<0.00200	U F2 F1	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:10	1
Ethylbenzene	<0.00200	U F1	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:10	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399	mg/Kg		10/15/21 14:17	10/17/21 19:10	1
o-Xylene	<0.00200	U F2 F1	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:10	1
Xylenes, Total	<0.00399	U F1	0.00399	mg/Kg		10/15/21 14:17	10/17/21 19:10	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		120		70 - 130		10/15/21 14:17	10/17/21 19:10	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Client Sample ID: PH02A**  
Date Collected: 10/05/21 10:49  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1402-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	10/15/21 14:17	10/17/21 19:10	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/19/21 13:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/14/21 14:29	10/17/21 16:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 14:29	10/17/21 16:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/14/21 14:29	10/17/21 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	10/14/21 14:29	10/17/21 16:56	1
o-Terphenyl	103		70 - 130	10/14/21 14:29	10/17/21 16:56	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.1		5.01	mg/Kg			10/18/21 17:22	1

**Client Sample ID: PH02B****Lab Sample ID: 890-1402-3**

Matrix: Solid

Date Collected: 10/05/21 10:55

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/15/21 14:17	10/17/21 19:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:17	10/17/21 19:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/15/21 14:17	10/17/21 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	10/15/21 14:17	10/17/21 19:30	1
1,4-Difluorobenzene (Surr)	125		70 - 130	10/15/21 14:17	10/17/21 19:30	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/19/21 13:25	1

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**Client Sample Results**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Client Sample ID: PH02B**  
Date Collected: 10/05/21 10:55  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1402-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/14/21 14:29	10/17/21 17:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 14:29	10/17/21 17:17	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/14/21 14:29	10/17/21 17:17	1
<b>Surrogate</b>								
1-Chlorooctane	90		70 - 130			10/14/21 14:29	10/17/21 17:17	1
<i>o-Terphenyl</i>	97		70 - 130			10/14/21 14:29	10/17/21 17:17	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.59		4.95	mg/Kg			10/18/21 17:28	1

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**Surrogate Summary**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Matrix: Solid****Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1402-1	PH02	117	99
890-1402-2	PH02A	120	100
890-1402-2 MS	PH02A	152 S1+	106
890-1402-2 MSD	PH02A	194 S1+	15 S1-
890-1402-3	PH02B	88	125
890-1415-A-18-C MS	Matrix Spike	110	118
890-1415-A-18-D MSD	Matrix Spike Duplicate	58 S1-	91
LCS 880-9467/1-A	Lab Control Sample	84	88
LCS 880-9534/1-A	Lab Control Sample	102	106
LCSD 880-9467/2-A	Lab Control Sample Dup	95	102
LCSD 880-9534/2-A	Lab Control Sample Dup	101	107
MB 880-9462/5-A	Method Blank	111	95
MB 880-9467/5-A	Method Blank	55 S1-	94
MB 880-9500/5-A	Method Blank	55 S1-	92
MB 880-9534/5-A	Method Blank	109	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**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-7052-A-1-F MS	Matrix Spike	98	93
880-7052-A-1-G MSD	Matrix Spike Duplicate	105	101
890-1402-1	PH02	105	114
890-1402-2	PH02A	94	103
890-1402-3	PH02B	90	97
LCS 880-9483/2-A	Lab Control Sample	84	85
LCSD 880-9483/3-A	Lab Control Sample Dup	92	94
MB 880-9483/1-A	Method Blank	104	117

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-9462/5-A****Matrix: Solid****Analysis Batch: 9521****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9462**

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		10/14/21 12:35	10/16/21 23:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/14/21 12:35	10/16/21 23:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/14/21 12:35	10/16/21 23:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/14/21 12:35	10/16/21 23:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/14/21 12:35	10/16/21 23:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/14/21 12:35	10/16/21 23:24	1
Surrogate	MB		MB		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	111			5+ - 17+		1+014081 18/72	1+013081 87/84	1	
1:4-, Fluorobenzene (Surr)	92			5+ - 17+		1+014081 18/72	1+013081 87/84	1	

**Lab Sample ID: MB 880-9467/5-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9467**

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Surrogate	MB		MB		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	22	S1-		5+ - 17+		1+012081 1+/++	1+013081 +3/17	1	
1:4-, Fluorobenzene (Surr)	94			5+ - 17+		1+012081 1+/++	1+013081 +3/17	1	

**Lab Sample ID: LCS 880-9467/1-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9467**

Analyte	Spike		LCS		Unit	D	%Rec.		Limits
	Added	Result	Result	Qualifier			%Rec	Limits	
Benzene	0.100	0.0R80	0.0R80		mg/Kg		R9	R0 - 130	
Toluene	0.100	0.08483			mg/Kg		85	R0 - 130	
Ethylbenzene	0.100	0.0R95R			mg/Kg		80	R0 - 130	
m-Xylene & p-Xylene	0.200	0.15R2			mg/Kg		R9	R0 - 130	
o-Xylene	0.100	0.08002			mg/Kg		80	R0 - 130	
Surrogate	LCS		LCS		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	i 4			5+ - 17+					
1:4-, Fluorobenzene (Surr)	i i			5+ - 17+					

**Lab Sample ID: LCSD 880-9467/2-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9467**

Analyte	Spike		LCSD		Unit	D	%Rec.		RPD
	Added	Result	Result	Qualifier			%Rec	Limits	
Benzene	0.100	0.09138	0.09138		mg/Kg		91	R0 - 130	15

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: MB 880-9500/5-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9500**

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/14/21 16:10	10/15/21 16:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/14/21 16:10	10/15/21 16:20	1
Surrogate	MB		MB					
	%Recovery	Qualifier		Limits	Prepared		Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	22	S1-		5+ - 17+		1+014081 13/1+	1+012081 13/8+	1
1:4-, Fluorobenzene (Surr)	98			5+ - 17+		1+014081 13/1+	1+012081 13/8+	1

**Lab Sample ID: MB 880-9534/5-A****Matrix: Solid****Analysis Batch: 9521****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9534**

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:1R	10/1R21 18:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:1R	10/1R21 18:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:1R	10/1R21 18:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/15/21 14:1R	10/1R21 18:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/15/21 14:1R	10/1R21 18:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/15/21 14:1R	10/1R21 18:48	1
Surrogate	MB		MB					
	%Recovery	Qualifier		Limits	Prepared		Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1+9			5+ - 17+		1+012081 14/15	1+015081 1i /4i	1
1:4-, Fluorobenzene (Surr)	9i			5+ - 17+		1+012081 14/15	1+015081 1i /4i	1

**Lab Sample ID: LCS 880-9534/1-A****Matrix: Solid****Analysis Batch: 9521****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9534**

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits
	Added	Result						
Benzene	0.100	0.1008			mg/Kg		101	R0 - 130
Toluene	0.100	0.0916R			mg/Kg		92	R0 - 130
Ethylbenzene	0.100	0.0899R			mg/Kg		90	R0 - 130
m-Xylene & p-Xylene	0.200	0.1851			mg/Kg		93	R0 - 130
o-Xylene	0.100	0.09500			mg/Kg		95	R0 - 130
Surrogate	LCS		LCS					
	%Recovery	Qualifier		Limits				
4-Bromofluorobenzene (Surr)	1+8			5+ - 17+				
1:4-, Fluorobenzene (Surr)	1+3			5+ - 17+				

**Lab Sample ID: LCSD 880-9534/2-A****Matrix: Solid****Analysis Batch: 9521****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9534**

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result								
Benzene	0.100	0.09648			mg/Kg		96	R0 - 130	4	35
Toluene	0.100	0.08548			mg/Kg		85	R0 - 130	R	35
Ethylbenzene	0.100	0.08348			mg/Kg		83	R0 - 130	R	35
m-Xylene & p-Xylene	0.200	0.1R19			mg/Kg		86	R0 - 130	R	35
o-Xylene	0.100	0.08628			mg/Kg		86	R0 - 130	10	35

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**QC Sample Results**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

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

<b>Surrogate</b>	<b>LCSD</b>	<b>LCSD</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
4-Bromofluorobenzene (Surr)			1+1		5+ - 17+
1:4-, Fluorobenzene (Surr)			1+5		5+ - 17+

**Lab Sample ID: 890-1402-2 MS****Client Sample ID: PH02A****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 9521****Prep Batch: 9534**

<b>Analyte</b>	<b>Sample</b>	<b>Sample</b>	<b>Spike</b>	<b>MS</b>	<b>MS</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>Limits</b>	<b>%Rec.</b>
	<b>Result</b>	<b>Qualifier</b>	<b>Added</b>	<b>Result</b>	<b>Qualifier</b>					
Benzene	<0.00200	U F1	0.0994	0.050R3	F1	mg/Kg		51	R0 - 130	
Toluene	<0.00200	U F2 F1	0.0994	0.05359	F1	mg/Kg		54	R0 - 130	
Ethylbenzene	<0.00200	U F1	0.0994	0.05R66	F1	mg/Kg		58	R0 - 130	
m-Xylene & p-Xylene	<0.00399	U F1	0.199	0.1203	F1	mg/Kg		61	R0 - 130	
o-Xylene	<0.00200	U F2 F1	0.0994	0.0R330		mg/Kg		R4	R0 - 130	

<b>Surrogate</b>	<b>MS</b>	<b>MS</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
4-Bromofluorobenzene (Surr)	128	S1C			5+ - 17+
1:4-, Fluorobenzene (Surr)	1+3				5+ - 17+

**Lab Sample ID: 890-1402-2 MSD****Client Sample ID: PH02A****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 9521****Prep Batch: 9534**

<b>Analyte</b>	<b>Sample</b>	<b>Sample</b>	<b>Spike</b>	<b>MSD</b>	<b>MSD</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>Limits</b>	<b>RPD</b>
	<b>Result</b>	<b>Qualifier</b>	<b>Added</b>	<b>Result</b>	<b>Qualifier</b>					
Benzene	<0.00200	U F1	0.100	0.05025	F1	mg/Kg		50	R0 - 130	1
Toluene	<0.00200	U F2 F1	0.100	0.1110	F2	mg/Kg		111	R0 - 130	R0
Ethylbenzene	<0.00200	U F1	0.100	0.05R56	F1	mg/Kg		58	R0 - 130	0
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1420		mg/Kg		R1	R0 - 130	1R
o-Xylene	<0.00200	U F2 F1	0.100	0.1349	F1 F2	mg/Kg		135	R0 - 130	59

<b>Surrogate</b>	<b>MSD</b>	<b>MSD</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
4-Bromofluorobenzene (Surr)	194	S1C			5+ - 17+
1:4-, Fluorobenzene (Surr)	12	S1-			5+ - 17+

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-9483/1-A****Client Sample ID: Method Blank****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 9596****Prep Batch: 9483**

<b>Analyte</b>	<b>MB</b>	<b>MB</b>	<b>Result</b>	<b>Qualifier</b>	<b>RL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>Result</b>	<b>Qualifier</b>								
Gasoline ) ange 7 rganics vG) 7 f-C6-C10	<50.0	U	50.0		mg/Kg			10/14/21 14:29	10/1R/21 11:31	1
Diesel ) ange 7 rganics v7 der C10-C28f	<50.0	U	50.0		mg/Kg			10/14/21 14:29	10/1R/21 11:31	1
7 II ) ange 7 rganics v7 der C28-C36f	<50.0	U	50.0		mg/Kg			10/14/21 14:29	10/1R/21 11:31	1

<b>Surrogate</b>	<b>MB</b>	<b>MB</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-h chloroethane	1+4				5+ - 17+	1+014081 14/89	1+015081 11/71	1
o-percen6l	115				5+ - 17+	1+014081 14/89	1+015081 11/71	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: LCS 880-9483/2-A****Matrix: Solid****Analysis Batch: 9596**

Analyte	Spike Added	LCS		Unit	D	%Rec.		Limits
		Result	Qualifier			%Rec.	Limits	
Gasoline ) ange 7 rganics vG) 7 f-C6-C10	1000	93R4		mg/Kg		94	R0 - 130	
Diesel ) ange 7 rganics v7 der C10-C28f	1000	842.2		mg/Kg		84	R0 - 130	
<b>Surrogate</b>	<b>LCS</b>	<b>LCS</b>						
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
1-h cloroot aTne	i 4		5+ - 17+					
o-peryen6l	i 2		5+ - 17+					

**Lab Sample ID: LCSD 880-9483/3-A****Matrix: Solid****Analysis Batch: 9596**

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Gasoline ) ange 7 rganics vG) 7 f-C6-C10	1000	1061		mg/Kg		106	R0 - 130	12	20
Diesel ) ange 7 rganics v7 der C10-C28f	1000	929.4		mg/Kg		93	R0 - 130	10	20
<b>Surrogate</b>	<b>LCSD</b>	<b>LCSD</b>							
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
1-h cloroot aTne	98		5+ - 17+						
o-peryen6l	94		5+ - 17+						

**Lab Sample ID: 880-7052-A-1-F MS****Matrix: Solid****Analysis Batch: 9596**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec.		RPD	Limit
				Result	Qualifier			%Rec.	Limits		
Gasoline ) ange 7 rganics vG) 7 f-C6-C10	<49.9	U	99R	11R0		mg/Kg		11R	R0 - 130		
Diesel ) ange 7 rganics v7 der C10-C28f	<49.9	U	99R	966.2		mg/Kg		94	R0 - 130		
<b>Surrogate</b>	<b>MS</b>	<b>MS</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
1-h cloroot aTne	9i		5+ - 17+								
o-peryen6l	97		5+ - 17+								

**Lab Sample ID: 880-7052-A-1-G MSD****Matrix: Solid****Analysis Batch: 9596**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec.		RPD	Limit
				Result	Qualifier			%Rec.	Limits		
Gasoline ) ange 7 rganics vG) 7 f-C6-C10	<49.9	U	1000	11R0		mg/Kg		11R	R0 - 130	0	20
Diesel ) ange 7 rganics v7 der C10-C28f	<49.9	U	1000	1041		mg/Kg		102	R0 - 130	R	20
<b>Surrogate</b>	<b>MSD</b>	<b>MSD</b>									
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
1-h cloroot aTne	1+2		5+ - 17+								

**Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 9483**

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

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

Lab Sample ID: 880-7052-A-1-G MSD

Matrix: Solid

Analysis Batch: 9596

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9483

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
o-percen6l			1+1		5+ - 17+

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-9560/1-A

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlori( e			<5.00	U	5.00	mg/Kg			10/18/21 16:3R	1

Lab Sample ID: LCS 880-9560/2-A

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits
Chlori( e	Added			240.8		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-9560/3-A

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Chlori( e	Added			241.5		mg/Kg		9R	90 - 110	0	20

Lab Sample ID: 880-7095-A-1-B MS

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier			mg/Kg			
Chlori( e			248	544.3				mg/Kg		94	90 - 110

Lab Sample ID: 880-7095-A-1-C MSD

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Result	Qualifier	Unit	D	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier			mg/Kg			Limit
Chlori( e			248	545.2				mg/Kg		95	90 - 110

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**QC Association Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**GC VOA****Prep Batch: 9462**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-9462/5-A	Method Blank	Total/NA	Solid	5035	

**Prep Batch: 9467**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Total/NA	Solid	5035	
MB 880-9467/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9467/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9467/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1415-A-18-C MS	Matrix Spike	Total/NA	Solid	5035	
890-1415-A-18-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Prep Batch: 9500**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-9500/5-A	Method Blank	Total/NA	Solid	5035	

**Analysis Batch: 9521**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-2	PH02A	Total/NA	Solid	8021B	9534
890-1402-3	PH02B	Total/NA	Solid	8021B	9534
MB 880-9462/5-A	Method Blank	Total/NA	Solid	8021B	9462
MB 880-9534/5-A	Method Blank	Total/NA	Solid	8021B	9534
LCS 880-9534/1-A	Lab Control Sample	Total/NA	Solid	8021B	9534
LCSD 880-9534/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9534
890-1402-2 MS	PH02A	Total/NA	Solid	8021B	9534
890-1402-2 MSD	PH02A	Total/NA	Solid	8021B	9534

**Analysis Batch: 9527**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Total/NA	Solid	8021B	9467
MB 880-9467/5-A	Method Blank	Total/NA	Solid	8021B	9467
MB 880-9500/5-A	Method Blank	Total/NA	Solid	8021B	9500
LCS 880-9467/1-A	Lab Control Sample	Total/NA	Solid	8021B	9467
LCSD 880-9467/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9467
890-1415-A-18-C MS	Matrix Spike	Total/NA	Solid	8021B	9467
890-1415-A-18-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	9467

**Prep Batch: 9534**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-2	PH02A	Total/NA	Solid	5035	
890-1402-3	PH02B	Total/NA	Solid	5035	
MB 880-9534/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9534/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9534/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1402-2 MS	PH02A	Total/NA	Solid	5035	
890-1402-2 MSD	PH02A	Total/NA	Solid	5035	

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Total/NA	Solid	Total BTEX	
890-1402-2	PH02A	Total/NA	Solid	Total BTEX	
890-1402-3	PH02B	Total/NA	Solid	Total BTEX	

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**QC Association Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**GC Semi VOA****Prep Batch: 9483**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Total/NA	Solid	8015NM Prep	
890-1402-2	PH02A	Total/NA	Solid	8015NM Prep	
890-1402-3	PH02B	Total/NA	Solid	8015NM Prep	
MB 880-9483/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9483/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9483/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7052-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7052-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 9596**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Total/NA	Solid	8015B NM	9483
890-1402-2	PH02A	Total/NA	Solid	8015B NM	9483
890-1402-3	PH02B	Total/NA	Solid	8015B NM	9483
MB 880-9483/1-A	Method Blank	Total/NA	Solid	8015B NM	9483
LCS 880-9483/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9483
LCSD 880-9483/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9483
880-7052-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	9483
880-7052-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9483

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Total/NA	Solid	8015 NM	
890-1402-2	PH02A	Total/NA	Solid	8015 NM	
890-1402-3	PH02B	Total/NA	Solid	8015 NM	

**HPLC/IC****Leach Batch: 9560**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Soluble	Solid	DI Leach	
890-1402-2	PH02A	Soluble	Solid	DI Leach	
890-1402-3	PH02B	Soluble	Solid	DI Leach	
MB 880-9560/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9560/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9560/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7095-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7095-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 9759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH02	Soluble	Solid	300.0	9560
890-1402-2	PH02A	Soluble	Solid	300.0	9560
890-1402-3	PH02B	Soluble	Solid	300.0	9560
MB 880-9560/1-A	Method Blank	Soluble	Solid	300.0	9560
LCS 880-9560/2-A	Lab Control Sample	Soluble	Solid	300.0	9560
LCSD 880-9560/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9560
880-7095-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	9560
880-7095-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9560

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**Lab Chronicle**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

**Client Sample ID: PH02**

Date Collected: 10/05/21 10:45  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1402-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	9467	10/15/21 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9527	10/16/21 14:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			9900	10/19/21 13:42	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			9896	10/19/21 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	9483	10/14/21 14:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9596	10/17/21 16:15	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	9560	10/15/21 17:31	CA	XEN MID
Soluble	Analysis	300.0		1			9759	10/18/21 17:17	SC	XEN MID

**Client Sample ID: PH02A**

Date Collected: 10/05/21 10:49  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1402-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	9534	10/15/21 14:17	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9521	10/17/21 19:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9900	10/19/21 13:42	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			9896	10/19/21 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	9483	10/14/21 14:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9596	10/17/21 16:56	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	9560	10/15/21 17:31	CA	XEN MID
Soluble	Analysis	300.0		1			9759	10/18/21 17:22	SC	XEN MID

**Client Sample ID: PH02B**

Date Collected: 10/05/21 10:55  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1402-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	9534	10/15/21 14:17	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	9521	10/17/21 19:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			9900	10/19/21 13:42	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			9896	10/19/21 13:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	9483	10/14/21 14:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			9596	10/17/21 17:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	9560	10/15/21 17:31	CA	XEN MID
Soluble	Analysis	300.0		1			9759	10/18/21 17:28	SC	XEN MID

**Laboratory References:**

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

Eurofins Xenco, Carlsbad

## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

### **Laboratory: Eurofins Xenco, Midland**

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

## Method Summary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 31402909.110

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

**Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Xenco, Carlsbad

**Sample Summary**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
 SDG: 31402909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1402-1	PH02	Solid	10/05/21 10:45	10/12/21 14:04	1
890-1402-2	PH02A	Solid	10/05/21 10:49	10/12/21 14:04	2
890-1402-3	PH02B	Solid	10/05/21 10:55	10/12/21 14:04	3

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## Chain of Custody

Work Order No:

Houston, TX (281) 240-4200, Dallas, TX (214) 982-0300, San Antonio, TX (210) 509-3334  
Midland, TX (432) 704-5440, El Paso, TX (915) 553-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7850, Carlsbad, NM (575) 988-3198, Phoenix, AZ (#80) 355-0900  
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-5701  
Atlanta, GA (770) 449-8800

Atlanta, GA (110) 449-8800

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Page 1 of 1

<b>Project Manager:</b>	Kalei Jennings	<b>Bill to (if different)</b>								
<b>Company Name:</b>	WSP USA	<b>Company Name:</b>								
<b>Address:</b>	3300 North A Street	<b>Address:</b>								
<b>City, State ZIP:</b>	Midland, TX 79705	<b>City, State ZIP:</b>								
<b>Phone:</b>	(817) 683-2503	<b>Email:</b>	kalei.jennings@wsp.com							
						<b>Work Order Comments</b>				
						<b>Program:</b> UST/PST <input type="checkbox"/> PRP <input checked="" type="checkbox"/> Brownfield <input type="checkbox"/> RR <input type="checkbox"/> Superfund <input type="checkbox"/>				
						<b>State of Project:</b>				
						Reporting Level <input type="checkbox"/>	Level <input type="checkbox"/>	PST/U <input type="checkbox"/>	TR <input type="checkbox"/>	Level <input type="checkbox"/>
						Deliverables: EDD <input type="checkbox"/>	AdAPT <input type="checkbox"/>	Other: <input type="checkbox"/>		

<b>Project Name:</b>	Fee Fee 01H	<b>Turn Around</b>
<b>Project Number:</b>	31402909.110	<b>Routine:</b> <input checked="" type="checkbox"/>
<b>Location:</b>	Lea County	<b>Rush:</b>
<b>Sampler's Name:</b>	Fatima Smith	<b>Due Date:</b>

**ANALYSIS REQUEST**



<b>SAMPLE RECEIPT</b>	<b>Temp Blank:</b>	<b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>	<b>Over/Under:</b>	<b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>
<b>Temperature (°C):</b>	<b>26.2</b>	<b>2.4</b>	<b>Thermometer ID:</b>	
<b>Received In-Act:</b>	<b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>	<b>TWN-007</b>		
<b>Cooler Custody Seals:</b>	<b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>	<b>Correction Factor:</b>		
<b>Sample Custody Seals:</b>	<b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/>	<b>Total Containers:</b>		
<b>Number of Containers</b>				
PA 8015)				
EPA 0=8021)				
e (EPA 300.0)				

890-1402 Chain of Custody

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO <sub>2</sub>	Na	Sr	Tl	Sn	U	V	Zn							
Circle Method(s) and Metal(s) to be analyzed			TCLP + SPLP-6010: 8RCRA		Sb		As		Ba		Be		Cd		Cr		Co		Cu		Pb		Mn		Mo		Ni		Se		Ag		Tl		U		V		Zn		
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.																																									
Requished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time																																				
1 <i>[Signature]</i>	<i>[Signature]</i>	10-22-21 15:00	<i>[Signature]</i>	<i>[Signature]</i>	10-22-21 14:00																																				
3																																									
5																																									
6																																									

**Total** 200.7 / 60.0    **200.8 / 6020:**    **8RCRA** 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Se Ag SiO<sub>2</sub> Na Sr Ti U    **Circle Method(s) and Metal(s) to be analyzed**    **TCLP + SPLP** 60.0 - 8RCRA - Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U    **1631 / 245.1 / 7470 / 7471** Hg

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

## Chain of Custody Record



eurofins

Environment Testing  
America

<b>Client Information (Sub Contract Lab)</b>			
Client Contact:	Sampler:	Lab PM:	GC/C No:
Shipping/Receiving:	Phone:	Kramer, Jessica	880-459-1
Company:	E-Mail:	State of Origin:	Page:
Eurofins Xenco	jessica.kramer@eurofinsx.com	New Mexico	Page 1 of 1
Address:	NELAP - Louisiana, NELAP - Texas		
City:	NELAP - Louisiana, NELAP - Texas		
Midland			
State, Zip:			
TX, 79701			
Phone:			
432-704-5440(Tel)			
Email:			
Project Name:			
Fee, fee 011h			
Site:			
<b>Analysis Requested</b>			
<input checked="" type="checkbox"/> Due Date Requested: 10/18/2021 <input type="checkbox"/> TAT Requested (days): <input type="checkbox"/> Filtered Sample (Yes or No) <input type="checkbox"/> Perform MS/MSD (Yes or No)			
8015MOD_NM/8015NM_S_Prep (MOD) Full TPH 8015MOD_Calc 300_ORGFM_28D/DI_LEACH Chloride 8021B/6036FP_Calc (MOD) BTEX Total_BTEX_GCV			
<b>Preservation Codes</b>			
A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Antifreeze H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - Acetate P - Na2O4S Q - Na2SCo3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylsuccinate U - Acetone V - MCA W - pH 4-5 Z - other(specify)			
<b>Special Instructions/Note:</b>			
<b>Sample Identification - Client ID (Lab ID)</b>			
Sample ID:	Sample Date:	Sample Time:	Matrix (Water, Soil, etc.)
PH02 (890-1402-1)	10/5/21	10:45	Mountain
PH02A (890-1402-2)	10/5/21	10:49	Mountain
PH02B (890-1402-3)	10/5/21	10:55	Mountain
<b>Total Number of containers</b>			
<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>			
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For    Months			
<b>Special Instructions/QC Requirements</b>			
Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For    Months			
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Deliverable Requested I II III IV Other (specify):	Company:	Received by:	Company
Custody Seals Intact:	Custody Seal No:	Received by:	Date/Time:
A Yes A No	Cooler Temperature(s) °C and Other Remarks:  10/11-7		

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1402-1

SDG Number: 31402909.110

**Login Number:** 1402**List Source:** Eurofins Xenco, Carlsbad**List Number:** 1**Creator:** Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1402-1

SDG Number: 31402909.110

**Login Number:** 1402**List Source:** Eurofins Xenco, Midland**List Number:** 2**List Creation:** 10/13/21 12:17 PM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1403-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

Authorized for release by:  
10/19/2021 1:32:41 PM

Jessica Kramer, Project Manager  
(432)704-5440  
[jessica.kramer@eurofinset.com](mailto: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: Fez Fee 011H

Laboratory Job ID: 890-1403-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1403-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, 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: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 21403909.110

**Job ID: 890-1403-1**

**Laboratory: Eurofins Xenco, Carlsbad**

**Narrative****Job Narrative  
890-1403-1****Receipt**

The samples were received on 10/13/3031 3:04 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 3.4°C

**GC VOA**

Method 8031B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9467 and analytical batch 880-9736 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (5CS) recovery was within acceptance limits.

Method 8031B: Surrogate recovery for the following samples were outside control limits: (MB 880-94L6/7-A), (MB 880-9467/7-A) and (890-1409-A-1-D). Evidence of matrix interferences is not obvious.

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

**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: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 21403909.110

**Client Sample ID: PH01**  
Date Collected: 10/05/21 10:23  
Date Received: 10/12/21 14:04  
Sample Depth: 1

**Lab Sample ID: 890-1403-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00303	U	0.00303	mg/Kg		10/15/31 12:12	10/16/31 03:15	1
Toluene	<0.00303	U	0.00303	mg/Kg		10/15/31 12:12	10/16/31 03:15	1
Ethylbenzene	<0.00303	U	0.00303	mg/Kg		10/15/31 12:12	10/16/31 03:15	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00437</b>		0.00404	mg/Kg		10/15/31 12:12	10/16/31 03:15	1
o-Xylene	<0.00303	U	0.00303	mg/Kg		10/15/31 12:12	10/16/31 03:15	1
<b>Xylenes, Total</b>	<b>0.00437</b>		0.00404	mg/Kg		10/15/31 12:12	10/16/31 03:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105		70 - 130			10/15/21 13:13	10/17/21 02:15	1
1,4-Difluorobenzene (Surr)	94		70 - 130			10/15/21 13:13	10/17/21 02:15	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00437</b>		0.00404	mg/Kg			10/19/31 12:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tot& TPH	<49.9	U	49.9	mg/Kg			10/19/31 12:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G&poline s &nge , rg&nicp	<49.9	U	49.9	mg/Kg		10/14/31 14:39	10/16/31 16:26	1
aGs , RCO-C10								
Diepel s &nge , rg&nicp a (er	<49.9	U	49.9	mg/Kg		10/14/31 14:39	10/16/31 16:26	1
C10-C38R								
, ll s &nge , rg&nicp a (er C38-C2OR	<49.9	U	49.9	mg/Kg		10/14/31 14:39	10/16/31 16:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	103		70 - 130			10/14/21 14:29	10/17/21 17:37	1
<i>o-Terphenyl</i>	107		70 - 130			10/14/21 14:29	10/17/21 17:37	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>16.4</b>		5.04	mg/Kg			10/18/31 16:45	1

**Client Sample ID: PH01A**

Date Collected: 10/05/21 10:25  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1403-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00301	U	0.00301	mg/Kg		10/15/31 12:12	10/16/31 03:41	1
Toluene	<0.00301	U	0.00301	mg/Kg		10/15/31 12:12	10/16/31 03:41	1
Ethylbenzene	<0.00301	U	0.00301	mg/Kg		10/15/31 12:12	10/16/31 03:41	1
m-Xylene ) 7-Xylene	<0.00403	U	0.00403	mg/Kg		10/15/31 12:12	10/16/31 03:41	1
o-Xylene	<0.00301	U	0.00301	mg/Kg		10/15/31 12:12	10/16/31 03:41	1
Xylenepv Tot&	<0.00403	U	0.00403	mg/Kg		10/15/31 12:12	10/16/31 03:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98		70 - 130			10/15/21 13:13	10/17/21 02:41	1

Eurofin Xencov C&amp;rlpb&amp;d

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 21403909.110

**Client Sample ID: PH01A**  
Date Collected: 10/05/21 10:25  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1403-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	10/15/21 13:13	10/17/21 02:41	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tot& BTEX	<0.00403	U	0.00403	mg/Kg			10/19/31 12:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.4		49.8	mg/Kg			10/19/31 12:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G&poline s &nge , rg&nipp aGs , RCO-C10	<49.8	U	49.8	mg/Kg		10/14/31 14:39	10/16/31 16:56	1
Diesel Range Organics (Over C10-C28)	59.4		49.8	mg/Kg		10/14/31 14:39	10/16/31 16:56	1
, II s &nge , rg&nipp a (er C38-C2OR	<49.8	U	49.8	mg/Kg		10/14/31 14:39	10/16/31 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			10/14/21 14:29	10/17/21 17:57	1
o-Terphenyl	93		70 - 130			10/14/21 14:29	10/17/21 17:57	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.7		4.99	mg/Kg			10/18/31 16:50	1

**Client Sample ID: PH01B****Lab Sample ID: 890-1403-3**

Matrix: Solid

Date Collected: 10/05/21 10:32

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/15/31 12:12	10/16/31 02:06	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/15/31 12:12	10/16/31 02:06	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/15/31 12:12	10/16/31 02:06	1
m-Xylene ) 7-Xylene	<0.00298	U	0.00298	mg/Kg		10/15/31 12:12	10/16/31 02:06	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/15/31 12:12	10/16/31 02:06	1
XylenepvTot&	<0.00298	U	0.00298	mg/Kg		10/15/31 12:12	10/16/31 02:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			10/15/21 13:13	10/17/21 03:07	1
1,4-Difluorobenzene (Surr)	94		70 - 130			10/15/21 13:13	10/17/21 03:07	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tot& BTEX	<0.00298	U	0.00298	mg/Kg			10/19/31 12:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tot& TPH	<50.0	U	50.0	mg/Kg			10/19/31 12:35	1

Eurofin XencovC&amp;rlpb&amp;d

**Client Sample Results**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 21403909.110

**Client Sample ID: PH01B**  
Date Collected: 10/05/21 10:32  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1403-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G&poline s &nge , rg&nicp aGs , RCO-C10	<50.0	U	50.0	mg/Kg		10/14/31 14:39	10/16/31 18:18	1
Diepel s &nge , rg&nicp a (er C10-C38R	<50.0	U	50.0	mg/Kg		10/14/31 14:39	10/16/31 18:18	1
, II s &nge , rg&nicp a (er C38-C2OR	<50.0	U	50.0	mg/Kg		10/14/31 14:39	10/16/31 18:18	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	10/14/21 14:29	10/17/21 18:18	1
o-Terphenyl	98		70 - 130	10/14/21 14:29	10/17/21 18:18	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.8		4.96	mg/Kg			10/18/31 16:50	1

**Surrogate Summary**

Client: WSP USA Inc.

Job ID: 890-1403-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Matrix: Solid****Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1403-1	PH01	105	94
890-1403-2	PH01A	98	99
890-1403-3	PH01B	99	94
890-1409-A-1-B MS	Matrix Spike	97	108
890-1409-A-1-C MSD	Matrix Spike Duplicate	118	112
LCS 880-9475/1-A	Lab Control Sample	90	103
LCSD 880-9475/2-A	Lab Control Sample Dup	91	105
MB 880-9467/5-A	Method Blank	55 S1-	94
MB 880-9475/5-A	Method Blank	59 S1-	94

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-7052-A-1-F MS	Matrix Spike	98	93
880-7052-A-1-G MSD	Matrix Spike Duplicate	105	101
890-1403-1	PH01	103	107
890-1403-2	PH01A	88	93
890-1403-3	PH01B	91	98
LCS 880-9483/2-A	Lab Control Sample	84	85
LCSD 880-9483/3-A	Lab Control Sample Dup	92	94
MB 880-9483/1-A	Method Blank	104	117

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1403-1  
SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-9467/5-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9467**

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/15/21 10:00	10/16/21 06:13	1
Surrogate	MB		MB		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	11	S7-		03 - 7/3		73515 7 7363	73525 7 3267		7
7 <i>i</i> -Fluorobenzene (Surr)	, 4			03 - 7/3		73515 7 7363	73525 7 3267		7

**Lab Sample ID: MB 880-9475/5-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9475**

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		10/15/21 13:13	10/16/21 20:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/15/21 13:13	10/16/21 20:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/15/21 13:13	10/16/21 20:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/15/21 13:13	10/16/21 20:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/15/21 13:13	10/16/21 20:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/15/21 13:13	10/16/21 20:13	1
Surrogate	MB		MB		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	1,	S7-		03 - 7/3		73515 7 7767	73525 7 : 367		7
7 <i>i</i> -Fluorobenzene (Surr)	, 4			03 - 7/3		73515 7 7767	73525 7 : 367		7

**Lab Sample ID: LCS 880-9475/1-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9475**

Analyte	Spike		LCS		Unit	D	%Rec.	Limits	
	Added	Result	Qualifier						
Benzene	0.100	0.08997			mg/Kg		90	70 - 130	
Toluene	0.100	0.08622			mg/Kg		86	70 - 130	
Ethylbenzene	0.100	0.08840			mg/Kg		88	70 - 130	
m-Xylene & p-Xylene	0.200	0.1738			mg/Kg		87	70 - 130	
o-Xylene	0.100	0.08893			mg/Kg		89	70 - 130	
Surrogate	LCS		LCS		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	, 3			03 - 7/3		73515 7 7767	73525 7 : 367		7
7 <i>i</i> -Fluorobenzene (Surr)	73/			03 - 7/3		73515 7 7767	73525 7 : 367		7

**Lab Sample ID: LCSD 880-9475/2-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9475**

Analyte	Spike		LCSD		Unit	D	%Rec.	Limits	RPD
	Added	Result	Qualifier						
Benzene	0.100	0.08597			mg/Kg		86	70 - 130	5

Eurofins Xenco, Carlsbad

**QC Sample Results**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1403-1  
SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: LCSD 880-9475/2-A****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9475**

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
		Added	Result	Qualifier							
Toluene		0.100	0.08904		mg/Kg		89	70 - 130	3	35	
Ethylbenzene		0.100	0.08589		mg/Kg		86	70 - 130	3	35	
m-Xylene & p-Xylene		0.200	0.1697		mg/Kg		85	70 - 130	2	35	
o-Xylene		0.100	0.08790		mg/Kg		88	70 - 130	1	35	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	, 7		03 - 7/ 3
7 <i>B</i> - <i>i</i> Fluorobenzene (Surr)	731		03 - 7/ 3

**Lab Sample ID: 890-1409-A-1-B MS****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 9475**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00199	U F2 F1	0.100	0.07320		mg/Kg		73	70 - 130		
Toluene	<0.00199	U F1	0.100	0.06060	F1	mg/Kg		60	70 - 130		
Ethylbenzene	<0.00199	U F2 F1	0.100	0.07085		mg/Kg		71	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.201	0.01955	F1	mg/Kg		10	70 - 130		
o-Xylene	<0.00199	U F2 F1	0.100	0.07847		mg/Kg		78	70 - 130		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	, 0		03 - 7/ 3
7 <i>B</i> - <i>i</i> Fluorobenzene (Surr)	73C		03 - 7/ 3

**Lab Sample ID: 890-1409-A-1-C MSD****Matrix: Solid****Analysis Batch: 9527****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 9475**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00199	U F2 F1	0.0990	0.03372	F2 F1	mg/Kg		34	70 - 130	74	35
Toluene	<0.00199	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F2 F1	0.0990	0.03244	F2 F1	mg/Kg		33	70 - 130	74	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.198	0.01108	F2 F1	mg/Kg		6	70 - 130	55	35
o-Xylene	<0.00199	U F2 F1	0.0990	0.04261	F2 F1	mg/Kg		43	70 - 130	59	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	77C		03 - 7/ 3
7 <i>B</i> - <i>i</i> Fluorobenzene (Surr)	77:		03 - 7/ 3

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-9483/1-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/14/21 14:29	10/17/21 11:31	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1403-1  
SDG: 31402909.110

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: MB 880-9483/1-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 14:29	10/17/21 11:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/14/21 14:29	10/17/21 11:31	1
<b>Surrogate</b>	<b>MB</b>	<b>MB</b>						
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
7-h chlorotetraene	734		03 - 7/3			73545 7 746 ,	73505 7 7767	7
o-percenol	770		03 - 7/3			73545 7 746 ,	73505 7 7767	7

**Lab Sample ID: LCS 880-9483/2-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	Spike		LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier	Limits				
Gasoline Range Organics (GRO)-C6-C10	1000	937.4		mg/Kg		94	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	842.2		mg/Kg		84	70 - 130	
<b>Surrogate</b>	<b>LCS</b>	<b>LCS</b>						
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
7-h chlorotetraene	C4		03 - 7/3					
o-percenol	C1		03 - 7/3					

**Lab Sample ID: LCSD 880-9483/3-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD
	Added	Result	Qualifier	Limits					
Gasoline Range Organics (GRO)-C6-C10	1000	1061		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	929.4		mg/Kg		93	70 - 130	10	20
<b>Surrogate</b>	<b>LCSD</b>	<b>LCSD</b>							
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
7-h chlorotetraene	, :		03 - 7/3						
o-percenol	, 4		03 - 7/3						

**Lab Sample ID: 880-7052-A-1-F MS****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	Sample		Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1170		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	966.2		mg/Kg		94	70 - 130
<b>Surrogate</b>	<b>MS</b>	<b>MS</b>							
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
7-h chlorotetraene	, C		03 - 7/3						
o-percenol	, /		03 - 7/3						

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1403-1  
SDG: 31402909.110

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

Lab Sample ID: 880-7052-A-1-G MSD

Matrix: Solid

Analysis Batch: 9596

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1170		mg/Kg		117	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1041		mg/Kg		102	70 - 130	7
Surrogate	%Recovery	Qualifier		MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
7-h-chloro- <i>alpha</i> -nhe	731			03 - 7 / 3						
<i>o</i> -perycenol	737			03 - 7 / 3						

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-9560/1-A

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U		5.00	mg/Kg			10/18/21 16:37	1

Lab Sample ID: LCS 880-9560/2-A

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride		250	240.8		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-9560/3-A

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Chloride		250	241.5		mg/Kg		97	90 - 110	0

Lab Sample ID: 880-7095-A-1-B MS

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Chloride	311		248	544.3		mg/Kg		94	0	20

Lab Sample ID: 880-7095-A-1-C MSD

Matrix: Solid

Analysis Batch: 9759

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Chloride	311		248	545.2		mg/Kg		95	0	20

Eurofins Xenco, Carlsbad

**QC Association Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 21403909.110

**GC VOA****Prep Batch: 9467**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-946h/5-A	Metaod BlknT	Nbtkl/7 A	Solid	5025	

**Prep Batch: 9475**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Nbtkl/7 A	Solid	5025	
890-1402-3	PH01A	Nbtkl/7 A	Solid	5025	
890-1402-2	PH01B	Nbtkl/7 A	Solid	5025	
MB 880-94h5/5-A	Metaod BlknT	Nbtkl/7 A	Solid	5025	
LCS 880-94h5/1-A	Lkb Control Skmple	Nbtkl/7 A	Solid	5025	
LCSD 880-94h5/3-A	Lkb Control Skmple Dup	Nbtkl/7 A	Solid	5025	
890-1409-A-1-B MS	Mktrix SpiTe	Nbtkl/7 A	Solid	5025	
890-1409-A-1-C MSD	Mktrix SpiTe Duplicte	Nbtkl/7 A	Solid	5025	

**Analysis Batch: 9527**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Nbtkl/7 A	Solid	8031B	94h5
890-1402-3	PH01A	Nbtkl/7 A	Solid	8031B	94h5
890-1402-2	PH01B	Nbtkl/7 A	Solid	8031B	94h5
MB 880-946h/5-A	Metaod BlknT	Nbtkl/7 A	Solid	8031B	94h6
MB 880-94h5/5-A	Metaod BlknT	Nbtkl/7 A	Solid	8031B	94h5
LCS 880-94h5/1-A	Lkb Control Skmple	Nbtkl/7 A	Solid	8031B	94h5
LCSD 880-94h5/3-A	Lkb Control Skmple Dup	Nbtkl/7 A	Solid	8031B	94h5
890-1409-A-1-B MS	Mktrix SpiTe	Nbtkl/7 A	Solid	8031B	94h5
890-1409-A-1-C MSD	Mktrix SpiTe Duplicte	Nbtkl/7 A	Solid	8031B	94h5

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Nbtkl/7 A	Solid	Nbtkl BNEX	
890-1402-3	PH01A	Nbtkl/7 A	Solid	Nbtkl BNEX	
890-1402-2	PH01B	Nbtkl/7 A	Solid	Nbtkl BNEX	

**GC Semi VOA****Prep Batch: 9483**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Nbtkl/7 A	Solid	80157 M Prep	
890-1402-3	PH01A	Nbtkl/7 A	Solid	80157 M Prep	
890-1402-2	PH01B	Nbtkl/7 A	Solid	80157 M Prep	
MB 880-9482/1-A	Metaod BlknT	Nbtkl/7 A	Solid	80157 M Prep	
LCS 880-9482/3-A	Lkb Control Skmple	Nbtkl/7 A	Solid	80157 M Prep	
LCSD 880-9482/2-A	Lkb Control Skmple Dup	Nbtkl/7 A	Solid	80157 M Prep	
880-h053-A-1-F MS	Mktrix SpiTe	Nbtkl/7 A	Solid	80157 M Prep	
880-h053-A-1-G MSD	Mktrix SpiTe Duplicte	Nbtkl/7 A	Solid	80157 M Prep	

**Analysis Batch: 9596**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Nbtkl/7 A	Solid	8015B 7 M	9482
890-1402-3	PH01A	Nbtkl/7 A	Solid	8015B 7 M	9482
890-1402-2	PH01B	Nbtkl/7 A	Solid	8015B 7 M	9482
MB 880-9482/1-A	Metaod BlknT	Nbtkl/7 A	Solid	8015B 7 M	9482
LCS 880-9482/3-A	Lkb Control Skmple	Nbtkl/7 A	Solid	8015B 7 M	9482

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**QC Association Summary**

Client: WSP USA Inc.

Project/Site: Fez Fee 011H

Job ID: 890-1402-1

SDG: 21403909.110

**GC Semi VOA (Continued)****Analysis Batch: 9596 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-9482/2-A	Lkb Control Skmple Dup	Nbtkl/7 A	Solid	8015B 7 M	9482
880-h053-A-1-F MS	Mktrix SpiTe	Nbtkl/7 A	Solid	8015B 7 M	9482
880-h053-A-1-G MSD	Mktrix SpiTe Duplicte	Nbtkl/7 A	Solid	8015B 7 M	9482

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Nbtkl/7 A	Solid	8015 7 M	
890-1402-3	PH01A	Nbtkl/7 A	Solid	8015 7 M	
890-1402-2	PH01B	Nbtkl/7 A	Solid	8015 7 M	

**HPLC/IC****Leach Batch: 9560**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Soluble	Solid	DI Lekca	
890-1402-3	PH01A	Soluble	Solid	DI Lekca	
890-1402-2	PH01B	Soluble	Solid	DI Lekca	
MB 880-9560/1-A	Metaod BlknT	Soluble	Solid	DI Lekca	
LCS 880-9560/3-A	Lkb Control Skmple	Soluble	Solid	DI Lekca	
LCSD 880-9560/2-A	Lkb Control Skmple Dup	Soluble	Solid	DI Lekca	
880-h095-A-1-B MS	Mktrix SpiTe	Soluble	Solid	DI Lekca	
880-h095-A-1-C MSD	Mktrix SpiTe Duplicte	Soluble	Solid	DI Lekca	

**Analysis Batch: 9759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	PH01	Soluble	Solid	200.0	9560
890-1402-3	PH01A	Soluble	Solid	200.0	9560
890-1402-2	PH01B	Soluble	Solid	200.0	9560
MB 880-9560/1-A	Metaod BlknT	Soluble	Solid	200.0	9560
LCS 880-9560/3-A	Lkb Control Skmple	Soluble	Solid	200.0	9560
LCSD 880-9560/2-A	Lkb Control Skmple Dup	Soluble	Solid	200.0	9560
880-h095-A-1-B MS	Mktrix SpiTe	Soluble	Solid	200.0	9560
880-h095-A-1-C MSD	Mktrix SpiTe Duplicte	Soluble	Solid	200.0	9560

**Lab Chronicle**

Client: WSP USA Inc.

Project/Site: Fez Fee 011H

Job ID: 890-1402-1

SDG: 21403909.110

**Client Sample ID: PH02**

Date Collected: 20/05/R2 20:R4

Date received: 20/2R/R2 21:01

**Lab Sample ID: 890-2104-2**

Matrix: Solid

Prep yBpe	Aatch yBpe	Aatch Method	vzn	Dil Nactor	Initial s moznt	Ninal s moznt	Aatch 3zmber	Prepared or s naiBFed	s naiBut	Lab
7otTI/NA	Prep	5025			4.95 a	5 g L	9465	10/15/31 12:12	KL	XEN MID
7otTI/NA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10/16/31 03:15	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/31 12:43	AJ	XEN MID
7otTI/NA	AnTlniyi	8015 NM		1			989R	10/19/31 12:35	AJ	XEN MID
7otTI/NA	Prep	8015NM Prep			10.02 a	10 g L	9482	10/14/31 14:39	DM	XEN MID
7otTI/NA	AnTlniyi	8015s NM		1			959R	10/16/31 16:26	AJ	XEN MID
Soluble	LeTch	DI LeTch			4.9Ra	50 g L	95R0	10/15/31 16:21	CA	XEN MID
Soluble	AnTlniyi	200.0		1			9659	10/18/31 16:45	SC	XEN MID

**Client Sample ID: PH02s**

Date Collected: 20/05/R2 20:R5

Date received: 20/2R/R2 21:01

**Lab Sample ID: 890-2104-R**

Matrix: Solid

Prep yBpe	Aatch yBpe	Aatch Method	vzn	Dil Nactor	Initial s moznt	Ninal s moznt	Aatch 3zmber	Prepared or s naiBFed	s naiBut	Lab
7otTI/NA	Prep	5025			4.96 a	5 g L	9465	10/15/31 12:12	KL	XEN MID
7otTI/NA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10/16/31 03:41	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/31 12:43	AJ	XEN MID
7otTI/NA	AnTlniyi	8015 NM		1			989R	10/19/31 12:35	AJ	XEN MID
7otTI/NA	Prep	8015NM Prep			10.04 a	10 g L	9482	10/14/31 14:39	DM	XEN MID
7otTI/NA	AnTlniyi	8015s NM		1			959R	10/16/31 16:56	AJ	XEN MID
Soluble	LeTch	DI LeTch			5.01 a	50 g L	95R0	10/15/31 16:21	CA	XEN MID
Soluble	AnTlniyi	200.0		1			9659	10/18/31 16:50	SC	XEN MID

**Client Sample ID: PH02A**

Date Collected: 20/05/R2 20:R4R

Date received: 20/2R/R2 21:01

**Lab Sample ID: 890-2104-4**

Matrix: Solid

Prep yBpe	Aatch yBpe	Aatch Method	vzn	Dil Nactor	Initial s moznt	Ninal s moznt	Aatch 3zmber	Prepared or s naiBFed	s naiBut	Lab
7otTI/NA	Prep	5025			5.03 a	5 g L	9465	10/15/31 12:12	KL	XEN MID
7otTI/NA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10/16/31 02:06	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/31 12:43	AJ	XEN MID
7otTI/NA	AnTlniyi	8015 NM		1			989R	10/19/31 12:35	AJ	XEN MID
7otTI/NA	Prep	8015NM Prep			10.01 a	10 g L	9482	10/14/31 14:39	DM	XEN MID
7otTI/NA	AnTlniyi	8015s NM		1			959R	10/16/31 18:18	AJ	XEN MID
Soluble	LeTch	DI LeTch			5.02 a	50 g L	95R0	10/15/31 16:21	CA	XEN MID
Soluble	AnTlniyi	200.0		1			9659	10/18/31 16:5R	SC	XEN MID

**Laboratory Reference:**

XEN MID = Eurofin Xenco, MidlTnd, 1311 W. FloridT Ave, MidlTnd, 7X 69601, 7EL (423)604-5440

Eurofin Xenco, CTrlybTd

## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 21403909.110

### **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	T104704400-31-33	06-20-33

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

## Method Summary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 21403909.110

Method	Method Description	Protocol	Laboratory
8031B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
200.0	Anions, Ion Chromatography	MCAWW	XEN MID
5025	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-030, March 1982 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

XEN MID = Eurofins Xenco, Midland, 1311 W. Florida Ave, Midland, TX 79701, TEL (423)704-5440

Eurofins Xenco, Carlsbad

**Sample Summary**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
 SDG: 21403909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1402-1	PH01	Solid	10/05/31 10:32	10/13/31 14:04	1
890-1402-3	PH01A	Solid	10/05/31 10:35	10/13/31 14:04	3
890-1402-2	PH01B	Solid	10/05/31 10:23	10/13/31 14:04	2

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## Chain of Custody

Work Order No: \_\_\_\_\_

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) 585-3433 Lubbock, TX (806) 794-1296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 Phoenix, AZ (480) 355-0900  
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-5701  
 Atlanta, GA (770) 449-8800

www.xenco.com

Page 1 of 1

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) 683-2503	Email:	kalei.jennings@wsp.com
<b>ANALYSIS REQUEST</b>			
Project Name:	Fee Fee 011H	Turn Around	
Project Number:	31402909.110	Routine:	<input checked="" type="checkbox"/>
Location:	Lea County	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
<b>SAMPLE RECEIPT</b>	Temp Blank: <input checked="" type="radio"/> Yes <input type="radio"/> No	Wet Ice: <input checked="" type="radio"/> Yes <input type="radio"/> No	Thermometer ID:
Temperature (°C):	21.6	2.4	77.1 M-207
Received In tact:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Correction Factor:	-0.2
Cooler Custody Seals:	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	Total Containers:	
Sample Custody Seals:	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		
<b>Number of Containers</b>			
TPH (EPA 8015)			
BTEX (EPA 0-8021)			
Chloride (EPA 300.0)			
 890-1403 Chain of Custody			
TAT starts the day received by the lab, if received by 4:30pm			
<b>Sample Comments</b>			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
PH01	S	10/5/2021	1023	1'
PH01A	S	10/5/2021	1025	2'
PH01B	S	10/5/2021	1032	3'

**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-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>Fatima</i>	<i>WSP USA</i>	10-12-21 1400	<i>Receiving</i>	<i>Receiving</i>	10-12-21 1400
3					
5					

## Chain of Custody Record



eurofins

Environment Testing  
America

## **Client Information (Sub Contract Lab)**

Carlsbad, NM 88220  
Phone: 575-988-3199 Fax: 575-988-3199

<b>Client Information (Sub Contract Lab)</b>		Sampler	Carrier Tracking No(s)	GCOC No:
Client Contact: Shipping/Receiving		Kramer, Jessica	State of Origin: New Mexico	890-459 1
Company Eurofins Xenco		jessica.kramer@eurofinsel.com	Page:	Page 1 of 1
Address: 1211 W Florida Ave		Date Due Requested 10/18/2021	TAT Requested (days):	Job #: 890-1403-1
City: Midland				
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)		PO #:		
Email: fez fee 011n		VNO #:		
Project Name: fez fee 011n		Project #: 89000004		
Site		SSOW#:		
<b>Analysis Requested</b>				
<input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No)				
8015MOD_NM/8015NM_S_Prep (MOD) Full TPH 8015MOD_Calc 300_ORGFM_28D/DI_LEACH Chloride 8021B/5035FP_Calc (MOD) BTEX Total_BTEX_GCV				
Total Number of containers				
Special Instructions/Note:				
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analytic & 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 immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.				
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Unconfirmed				
Deliverable Requested I, II, III IV Other (specify)		Primary Deliverable Rank 2		
Empty Kit Relinquished by:				
Relinquished by: <i>Cle</i> 10.12.21		Date/Time:	Received by: <i>J. Kramer</i>	Method of Shipment:
		Company	Date/Time: 10.13.21	Company
Relinquished by		Company	Date/Time:	Company
Custody Seals Intact: △ Yes △ No		Received by	Date/Time:	Company
Cooler Temperature(s) °C and Other Remarks: <i>10/11.7</i>				

Note Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analysis & accreditation compliance upon subcontractor 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/testmatrix 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 immediately. If all requested accreditations are current to date return the signed Chain of Custody Attestation to said company to Eurofins Xenco LLC.

### Possible Hazard Identification

Deliverable F

Empty Kit Relinquished by

Relinquished by Mr. H. C. A.

Relinquished by

Custody Seals Intact:  Yes  No

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1402-1

SDG Number: 21403909.110

**Login Number:** 1402**List Source:** Eurofins Xenco, Carlsbad**List Number:** 1**Creator:** Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1402-1

SDG Number: 21403909.110

**Login Number:** 1402**List Source:** Eurofins Xenco, Midland**List Number:** 3**List Creation:** 10/12/31 13:17 PM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1405-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/20/2021 1:52:52 PM

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

### LINKS

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results through

**Total Access**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Laboratory Job ID: 890-1405-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1405-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
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

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**Case Narrative**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1405-1  
SDG: 31402909.110

**Job ID: 890-1405-1**

**Laboratory: Eurofins Xenco, Carlsbad**

**Narrative****Job Narrative  
890-1405-1****Receipt**

The samples were received on 10/12/2021 2:04 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 2.4°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9466 and analytical batch 880-9649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH03 (890-1405-1) and (890-1405-A-1-B MS). Evidence of matrix interferences is not obvious.

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

**GC Semi VOA**

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: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

**Client Sample ID: PH03**  
Date Collected: 10/05/21 11:05  
Date Received: 10/12/21 14:04  
Sample Depth: 1

**Lab Sample ID: 890-1405-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<enHene	m0.00r 00	U z1 zr	0.00r 00	g Kf5K		10/14/1 1r:43	10/19/1 01:14	1
6oITene	m0.00r 00	U z1	0.00r 00	g Kf5K		10/14/1 1r:43	10/19/1 01:14	1
utEhlbenHene	m0.00r 00	U z1 zr	0.00r 00	g Kf5K		10/14/1 1r:43	10/19/1 01:14	1
g -y hlene X & y hlene	m0.00400	U z1 zr	0.00400	g Kf5K		10/14/1 1r:43	10/19/1 01:14	1
o-y hlene	m0.00r 00	U z1 zr	0.00r 00	g Kf5K		10/14/1 1r:43	10/19/1 01:14	1
y hleneps6ot, I	m0.00400	U z1 zr	0.00400	g Kf5K		10/14/1 1r:43	10/19/1 01:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	10/14/21 12:43	10/19/21 01:14	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/14/21 12:43	10/19/21 01:14	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, I <6uy	m0.00400	U	0.00400	g Kf5K		10/19/1 13:4r		1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, I 6PB	m49.9	U	49.9	g Kf5K		10/19/1 13:r2		1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G, poline a , nKe RjK, nicp	m49.9	U	49.9	g Kf5K		10/14/1 14:r9	10/17/1 18:38	1
CGaR(-C)-C10								
Diepel a , nKe RjK, nicp ORvej	m49.9	U	49.9	g Kf5K		10/14/1 14:r9	10/17/1 18:38	1
C10-Cr 8(								
RII a , nKe RjK, nicp ORvej Cr 8-C3) (	m49.9	U	49.9	g Kf5K		10/14/1 14:r9	10/17/1 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	10/14/21 14:29	10/17/21 18:38	1
o-Terphenyl	113		70 - 130	10/14/21 14:29	10/17/21 18:38	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.2		4.97	g Kf5K		10/18/1 18:30		1

**Client Sample ID: PH03A**  
Date Collected: 10/05/21 11:07  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1405-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<enHene	m0.00198	U	0.00198	g Kf5K		10/14/1 1r:43	10/19/1 01:34	1
6oITene	m0.00198	U	0.00198	g Kf5K		10/14/1 1r:43	10/19/1 01:34	1
utEhlbenHene	m0.00198	U	0.00198	g Kf5K		10/14/1 1r:43	10/19/1 01:34	1
g -y hlene X & y hlene	m0.0039)	U	0.0039)	g Kf5K		10/14/1 1r:43	10/19/1 01:34	1
o-y hlene	m0.00198	U	0.00198	g Kf5K		10/14/1 1r:43	10/19/1 01:34	1
y hleneps6ot, I	m0.0039)	U	0.0039)	g Kf5K		10/14/1 1r:43	10/19/1 01:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	10/14/21 12:43	10/19/21 01:34	1

u Tjofinp y encosC, jIpbd, d

## Client Sample Results

Client: WSP USA Inc.  
Project Site: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

**Client Sample ID: PH03A**  
Date Collected: 10/05/21 11:07  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1405-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130	10/14/21 12:43	10/19/21 01:34	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, I <6uy	m0.0039	U	0.0039	g Kf5K			10/19/21 13:4r	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, I 6PB	m49.8	U	49.8	g Kf5K			10/19/21 13:r2	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G, poline a, nKe RjK, nicp O&a R(-C)-C10	m49.8	U	49.8	g Kf5K		10/14/21 14:r9	10/17/21 18:29	1
Diepel a, nKe RjK, nicp O&vej C10-Cr 8(	m49.8	U	49.8	g Kf5K		10/14/21 14:r9	10/17/21 18:29	1
RII a, nKe RjK, nicp O&vej Cr 8-C3)(	m49.8	U	49.8	g Kf5K		10/14/21 14:r9	10/17/21 18:29	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	10/14/21 14:29	10/17/21 18:59	1
o-Terphenyl	113		70 - 130	10/14/21 14:29	10/17/21 18:59	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.33		4.99	g Kf5K			10/18/21 18:3)	1

**Client Sample ID: PH03B****Lab Sample ID: 890-1405-3**

Matrix: Solid

Date Collected: 10/05/21 11:10

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<en-1-ene	m0.00r 00	U	0.00r 00	g Kf5K		10/14/21 11:r43	10/19/21 01:22	1
6olTene	m0.00r 00	U	0.00r 00	g Kf5K		10/14/21 11:r43	10/19/21 01:22	1
utElnben-1-ene	m0.00r 00	U	0.00r 00	g Kf5K		10/14/21 11:r43	10/19/21 01:22	1
g -y hlene X &y hlene	m0.00400	U	0.00400	g Kf5K		10/14/21 11:r43	10/19/21 01:22	1
o-y hlene	m0.00r 00	U	0.00r 00	g Kf5K		10/14/21 11:r43	10/19/21 01:22	1
y hleneps6ot, I	m0.00400	U	0.00400	g Kf5K		10/14/21 11:r43	10/19/21 01:22	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	10/14/21 12:43	10/19/21 01:55	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/14/21 12:43	10/19/21 01:55	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, I <6uy	m0.00400	U	0.00400	g Kf5K			10/19/21 13:4r	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, I 6PB	m49.8	U	49.8	g Kf5K			10/19/21 13:r2	1

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## Client Sample Results

Client: WSP USA Inc.  
Project Site: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

**Client Sample ID: PH03B**  
Date Collected: 10/05/21 11:10  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1405-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G, poline a, nK <sub>e</sub> RjK, nicp O <sub>a</sub> R(-C)-C10	m49.8	U	49.8	g K <sub>5</sub> K	10/14/11:49	10/17/11:19:rr		1
Diepel a, nK <sub>e</sub> RjK, nicp O <sub>v</sub> ej C10-Cr 8(	m49.8	U	49.8	g K <sub>5</sub> K	10/14/11:49	10/17/11:19:rr		1
RII a, nK <sub>e</sub> RjK, nicp O <sub>v</sub> ej Cr 8-C3)(	m49.8	U	49.8	g K <sub>5</sub> K	10/14/11:49	10/17/11:19:rr		1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	10/14/21 14:29	10/17/21 19:22	1
o-Terphenyl	100		70 - 130	10/14/21 14:29	10/17/21 19:22	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.14		4.9)	g K <sub>5</sub> K	10/19/11:48			1

**Client Sample ID: PH03C**  
Date Collected: 10/05/21 11:15  
Date Received: 10/12/21 14:04  
Sample Depth: 4

**Lab Sample ID: 890-1405-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<enHene	m0.00r 00	U	0.00r 00	g K <sub>5</sub> K	10/14/11:43	10/19/10r:12		1
6olTene	m0.00r 00	U	0.00r 00	g K <sub>5</sub> K	10/14/11:43	10/19/10r:12		1
utEhlbenHene	m0.00r 00	U	0.00r 00	g K <sub>5</sub> K	10/14/11:43	10/19/10r:12		1
g-y hlene X &y hlene	m0.00399	U	0.00399	g K <sub>5</sub> K	10/14/11:43	10/19/10r:12		1
o-y hlene	m0.00r 00	U	0.00r 00	g K <sub>5</sub> K	10/14/11:43	10/19/10r:12		1
y hleneps6ot, l	m0.00399	U	0.00399	g K <sub>5</sub> K	10/14/11:43	10/19/10r:12		1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	10/14/21 12:43	10/19/21 02:15	1
1,4-Difluorobenzene (Surr)	117		70 - 130	10/14/21 12:43	10/19/21 02:15	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, l <6uy	m0.00399	U	0.00399	g K <sub>5</sub> K	10/19/11:48			1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
6ot, l 6PB	m20.0	U	20.0	g K <sub>5</sub> K	10/19/11:49			1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
G, poline a, nK <sub>e</sub> RjK, nicp O <sub>a</sub> R(-C)-C10	m20.0	U	20.0	g K <sub>5</sub> K	10/14/11:49	10/17/11:19:4r		1
Diepel a, nK <sub>e</sub> RjK, nicp O <sub>v</sub> ej C10-Cr 8(	m20.0	U	20.0	g K <sub>5</sub> K	10/14/11:49	10/17/11:19:4r		1
RII a, nK <sub>e</sub> RjK, nicp O <sub>v</sub> ej Cr 8-C3)(	m20.0	U	20.0	g K <sub>5</sub> K	10/14/11:49	10/17/11:19:4r		1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	10/14/21 14:29	10/17/21 19:42	1
o-Terphenyl	105		70 - 130	10/14/21 14:29	10/17/21 19:42	1

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**Client Sample Results**

Client: WSP USA Inc.  
 Project Site: zeHzee 011B

Job ID: 890-1402-1  
 SDG: 3140r 909.110

**Client Sample ID: PH03C**  
 Date Collected: 10/05/21 11:15  
 Date Received: 10/12/21 14:04  
 Sample Depth: 4

**Lab Sample ID: 890-1405-4**  
 Matrix: Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		2.04	g K5K			10/9/21 11:24	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

**Surrogate Summary**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project Site: zeHzee 0117

SDG: 3140r 909.110

**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)										
890-1402-1	P703	13r S15	91										
890-1402-1 6 S	P703	1+8 S15	r 82 S15										
890-1402-1 6 SD	P703	84	102										
890-1402-r	P703A	8M	91										
890-1402-3	P703B	81	81										
890-1402-4	P703C	1r 1	11+										
aCS 880-94MM-A	axb Contjol Sxp kle	91	10r										
aCSD 880-94MM-A	axb Contjol Sxp kle Duk	88	10r										
6 B 880-94MF-A	6 etLomBlxnh	99	104										
6 B 880-94MF-A	6 etLomBlxnh	98	103										

**Surrogate Legend**

BzB d 4-Bjop o‡uojobenHene fSujj(

DzB) d 1‡-Di‡uojobenHene fSujj(

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Matrix: Solid****Prep Type: Total/NA****Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-+02r-A-1-z 6 S	6 xtji, Skihe	98	93										
880-+02r-A-1-G 6 SD	6 xtji, Skihe Duklicxte	102	101										
890-1402-1	P703	108	113										
890-1402-r	P703A	108	113										
890-1402-3	P703B	94	100										
890-1402-4	P703C	9+	102										
aCS 880-9483f-A	axb Contjol Sxp kle	84	82										
aCSD 880-9483f-A	axb Contjol Sxp kle Duk	9r	94										
6 B 880-9483f-A	6 etLomBlxnh	104	11+										

**Surrogate Legend**

1CO d 1-Cliojooctxne

OTPH d o-TejkLenyl

Eujoin XencoZCxjlsbxm

## QC Sample Results

Client: WSP USA Inc.  
Project Site: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-9466/5-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	MB		RL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier				Prepared	Analyzed		
<enHene	n0.00r 00	U	0.00r 00	g Kf5K	10/14/1 1r:43	10/19/1 00:42		1	
6olTene	n0.00r 00	U	0.00r 00	g Kf5K	10/14/1 1r:43	10/19/1 00:42		1	
utEhlbenHene	n0.00r 00	U	0.00r 00	g Kf5K	10/14/1 1r:43	10/19/1 00:42		1	
g -y hlene X & y hlene	n0.00400	U	0.00400	g Kf5K	10/14/1 1r:43	10/19/1 00:42		1	
o-y hlene	n0.00r 00	U	0.00r 00	g Kf5K	10/14/1 1r:43	10/19/1 00:42		1	
y hleneps6ot, I	n0.00400	U	0.00400	g Kf5K	10/14/1 1r:43	10/19/1 00:42		1	
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac	9		
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	99		70 - 130	10/14/21 12:43	10/19/21 00:45		1		
1,4-Difluorobenzene (Surr)	104		70 - 130	10/14/21 12:43	10/19/21 00:45		1		

**Lab Sample ID: LCS 880-9466/1-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Spike		Unit	D	7 Rec%		13
	Added	Result			7 Rec	Limits	
<enHene	0.100	0.080r a	g Kf5K	80	R0 - 130		
6olTene	0.100	0.0948r	g Kf5K	92	R0 - 130		
utEhlbenHene	0.100	0.09829	g Kf5K	99	R0 - 130		
g -y hlene X & y hlene	0.r 00	0.183a	g Kf5K	9r	R0 - 130		
o-y hlene	0.100	0.10a3	g Kf5K	10a	R0 - 130		
Surrogate	LCS		Unit	D	7 Rec%		14
	%Recovery	Qualifier			7 Rec	Limits	
4-Bromofluorobenzene (Surr)	91		70 - 130				
1,4-Difluorobenzene (Surr)	102		70 - 130				

**Lab Sample ID: LCSD 880-9466/2-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Spike		Unit	D	7 Rec%		RPD
	Added	Result			7 Rec	Limits	
<enHene	0.100	0.1114	g Kf5K	111	R0 - 130	3r	32
6olTene	0.100	0.1143	g Kf5K	114	R0 - 130	19	32
utEhlbenHene	0.100	0.1121	g Kf5K	112	R0 - 130	12	32
g -y hlene X & y hlene	0.r 00	0.rr 03	g Kf5K	110	R0 - 130	18	32
o-y hlene	0.100	0.11R3	g Kf5K	11R	R0 - 130	10	32
Surrogate	LCSD		Unit	D	7 Rec%		Limit
	%Recovery	Qualifier			7 Rec	Limits	
4-Bromofluorobenzene (Surr)	88		70 - 130				
1,4-Difluorobenzene (Surr)	102		70 - 130				

**Lab Sample ID: 890-1405-1 MS****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: P. 03****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Sample		Spike	MS Result	MS Qualifier	Unit	D	7 Rec%	
	Result	Qualifier						7 Rec	Limits
<enHene	n0.00r 00	U z1 zr	0.100	0.102a		g Kf5K	102	R0 - 130	
6olTene	n0.00r 00	U z1	0.100	0.0R230		g Kf5K	R2	R0 - 130	

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Client: WSP USA Inc.  
Project Site: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

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

Lab Sample ID: 890-1405-1 MS

Matrix: Solid

Analysis Batch: 9649

Client Sample ID: P. 03  
Prep Type: Total/NA  
Prep Batch: 9466

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	7 Rec	7 Rec%
	Result	Qualifier	Added	Result	Qualifier				Limits
utEhlbenHene	m0.00r 00	U z1 zr	0.100	0.03928	z1	g KfK		39	R0 - 130
g-yHlene X & yHlene	m0.00400	U z1 zr	0.r 00	0.02312	z1	g KfK		r R	R0 - 130
o-yHlene	m0.00r 00	U z1 zr	0.100	0.0083a9	z1	g KfK		8	R0 - 130

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	%Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	178	S1+	70 - 130		
1,4-Difluorobenzene (Surr)	285	S1+	70 - 130		

Lab Sample ID: 890-1405-1 MSD

Matrix: Solid

Analysis Batch: 9649

Client Sample ID: P. 03  
Prep Type: Total/NA  
Prep Batch: 9466

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	7 Rec	7 Rec%	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	
<enHene	m0.00r 00	U z1 zr	0.101	0.00944r	z1 zr	g KfK		9	R0 - 130	1aR 32
6olTene	m0.00r 00	U z1	0.101	0.02aaR	z1	g KfK		2a	R0 - 130	r 8 32
utEhlbenHene	m0.00r 00	U z1 zr	0.101	0.0aa82	z1 zr	g KfK		aa	R0 - 130	21 32
g-yHlene X & yHlene	m0.00400	U z1 zr	0.r 0r	0.0822R	z1 zr	g KfK		4r	R0 - 130	4R 32
o-yHlene	m0.00r 00	U z1 zr	0.101	0.0R180	zr	g KfK		R1	R0 - 130	128 32

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	%Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	84		70 - 130		
1,4-Difluorobenzene (Surr)	105		70 - 130		

Lab Sample ID: MB 880-9635/5-A

Matrix: Solid

Analysis Batch: 9649

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 9635

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						Prepared	Analyzed	
<enHene	m0.00r 00	U	0.00r 00		0.00r 00	g KfK		10/18/1 09:40	10/18/1 13:1r	1
6olTene	m0.00r 00	U	0.00r 00		0.00r 00	g KfK		10/18/1 09:40	10/18/1 13:1r	1
utEhlbenHene	m0.00r 00	U	0.00r 00		0.00r 00	g KfK		10/18/1 09:40	10/18/1 13:1r	1
g-yHlene X & yHlene	m0.00400	U	0.00400		0.00400	g KfK		10/18/1 09:40	10/18/1 13:1r	1
o-yHlene	m0.00r 00	U	0.00r 00		0.00r 00	g KfK		10/18/1 09:40	10/18/1 13:1r	1
yHleneps6ot, I	m0.00400	U	0.00400		0.00400	g KfK		10/18/1 09:40	10/18/1 13:1r	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	98		70 - 130			10/18/21 09:40	10/18/21 13:12	1
1,4-Difluorobenzene (Surr)	103		70 - 130			10/18/21 09:40	10/18/21 13:12	1

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

Lab Sample ID: MB 880-9483/1-A

Matrix: Solid

Analysis Batch: 9596

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 9483

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						Prepared	Analyzed	
G, poline ) , nKe 7 jK, nicp VG) 7 f-Ca-C10	m20.0	U	20.0		20.0	g KfK		10/14/1 14:9	10/14/1 11:31	1

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## QC Sample Results

Client: WSP USA Inc.  
Project Site: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: MB 880-9483/1-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	MB		RL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier				Prepared	Analyzed		
Diepel ) , nKe 7 jK, nicp v7 dej	m20.0	U	20.0	g KfK		10/14/21 14:29	10/14/21 11:31		1
C10-Cr 8f									
7 II ) , nKe 7 jK, nicp v7 dej Cr 8-C3af	m20.0	U	20.0	g KfK		10/14/21 14:29	10/14/21 11:31		1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
o-Terphenyl	104		70 - 130			10/14/21 14:29	10/17/21 11:31	1	
	117		70 - 130			10/14/21 14:29	10/17/21 11:31	1	

**Lab Sample ID: LCS 880-9483/2-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	Spike		LCS	LCS	Unit	D	7 Rec%		Limits
	Added	Result	Qualifier	7 Rec	7 Rec				
G, poline ) , nKe 7 jK, nicp vG) 7 f-Ca-C10	1000	93R4		g KfK			94	R0 - 130	
Diepel ) , nKe 7 jK, nicp v7 dej	1000	84r .r		g KfK			84	R0 - 130	
C10-Cr 8f									
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits						
o-Terphenyl	84		70 - 130						
	85		70 - 130						

**Lab Sample ID: LCSD 880-9483/3-A****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	Spike		LCSD	LCSD	Unit	D	7 Rec%		RPD
	Added	Result	Qualifier	7 Rec	7 Rec				
G, poline ) , nKe 7 jK, nicp vG) 7 f-Ca-C10	1000	10a1		g KfK			10a	R0 - 130	1r
Diepel ) , nKe 7 jK, nicp v7 dej	1000	9r 9.4		g KfK			93	R0 - 130	10
C10-Cr 8f									r 0
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits						
o-Terphenyl	92		70 - 130						
	94		70 - 130						

**Lab Sample ID: 880-H052-A-1-F MS****Matrix: Solid****Analysis Batch: 9596****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 9483**

Analyte	Sample		Spike	MS	MS	Unit	D	7 Rec%	
	Result	Qualifier						7 Rec	Limits
G, poline ) , nKe 7 jK, nicp vG) 7 f-Ca-C10	m49.9	U	99R	11R0		g KfK		11R	R0 - 130
Diepel ) , nKe 7 jK, nicp v7 dej	m49.9	U	99R	9aa.r		g KfK		94	R0 - 130
C10-Cr 8f									
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits						
o-Terphenyl	98		70 - 130						
	93		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project Site: zeHzee 011B

Job ID: 890-1402-1  
SDG: 3140r 909.110

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: 880-H052-A-1-G MSD****Matrix: Solid****Analysis Batch: 9596**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 9483**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	7 Rec	7 Rec% Limits	RPD	RPD Limit
G, poline ) , nKe 7 jK, nicp vG) 7 f-Ca-C10	m49.9	U	1000	11R0		g KfK		11R	R0 - 130	0	r 0
Diepel ) , nKe 7 jK, nicp v7 dej C10-Cr 8f	m49.9	U	1000	1041		g KfK		10r	R0 - 130	R	r 0

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl			70 - 130

**Method: 300% - Anions, Ion Chromatography****Lab Sample ID: MB 880-9560/1-A****Matrix: Solid****Analysis Batch: 9H59**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
CEoji( e	m2.00	U	2.00	g KfK			10F8F 1 1a:3R	1

**Lab Sample ID: LCS 880-9560/2-A****Matrix: Solid****Analysis Batch: 9H59**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	7 Rec	7 Rec% Limits
CEoji( e	r 20	r 40.8		g KfK		9a	90 - 110

**Lab Sample ID: LCSD 880-9560/3-A****Matrix: Solid****Analysis Batch: 9H59**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	7 Rec	7 Rec% Limits	RPD	RPD Limit
CEoji( e	r 20	r 41.2		g KfK		9R	90 - 110	0	r 0

**Lab Sample ID: 880-H095-A-1-B MS****Matrix: Solid****Analysis Batch: 9H59**

**Client Sample ID: Matrix Spike**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	7 Rec	7 Rec% Limits
CEoji( e	311		r 48	244.3		g KfK		94	90 - 110

**Lab Sample ID: 880-H095-A-1-C MSD****Matrix: Solid****Analysis Batch: 9H59**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	7 Rec	7 Rec% Limits	RPD	RPD Limit
CEoji( e	311		r 48	242.r		g KfK		92	90 - 110	0	r 0

uTjo@hp y encosC, jlpb, (

**QC Association Summary**

Client: WSP USA Inc.  
Project Site: zeHzee 011d

Job ID: 890-1402-1  
SDG: 3140r 909.110

**GC VOA****Prep Batch: 9466**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	MtBf6 A	Soli5	2032	
890-1402-r	Pd 03A	MtBf6 A	Soli5	2032	
890-1402-3	Pd 03h	MtBf6 A	Soli5	2032	
890-1402-4	Pd 03C	MtBf6 A	Soli5	2032	
a h 880-94kkf2-A	a etTo5 hIBnN	MtBf6 A	Soli5	2032	
7CS 880-94kkf2-A	7Bb Contjol SBL mle	MtBf6 A	Soli5	2032	
7CSD 880-94kkf2-A	7Bb Contjol SBL mle Dpm	MtBf6 A	Soli5	2032	
890-1402-1 a S	Pd 03	MtBf6 A	Soli5	2032	
890-1402-1 a SD	Pd 03	MtBf6 A	Soli5	2032	

**Prep Batch: 9635**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
a h 880-9k32f2-A	a etTo5 hIBnN	MtBf6 A	Soli5	2032	

**Analysis Batch: 9649**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	MtBf6 A	Soli5	80r 1h	94kk
890-1402-r	Pd 03A	MtBf6 A	Soli5	80r 1h	94kk
890-1402-3	Pd 03h	MtBf6 A	Soli5	80r 1h	94kk
890-1402-4	Pd 03C	MtBf6 A	Soli5	80r 1h	94kk
a h 880-94kkf2-A	a etTo5 hIBnN	MtBf6 A	Soli5	80r 1h	94kk
a h 880-9k32f2-A	a etTo5 hIBnN	MtBf6 A	Soli5	80r 1h	9k32
7CS 880-94kkf2-A	7Bb Contjol SBL mle	MtBf6 A	Soli5	80r 1h	94kk
7CSD 880-94kkf2-A	7Bb Contjol SBL mle Dpm	MtBf6 A	Soli5	80r 1h	94kk
890-1402-1 a S	Pd 03	MtBf6 A	Soli5	80r 1h	94kk
890-1402-1 a SD	Pd 03	MtBf6 A	Soli5	80r 1h	94kk

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	MtBf6 A	Soli5	MtBl hMux	
890-1402-r	Pd 03A	MtBf6 A	Soli5	MtBl hMux	
890-1402-3	Pd 03h	MtBf6 A	Soli5	MtBl hMux	
890-1402-4	Pd 03C	MtBf6 A	Soli5	MtBl hMux	

**GC Semi VOA****Prep Batch: 9483**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	MtBf6 A	Soli5	80126a Pjem	
890-1402-r	Pd 03A	MtBf6 A	Soli5	80126a Pjem	
890-1402-3	Pd 03h	MtBf6 A	Soli5	80126a Pjem	
890-1402-4	Pd 03C	MtBf6 A	Soli5	80126a Pjem	
a h 880-9483f2-A	a etTo5 hIBnN	MtBf6 A	Soli5	80126a Pjem	
7CS 880-9483f2-A	7Bb Contjol SBL mle	MtBf6 A	Soli5	80126a Pjem	
7CSD 880-9483f2-A	7Bb Contjol SBL mle Dpm	MtBf6 A	Soli5	80126a Pjem	
880-E02r-A-1-z a S	a BtjIXSmle	MtBf6 A	Soli5	80126a Pjem	
880-E02r-A-1-G a SD	a BtjIXSmle DpmicBte	MtBf6 A	Soli5	80126a Pjem	

**Analysis Batch: 9596**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	MtBf6 A	Soli5	8012h 6 a	9483

upjofins x enco, CBjlsbB5

**QC Association Summary**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project Site: zeHzee 011d

SDG: 3140r 909.110

**GC Semi VOA (Continued)****Analysis Batch: 9596 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-r	Pd 03A	MtBf6 A	Soli5	8012h 6 a	9483
890-1402-3	Pd 03h	MtBf6 A	Soli5	8012h 6 a	9483
890-1402-4	Pd 03C	MtBf6 A	Soli5	8012h 6 a	9483
a h 880-9483F-A	a etTo5 hBnN	MtBf6 A	Soli5	8012h 6 a	9483
7CS 880-9483F-A	7Bb Contol SBL mle	MtBf6 A	Soli5	8012h 6 a	9483
7CSD 880-9483B-A	7Bb Contol SBL mle Dpm	MtBf6 A	Soli5	8012h 6 a	9483
880-E02r-A-1-z a S	a BtjX SmiN	MtBf6 A	Soli5	8012h 6 a	9483
880-E02r-A-1-G a SD	a BtjX SmiN DpmicBte	MtBf6 A	Soli5	8012h 6 a	9483

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	MtBf6 A	Soli5	8012 6 a	
890-1402-r	Pd 03A	MtBf6 A	Soli5	8012 6 a	
890-1402-3	Pd 03h	MtBf6 A	Soli5	8012 6 a	

**Analysis Batch: 10003**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-4	Pd 03C	MtBf6 A	Soli5	8012 6 a	

**HPLC/IC****Leach Batch: 9560**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	Soluble	Soli5	DI 7eBcT	
890-1402-r	Pd 03A	Soluble	Soli5	DI 7eBcT	
890-1402-3	Pd 03h	Soluble	Soli5	DI 7eBcT	
890-1402-4	Pd 03C	Soluble	Soli5	DI 7eBcT	
a h 880-92k0F-A	a etTo5 hBnN	Soluble	Soli5	DI 7eBcT	
7CS 880-92k0F-A	7Bb Contol SBL mle	Soluble	Soli5	DI 7eBcT	
7CSD 880-92k0B-A	7Bb Contol SBL mle Dpm	Soluble	Soli5	DI 7eBcT	
880-E092-A-1-h a S	a BtjX SmiN	Soluble	Soli5	DI 7eBcT	
880-E092-A-1-C a SD	a BtjX SmiN DpmicBte	Soluble	Soli5	DI 7eBcT	

**Analysis Batch: 9759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 03	Soluble	Soli5	300.0	92k0
890-1402-r	Pd 03A	Soluble	Soli5	300.0	92k0
890-1402-3	Pd 03h	Soluble	Soli5	300.0	92k0
890-1402-4	Pd 03C	Soluble	Soli5	300.0	92k0
a h 880-92k0F-A	a etTo5 hBnN	Soluble	Soli5	300.0	92k0
7CS 880-92k0F-A	7Bb Contol SBL mle	Soluble	Soli5	300.0	92k0
7CSD 880-92k0B-A	7Bb Contol SBL mle Dpm	Soluble	Soli5	300.0	92k0
880-E092-A-1-h a S	a BtjX SmiN	Soluble	Soli5	300.0	92k0
880-E092-A-1-C a SD	a BtjX SmiN DpmicBte	Soluble	Soli5	300.0	92k0

upjofins x enco, CBjlsbB5

**Lab Chronicle**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 3140p909.110

**Client Sample ID: PH03**

Date Collected: 10/05/21 11:05  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTI/NA	Pre5	2032			2.00 a	2 g L	9466	10/14/p1 1p:43	KL	XEN MID
7otTI/NA	AnTlniyi	80p1s		1	2 g L	2 g L	9649	10/19/p1 01:14	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/p1 13:4p	AJ	XEN MID
7otTI/NA	AnTlniyi	8012 NM		1			9896	10/19/p1 13:p2	AJ	XEN MID
7otTI/NA	Pre5	8012NM Pre5			10.0p a	10 g L	9483	10/14/p1 14:p9	DM	XEN MID
7otTI/NA	AnTlniyi	8012s NM		1			9296	10/1R/p1 18:38	AJ	XEN MID
Soluble	LeTch	DI LeTch			2.03 a	20 g L	9260	10/12/p1 1R31	CA	XEN MID
Soluble	AnTlniyi	300.0		1			9R29	10/18/p1 18:30	SC	XEN MID

**Client Sample ID: PH03A**

Date Collected: 10/05/21 11:07  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-2**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTI/NA	Pre5	2032			2.02 a	2 g L	9466	10/14/p1 1p:43	KL	XEN MID
7otTI/NA	AnTlniyi	80p1s		1	2 g L	2 g L	9649	10/19/p1 01:34	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/p1 13:4p	AJ	XEN MID
7otTI/NA	AnTlniyi	8012 NM		1			9896	10/19/p1 13:p2	AJ	XEN MID
7otTI/NA	Pre5	8012NM Pre5			10.04 a	10 g L	9483	10/14/p1 14:p9	DM	XEN MID
7otTI/NA	AnTlniyi	8012s NM		1			9296	10/1R/p1 18:29	AJ	XEN MID
Soluble	LeTch	DI LeTch			2.01 a	20 g L	9260	10/12/p1 1R31	CA	XEN MID
Soluble	AnTlniyi	300.0		1			9R29	10/18/p1 18:36	SC	XEN MID

**Client Sample ID: PH03B**

Date Collected: 10/05/21 11:10  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-3**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTI/NA	Pre5	2032			2.00 a	2 g L	9466	10/14/p1 1p:43	KL	XEN MID
7otTI/NA	AnTlniyi	80p1s		1	2 g L	2 g L	9649	10/19/p1 01:22	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/p1 13:4p	AJ	XEN MID
7otTI/NA	AnTlniyi	8012 NM		1			9896	10/19/p1 13:p2	AJ	XEN MID
7otTI/NA	Pre5	8012NM Pre5			10.02 a	10 g L	9483	10/14/p1 14:p9	DM	XEN MID
7otTI/NA	AnTlniyi	8012s NM		1			9296	10/1R/p1 19:pp	AJ	XEN MID
Soluble	LeTch	DI LeTch			2.04 a	20 g L	9260	10/12/p1 1R31	CA	XEN MID
Soluble	AnTlniyi	300.0		1			9R29	10/19/p1 11:48	SC	XEN MID

**Client Sample ID: PH03C**

Date Collected: 10/05/21 11:15  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTI/NA	Pre5	2032			2.01 a	2 g L	9466	10/14/p1 1p:43	KL	XEN MID
7otTI/NA	AnTlniyi	80p1s		1	2 g L	2 g L	9649	10/19/p1 0p:12	MB	XEN MID
7otTI/NA	AnTlniyi	7otTI s 7EX		1			9900	10/19/p1 13:4p	AJ	XEN MID

Euro+iny Xencof CTrlybT,

**Lab Chronicle**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 3140p909.110

**Client Sample ID: PH03C****Lab Sample ID: 890-1405-4**

Date Collected: 10/05/21 11:15

Matrix: Solid

Date Received: 10/12/21 14:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTI/NA	AnTlniyi	8012 NM		1			10003	10/p0/p1 14:09	AJ	XEN MID
7otTI/NA	Pre5	8012NM Pre5			10.00 a	10 g L	9483	10/14/p1 14:p9	DM	XEN MID
7otTI/NA	AnTlniyi	8012s NM		1			9296	10/1R/p1 19:4p	AJ	XEN MID
Soluble	LeTch	DI LeTch			4.96 a	20 g L	9260	10/12/p1 1R31	CA	XEN MID
Soluble	AnTlniyi	300.0		1			9R29	10/19/p1 11:24	SC	XEN MID

**Laboratory References:**

XEN MID d Euro+ny Xencof Mi, ITn, f 1p11 W. Flori, T Avef Mi, ITn, f 7X R9R01f 7EL (43p)R04-2440

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Euro+ny Xencof CTrlybT,

**Accreditation/Certification Summary**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 3140s909.110

**Laboratory: Eurofins Xenco, Midland**

Unlehh otwerd ihe note, ayll ynylf teh vor twih lyborytorf d ere couere, Tn, er eycwyccre, ityton/certivicytion belod.

Authority	Program	Identification Number	Expiration Date
xeNyh	EL7AP	x104604400-s1-ss	0g-30-ss
Anylf hih 5 etwo, 8012 E5 xotyl BxLX	Prem5 etwo, Soli, Soli,	5 ytriN xotyl xPH xotyl BxLX	Anylf te

xwe vollod inp ynylf teh yre inclT, e, in twih remortabTt twe lyborytorf ih not certive, bf twe pouerninp yTtworitf. xwih liht Myf inclT, e ynylf teh vor dwicw tve ypencf , oeh not over certivicytion.

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## Method Summary

Client: WSP USA Inc.  
Project Site: zeHzee 0116

Job ID: 890-1402-1  
SDG: 3140r 909.110

Method	Method Description	Protocol	Laboratory
80r 1V	aolQile g jmnic Cop uodns( )GCX	SW84B	ENM T ID
LotQ VLNE	LotQ VLNE CQcdlQtion	LA5 Sg P	ENM T ID
8012 MT	Die( el RQnre g jmnic( )DRg X)GCX	SW84B	ENM T ID
8012V MT	Die( el RQnre g jmnic( )DRg X)GCX	SW84B	ENM T ID
300.0	Anion( , Ion Chjop QonjQuhy	T CAWW	ENM T ID
2032	Clo(es Sy(teP Pdjme Ons LjQu	SW84B	ENM T ID
8012MT Pjeu	T icjoextjOction	SW84B	ENM T ID
DI 5eQch	DeionilHes WQtej 5eQchinmPjocesdje	ASLT	ENM T ID

**Protocol References:**

ASLT = ASLT IntejnQtionQ

T CAWW = "T ethos( zoj Chep icQ AnQy(i( g f WQtej Ans WQ te( ", NPA-B00R4-79-0r 0, T Qch 1983 Ans Sdb eqdent Revi( ion(.

SW84B = "Le(t T ethos( zoj NvQdQtimSolis WQ te, Phy( icQFChep icQ T ethos( ", Lhjs Nsition, Mvep bej 198B Ans It( UusQte( .

LA5 Sg P = Le(tAp ejicO5CbojQtojie(, StQnsQs g uej QtinmPjocesdje

**Laboratory References:**

ENM T ID = Ndjofin( Eenco, T isIQhs, 1r 11 W. zlojisOAve, T isIQhs, LE 79701, LN5 )43r X704-2440

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Ndjofin( Eenco, CQI( bQs

**Sample Summary**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1405-1  
 SDG: 31402909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1405-1	PH03	Solid	10/05/21 11:05	10/12/21 14:04	1
890-1405-2	PH03A	Solid	10/05/21 11:07	10/12/21 14:04	2
890-1405-3	PH03B	Solid	10/05/21 11:10	10/12/21 14:04	3
890-1405-4	PH03C	Solid	10/05/21 11:15	10/12/21 14:04	4

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## Chain of Custody

Work Order No:

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) 794-296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 385-0800  
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701

Atlanta, GA (770) 449-8800

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Page 1 of 1

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) 683-2503	Email:	kalei.jennings@wsp.com

Project Name: Fee Fee 011H Turn Around

Project Number: 31402909.110 Routine:

Location: Lea County Rush:

Sampler's Name: Fatima Smith Due Date:

**SAMPLE RECEIPT**

Temp Blank:  Yes No

Wet Ice:  Yes No

Thermometer ID:

Temperature (°C): 24.24

Received Inact: Yes No

Cooler Custody Seals: Correction Factor: -0.2

Sample Custody Seals: Yes No  Total Containers:

ANALYSIS REQUEST

Work Order Notes

Number of Containers

TPH (EPA 8015)

BTEX (EPA 0-8021)

Chloride (EPA 300.0)



890-1405 Chain of Custody

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

				Work Order Comments
				Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfield <input type="checkbox"/> RR <input type="checkbox"/> Superfund <input type="checkbox"/>
				State of Project:
				Reporting Level <input type="checkbox"/> Level <input type="checkbox"/> PSTUS <input type="checkbox"/> TRI <input type="checkbox"/> Level <input type="checkbox"/>
				Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

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<sub>2</sub> Na Sr Ti Sn U V Zn Circle Method(s) and Metal(s) to be analyzed ICLP/SPLP 6040-8RCRA-Sb As-Ba-Be-Cu-Cr-Co-Cu-FD-Wn-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>Fatima J.</i>	<i>WSP USA</i>	10-12-21 16:00	2. <i>WSP USA</i>	10-12-21 17:00	
3		4			5



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1405-1

SDG Number: 31402909.110

**Login Number:** 1405**List Source:** Eurofins Xenco, Carlsbad**List Number:** 1**Creator:** Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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: 890-1405-1

SDG Number: 31402909.110

**Login Number:** 1405**List Source:** Eurofins Xenco, Midland**List Number:** 2**List Creation:** 10/13/21 12:17 PM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1406-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/20/2021 1:52:58 PM

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

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Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Laboratory Job ID: 890-1406-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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

**Case Narrative**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Job ID: 890-1406-1**

**Laboratory: Eurofins Xenco, Carlsbad**

**Narrative****Job Narrative  
890-1406-1****Receipt**

The samples were received on 10/12/2021 2:04 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 2.4°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9466 and analytical batch 880-9649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH04A (890-1406-2), PH04B (890-1406-3), (890-1405-A-1-D) and (890-1405-A-1-B MS). Evidence of matrix interferences is not obvious.

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

**GC Semi VOA**

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-9484 and analytical batch 880-9598 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

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: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Client Sample ID: PH04**  
Date Collected: 10/05/21 11:20  
Date Received: 10/12/21 14:04  
Sample Depth: 1

**Lab Sample ID: 890-1406-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/14/21 12:43	10/19/21 02:35	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/14/21 12:43	10/19/21 02:35	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/14/21 12:43	10/19/21 02:35	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/14/21 12:43	10/19/21 02:35	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/14/21 12:43	10/19/21 02:35	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/14/21 12:43	10/19/21 02:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	11		5+ - 70+			7+34387 78/40	7+32387 +8/09	7
7,4-, Fluorobenzene (Surr)	24		5+ - 70+			7+34387 78/40	7+32387 +8/09	7

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/19/21 13:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		10/14/21 14:45	10/17/21 12:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 14:45	10/17/21 12:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/14/21 14:45	10/17/21 12:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
7-i-Cloroohd ne	11		5+ - 70+			7+34387 74/49	7+35387 78/08	7
o-aerTcenpl	29		5+ - 70+			7+34387 74/49	7+35387 78/08	7

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.62		4.97	mg/Kg			10/19/21 11:59	1

**Client Sample ID: PH04A**

Date Collected: 10/05/21 11:23  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1406-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 02:56	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 02:56	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 02:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/14/21 12:43	10/19/21 02:56	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 02:56	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/14/21 12:43	10/19/21 02:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	7y8	S76	5+ - 70+			7+34387 78/40	7+32387 +8/09	7

Eurofins Xenco, Carlsbad

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Client Sample ID: PH04A**  
Date Collected: 10/05/21 11:23  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1406-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
7,4-, Fluorobenzene (Surr)	1y		5+ - 70+	7+34387 78/40	7+32387 +8/9y	7

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/19/21 13:25	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 *1	49.8	mg/Kg		10/14/21 14:45	10/17/21 13:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/14/21 14:45	10/17/21 13:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 14:45	10/17/21 13:32	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
7-i-Cloroohd ne	11		5+ - 70+	7+34387 74/49	7+35387 70/08	7
o-aerTcenpl	29		5+ - 70+	7+34387 74/49	7+35387 70/08	7

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.41		5.04	mg/Kg			10/19/21 12:05	1

**Client Sample ID: PH04B****Lab Sample ID: 890-1406-3**

Matrix: Solid

Date Collected: 10/05/21 11:25

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 03:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 03:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 03:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/14/21 12:43	10/19/21 03:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 03:16	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/14/21 12:43	10/19/21 03:16	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	878	S76	5+ - 70+	7+34387 78/40	7+32387 +0/7y	7
7,4-, Fluorobenzene (Surr)	58		5+ - 70+	7+34387 78/40	7+32387 +0/7y	7

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/19/21 13:25	1

Eurofins Xenco, Carlsbad

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Client Sample ID: PH04B**  
Date Collected: 10/05/21 11:25  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1406-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		10/14/21 14:45	10/17/21 13:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 14:45	10/17/21 13:53	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/14/21 14:45	10/17/21 13:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
7-i-Cloroohd ne	19		5+ - 70+			7+34387 74/49	7+35387 70/90	7
o-aerTCenpl	20		5+ - 70+			7+34387 74/49	7+35387 70/90	7

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.27		5.03	mg/Kg			10/19/21 12:11	1

**Client Sample ID: PH04C**  
Date Collected: 10/05/21 11:33  
Date Received: 10/12/21 14:04  
Sample Depth: 4

**Lab Sample ID: 890-1406-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 03:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 03:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 03:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/14/21 12:43	10/19/21 03:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 03:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/14/21 12:43	10/19/21 03:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	24		5+ - 70+			7+34387 78/40	7+32387 +0/05	7
7:4-, Fluorobenzene (Surr)	7+8		5+ - 70+			7+34387 78/40	7+32387 +0/05	7

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/19/21 13:25	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 *1	49.8	mg/Kg		10/14/21 14:45	10/17/21 14:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/14/21 14:45	10/17/21 14:13	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/14/21 14:45	10/17/21 14:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
7-i-Cloroohd ne	2+		5+ - 70+			7+34387 74/49	7+35387 74/70	7
o-aerTCenpl	24		5+ - 70+			7+34387 74/49	7+35387 74/70	7

Eurofins Xenco, Carlsbad

**Client Sample Results**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
 SDG: 31402909.110

**Client Sample ID: PH04C**  
**Date Collected:** 10/05/21 11:33  
**Date Received:** 10/12/21 14:04  
**Sample Depth:** 4

**Lab Sample ID: 890-1406-4**  
**Matrix:** Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		4.97	mg/Kg			10/19/21 12:16	1

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Eurofins Xenco, Carlsbad

**Surrogate Summary**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project Site: zeHzee 0117

SDG: 3140r 909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Matrix: Solid****Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1406-A-1-MBS	Batjix Spike	158 S1+	r 86 S1+
890-1406-A-1-C B SD	Batjix Spike Duplicate	84	106
890-1402-1	P704	88	94
890-1402-r	P704A	12r S1+	82
890-1402-3	P704M	r 1r S1+	5r
890-1402-4	P704C	94	10r
LCS 880-9422F-A	Lab Contjol Sample	91	10r
LCSD 880-9422F-A	Lab Contjol Sample Dup	88	10r
BM 880-9422F-A	B ethod Mank	99	104
BM 880-9236F-A	B ethod Mank	98	103

**Surrogate Legend**

MzM = 4-Monomofluorobenene (Sujj)

DzMZ = 1,4-Difluorobenene (Sujj)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1402-1	P704	88	96
890-1402-1 B S	P704	95	9r
890-1402-1 B SD	P704	94	90
890-1402-r	P704A	88	96
890-1402-3	P704M	86	93
890-1402-4	P704C	90	94
LCS 880-9484F-A	Lab Contjol Sample	8r	91
LCSD 880-9484F-A	Lab Contjol Sample Dup	93	91
BM 880-9484F-A	B ethod Mank	92	106

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Tephenyl

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-9466/5-A****Matrix: Solid****Analysis Batch: 9649**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 9466**

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg	10/14/21 12:43	10/19/21 00:45		1
Toluene	<0.00200	U	0.00200	mg/Kg	10/14/21 12:43	10/19/21 00:45		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	10/14/21 12:43	10/19/21 00:45		1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	10/14/21 12:43	10/19/21 00:45		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	10/14/21 12:43	10/19/21 00:45		1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	10/14/21 12:43	10/19/21 00:45		1

**MB MB**

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	11		5+ - 70+	7+34387 78/40	7+31387 ++/42	7
794- ,fluorobenzene (Surr)	7+4		5+ - 70+	7+34387 78/40	7+31387 ++/42	7

**Lab Sample ID: LCS 880-9466/1-A****Matrix: Solid****Analysis Batch: 9649**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 9466**

Analyte	Spike		Unit	D	7 Rec	7 Rec%	Limits
	Added	Result					
Benzene	0.100	0.08026	mg/Kg	80	R0 - 130		
Toluene	0.100	0.09482	mg/Kg	95	R0 - 130		
Ethylbenzene	0.100	0.09859	mg/Kg	99	R0 - 130		
m-Xylene & p-Xylene	0.200	0.1836	mg/Kg	92	R0 - 130		
o-Xylene	0.100	0.1063	mg/Kg	106	R0 - 130		

**LCS LCS**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	17		5+ - 70+
794- ,fluorobenzene (Surr)	7+8		5+ - 70+

**Lab Sample ID: LCSD 880-9466/2-A****Matrix: Solid****Analysis Batch: 9649**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 9466**

Analyte	Spike		Unit	D	7 Rec	7 Rec%	RPD	Limit
	Added	Result						
Benzene	0.100	0.1114	mg/Kg	111	R0 - 130		32	35
Toluene	0.100	0.1143	mg/Kg	114	R0 - 130		19	35
Ethylbenzene	0.100	0.1151	mg/Kg	115	R0 - 130		15	35
m-Xylene & p-Xylene	0.200	0.2203	mg/Kg	110	R0 - 130		18	35
o-Xylene	0.100	0.11R3	mg/Kg	11R	R0 - 130		10	35

**LCSD LCSD**

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	DD		5+ - 70+
794- ,fluorobenzene (Surr)	7+8		5+ - 70+

**Lab Sample ID: 890-1405-A-1-B MS****Matrix: Solid****Analysis Batch: 9649**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 9466**

Analyte	Sample		Spike	MS Result	MS Qualifier	Unit	D	7 Rec	7 Rec%
	Result	Qualifier							
Benzene	<0.00200	U F1 F2	0.100	0.1056		mg/Kg	105	R0 - 130	
Toluene	<0.00200	U F1	0.100	0.0R530		mg/Kg	R5	R0 - 130	

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**QC Sample Results**

Client: WSP USA Inc.

Job ID: 890-1406-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 890-1405-A-1-B MS****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	7 Rec	7 Rec%
	Result	Qualifier	Added	Result	Qualifier				Limits
Ethylbenzene	<0.00200	U F1 F2	0.100	0.03958	F1	mg/Kg		39	R0 - 130
m-Xylene & p-Xylene	<0.00400	U F1 F2	0.200	0.05315	F1	mg/Kg		2R	R0 - 130
o-Xylene	<0.00200	U F1 F2	0.100	0.008369	F1	mg/Kg		8	R0 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	75D	S7i	5+ - 70+
794- ,fluorobenzene (Surr)	8D2	S7i	5+ - 70+

**Lab Sample ID: 890-1405-A-1-C MSD****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	7 Rec	7 Rec%	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	
Benzene	<0.00200	U F1 F2	0.101	0.009442	F1 F2	mg/Kg		9	R0 - 130	16R 35
Toluene	<0.00200	U F1	0.101	0.0566R	F1	mg/Kg		56	R0 - 130	28 35
Ethylbenzene	<0.00200	U F1 F2	0.101	0.06685	F1 F2	mg/Kg		66	R0 - 130	51 35
m-Xylene & p-Xylene	<0.00400	U F1 F2	0.202	0.0855R	F1 F2	mg/Kg		42	R0 - 130	4R 35
o-Xylene	<0.00200	U F1 F2	0.101	0.0R180	F2	mg/Kg		R1	R0 - 130	158 35

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	D4		5+ - 70+
794- ,fluorobenzene (Surr)	7+2		5+ - 70+

**Lab Sample ID: MB 880-96. 5/5-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 96. 5**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/18/21 09:40	10/18/21 13:12	1

Surrogate	MB		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	1D		5+ - 70+
794- ,fluorobenzene (Surr)	7+0		5+ - 70+

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-9484/1-A****Matrix: Solid****Analysis Batch: 9598****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9484**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline ) ange * rganics	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/1R/21 11:31	1
TG) * vC6-C10								

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

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

Lab Sample ID: MB 880-9484/1-A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9484

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel ) ange * rganics 7 fer	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/1R/21 11:31	1
C10-C28v								
* II ) ange * rganics 7 fer C28-C36v	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/1R/21 11:31	1
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac	7 Rec%	Limits
	%Recovery	Qualifier						
7-Chlorooctane	1T		5+ - 70+	7+34387 74/42	7+35387 77/07	7		
o-phenylen6l	7+2		5+ - 70+	7+34387 74/42	7+35387 77/07	7		

Lab Sample ID: LCS 880-9484/2-A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	7 Rec%	
	Added						R8	R0 - 130
Gasoline ) ange * rganics		1000	R80.0		mg/Kg			
7G) * vC6-C10								
Diesel ) ange * rganics 7 fer		1000	880.0		mg/Kg		88	R0 - 130
C10-C28v								
Surrogate	LCS		LCS Result	LCS Qualifier	Unit	D	7 Rec%	
	%Recovery	Qualifier					Limits	
7-Chlorooctane	D8		5+ - 70+					
o-phenylen6l	17		5+ - 70+					

Lab Sample ID: LCSD 880-9484/. -A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	7 Rec%		RPD	
	Added						Limits	R0 - 130	25	20
Gasoline ) ange * rganics		1000	99R9	d1	mg/Kg					
7G) * vC6-C10										
Diesel ) ange * rganics 7 fer		1000	8R8.9		mg/Kg		88	R0 - 130	0	20
C10-C28v										
Surrogate	LCSD		LCSD Result	LCSD Qualifier	Unit	D	7 Rec%		Limit	
	%Recovery	Qualifier					Limits	RPD		
7-Chlorooctane	10		5+ - 70+							
o-phenylen6l	17		5+ - 70+							

Lab Sample ID: 890-1406-1 MS

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: P3 04

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Sample		Spike	MS		D	7 Rec%		Limit
	Result	Qualifier		Added			7 Rec	Limits	
Gasoline ) ange * rganics	<49.9	U d1	99R	939.6		mg/Kg	90	R0 - 130	
7G) * vC6-C10									
Diesel ) ange * rganics 7 fer	<49.9	U	99R	894.R		mg/Kg	90	R0 - 130	
C10-C28v									
Surrogate	MS		MS Result	MS Qualifier	Unit	D	7 Rec%		Limit
	%Recovery	Qualifier					Limits	RPD	
7-Chlorooctane	15		5+ - 70+						
o-phenylen6l	18		5+ - 70+						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

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

Lab Sample ID: 890-1406-1 MSD

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: P3 04  
Prep Type: Total/NA  
Prep Batch: 9484

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	7 Rec	7 Rec% Limits	RPD RPD	RPD Limit
Gasoline ) ange * rganics	<49.9	U d1	1000	9R4.1		mg/Kg		93	R0 - 130	4	20
7G) * vC6-C10											
Diesel ) ange * rganics 7 fer	<49.9	U	1000	880.8		mg/Kg		88	R0 - 130	2	20
C10-C28v											

Surrogate	MSD %Recovery	MSD Qualifier	Limits
7-Chlorooctane	14		5+ - 70+
o-phenylen6l	1+		5+ - 70+

**Method: . 00% - AnionsHon Chromatography**

Lab Sample ID: MB 880-9560/1-A

Matrix: Solid

Analysis Batch: 9, 59

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlori( e	<5.00	U	5.00	mg/Kg			10/18/21 16:3R	1

Lab Sample ID: LCS 880-9560/2-A

Matrix: Solid

Analysis Batch: 9, 59

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	7 Rec	7 Rec% Limits
Chlori( e	250	240.8		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-9560/. -A

Matrix: Solid

Analysis Batch: 9, 59

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	7 Rec	7 Rec% Limits	RPD RPD	RPD Limit
Chlori( e	250	241.5		mg/Kg		9R	90 - 110	0	20

Lab Sample ID: 880-, 095-A-1-B MS

Matrix: Solid

Analysis Batch: 9, 59

Client Sample ID: Matrix Spike  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	7 Rec	7 Rec% Limits
Chlori( e	311		248	544.3		mg/Kg		94	90 - 110

Lab Sample ID: 880-, 095-A-1-C MSD

Matrix: Solid

Analysis Batch: 9, 59

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	7 Rec	7 Rec% Limits	RPD RPD	RPD Limit
Chlori( e	311		248	545.2		mg/Kg		95	90 - 110	0	20

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**QC Association Summary**

Client: WSP USA Inc.  
Project Site: zeHzee 011d

Job ID: 890-1402-1  
SDG: 3140r 909.110

**GC VOA****Prep Batch: 9466**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Bot6lfh A	Soli5	M03M	
890-1402-r	Pd 04A	Bot6lfh A	Soli5	M03M	
890-1402-3	Pd 04a	Bot6lfh A	Soli5	M03M	
890-1402-4	Pd 04C	Bot6lfh A	Soli5	M03M	
k a 880-9422fMA	k etTo5 al6nN	Bot6lfh A	Soli5	M03M	
7CS 880-9422f-A	76b Contol S6L mle	Bot6lfh A	Soli5	M03M	
7CSD 880-9422f -A	76b Contol S6L mle Dpm	Bot6lfh A	Soli5	M03M	
890-140MA-1-a k S	k 6tjiu SmiN	Bot6lfh A	Soli5	M03M	
890-140MA-1-C k SD	k 6tjiu SmiN Dpmic6te	Bot6lfh A	Soli5	M03M	

**Prep Batch: 9635**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
k a 880-923MMA	k etTo5 al6nN	Bot6lfh A	Soli5	M03M	

**Analysis Batch: 9649**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Bot6lfh A	Soli5	80r 1a	9422
890-1402-r	Pd 04A	Bot6lfh A	Soli5	80r 1a	9422
890-1402-3	Pd 04a	Bot6lfh A	Soli5	80r 1a	9422
890-1402-4	Pd 04C	Bot6lfh A	Soli5	80r 1a	9422
k a 880-9422fMA	k etTo5 al6nN	Bot6lfh A	Soli5	80r 1a	9422
k a 880-923MMA	k etTo5 al6nN	Bot6lfh A	Soli5	80r 1a	923M
7CS 880-9422f-A	76b Contol S6L mle	Bot6lfh A	Soli5	80r 1a	9422
7CSD 880-9422f -A	76b Contol S6L mle Dpm	Bot6lfh A	Soli5	80r 1a	9422
890-140MA-1-a k S	k 6tjiu SmiN	Bot6lfh A	Soli5	80r 1a	9422
890-140MA-1-C k SD	k 6tjiu SmiN Dpmic6te	Bot6lfh A	Soli5	80r 1a	9422

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Bot6lfh A	Soli5	Bot6l a Bx E	
890-1402-r	Pd 04A	Bot6lfh A	Soli5	Bot6l a Bx E	
890-1402-3	Pd 04a	Bot6lfh A	Soli5	Bot6l a Bx E	
890-1402-4	Pd 04C	Bot6lfh A	Soli5	Bot6l a Bx E	

**GC Semi VOA****Prep Batch: 9484**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Bot6lfh A	Soli5	801Mh k Pjem	
890-1402-r	Pd 04A	Bot6lfh A	Soli5	801Mh k Pjem	
890-1402-3	Pd 04a	Bot6lfh A	Soli5	801Mh k Pjem	
890-1402-4	Pd 04C	Bot6lfh A	Soli5	801Mh k Pjem	
k a 880-9484f-A	k etTo5 al6nN	Bot6lfh A	Soli5	801Mh k Pjem	
7CS 880-9484f -A	76b Contol S6L mle	Bot6lfh A	Soli5	801Mh k Pjem	
7CSD 880-9484fB -A	76b Contol S6L mle Dpm	Bot6lfh A	Soli5	801Mh k Pjem	
890-1402-1 k S	Pd 04	Bot6lfh A	Soli5	801Mh k Pjem	
890-1402-1 k SD	Pd 04	Bot6lfh A	Soli5	801Mh k Pjem	

**Analysis Batch: 9598**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Bot6lfh A	Soli5	801Ma h k	9484

x pjoXnf EencosC6jf b65

**QC Association Summary**

Client: WSP USA Inc.

Project Site: zeHzee 011d

Job ID: 890-1402-1

SDG: 3140r 909.110

**GC Semi VOA (Continued)****Analysis Batch: 9598 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-r	Pd 04A	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
890-1402-3	Pd 04a	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
890-1402-4	Pd 04C	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
k a 880-9484F-A	k etTo5 al6nN	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
7CS 880-9484F-A	76b Contjol S6L mle	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
7CSD 880-9484B-A	76b Contjol S6L mle Dpm	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
890-1402-1 k S	Pd 04	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484
890-1402-1 k SD	Pd 04	Bot6lfh A	Soli5	801M <sub>a</sub> h k	9484

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Bot6lfh A	Soli5	801Mh k	
890-1402-r	Pd 04A	Bot6lfh A	Soli5	801Mh k	
890-1402-3	Pd 04a	Bot6lfh A	Soli5	801Mh k	
890-1402-4	Pd 04C	Bot6lfh A	Soli5	801Mh k	

**HPLC/IC****Leach Batch: 9560**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Soluble	Soli5	DI 7e6cT	
890-1402-r	Pd 04A	Soluble	Soli5	DI 7e6cT	
890-1402-3	Pd 04a	Soluble	Soli5	DI 7e6cT	
890-1402-4	Pd 04C	Soluble	Soli5	DI 7e6cT	
k a 880-9M20F-A	k etTo5 al6nN	Soluble	Soli5	DI 7e6cT	
7CS 880-9M20F-A	76b Contjol S6L mle	Soluble	Soli5	DI 7e6cT	
7CSD 880-9M20B-A	76b Contjol S6L mle Dpm	Soluble	Soli5	DI 7e6cT	
880-, 09MA-1-a k S	k 6tjiu Sm <sub>n</sub> e	Soluble	Soli5	DI 7e6cT	
880-, 09MA-1-C k SD	k 6tjiu Sm <sub>n</sub> e Dpmic6te	Soluble	Soli5	DI 7e6cT	

**Analysis Batch: 9759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 04	Soluble	Soli5	300.0	9M20
890-1402-r	Pd 04A	Soluble	Soli5	300.0	9M20
890-1402-3	Pd 04a	Soluble	Soli5	300.0	9M20
890-1402-4	Pd 04C	Soluble	Soli5	300.0	9M20
k a 880-9M20F-A	k etTo5 al6nN	Soluble	Soli5	300.0	9M20
7CS 880-9M20F-A	76b Contjol S6L mle	Soluble	Soli5	300.0	9M20
7CSD 880-9M20B-A	76b Contjol S6L mle Dpm	Soluble	Soli5	300.0	9M20
880-, 09MA-1-a k S	k 6tjiu Sm <sub>n</sub> e	Soluble	Soli5	300.0	9M20
880-, 09MA-1-C k SD	k 6tjiu Sm <sub>n</sub> e Dpmic6te	Soluble	Soli5	300.0	9M20

x pjoXnf EencosC6jf b65

**Lab Chronicle**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 3140p909.110

**Client Sample ID: PH03**

Date Collectex: 10d/ d21 11:20  
Date Receivex: 10d2d21 13:03

**Lab Sample ID: 890-1304-1**  
**5 atriM Solix**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared by Analyzex	Analyst	Lab
Prep Type	Type	5 ethox	Run	Factor	Amount	Number			
7otTi/MA	Pre5	K03K			4.98 a	Kg X	9422	10/14/p1 1p:43	LX
7otTi/MA	AnTlniyi	80p1s		1	Kg X	Kg X	9249	10/19/p1 0p:3K	6 B
7otTi/MA	AnTlniyi	7otTi s 7NE		1			9900	10/19/p1 13:4p	AJ
7otTi/MA	AnTlniyi	801KM6		1			9892	10/19/p1 13:pK	AJ
7otTi/MA	Pre5	801KM6 Pre5			10.0p a	10 g X	9484	10/14/p1 14:4K	D6
7otTi/MA	AnTlniyi	801Ks M6		1			9K98	10/1R/p1 1p:3p	AJ
Soluble	XeTch	DI XeTch			K03 a	K0 g X	9K20	10/1K/p1 1R31	CA
Soluble	AnTlniyi	300.0		1			9RK9	10/19/p1 11:K9	SC

**Client Sample ID: PH03A**

Date Collectex: 10d/ d21 11:27  
Date Receivex: 10d2d21 13:03

**Lab Sample ID: 890-1304-2**  
**5 atriM Solix**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared by Analyzex	Analyst	Lab
Prep Type	Type	5 ethox	Run	Factor	Amount	Number			
7otTi/MA	Pre5	K03K			K03 a	Kg X	9422	10/14/p1 1p:43	LX
7otTi/MA	AnTlniyi	80p1s		1	Kg X	Kg X	9249	10/19/p1 0p:K2	6 B
7otTi/MA	AnTlniyi	7otTi s 7NE		1			9900	10/19/p1 13:4p	AJ
7otTi/MA	AnTlniyi	801KM6		1			9892	10/19/p1 13:pK	AJ
7otTi/MA	Pre5	801KM6 Pre5			10.0K a	10 g X	9484	10/14/p1 14:4K	D6
7otTi/MA	AnTlniyi	801Ks M6		1			9K98	10/1R/p1 13:3p	AJ
Soluble	XeTch	DI XeTch			4.92 a	K0 g X	9K20	10/1K/p1 1R31	CA
Soluble	AnTlniyi	300.0		1			9RK9	10/19/p1 1p:OK	SC

**Client Sample ID: PH03B**

Date Collectex: 10d/ d21 11:2/  
Date Receivex: 10d2d21 13:03

**Lab Sample ID: 890-1304-7**  
**5 atriM Solix**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared by Analyzex	Analyst	Lab
Prep Type	Type	5 ethox	Run	Factor	Amount	Number			
7otTi/MA	Pre5	K03K			4.99 a	Kg X	9422	10/14/p1 1p:43	LX
7otTi/MA	AnTlniyi	80p1s		1	Kg X	Kg X	9249	10/19/p1 03:12	6 B
7otTi/MA	AnTlniyi	7otTi s 7NE		1			9900	10/19/p1 13:4p	AJ
7otTi/MA	AnTlniyi	801KM6		1			9892	10/19/p1 13:pK	AJ
7otTi/MA	Pre5	801KM6 Pre5			10.0p a	10 g X	9484	10/14/p1 14:4K	D6
7otTi/MA	AnTlniyi	801Ks M6		1			9K98	10/1R/p1 13:K3	AJ
Soluble	XeTch	DI XeTch			4.9Ra	K0 g X	9K20	10/1K/p1 1R31	CA
Soluble	AnTlniyi	300.0		1			9RK9	10/19/p1 1p:11	SC

**Client Sample ID: PH03C**

Date Collectex: 10d/ d21 11:77  
Date Receivex: 10d2d21 13:03

**Lab Sample ID: 890-1304-3**  
**5 atriM Solix**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared by Analyzex	Analyst	Lab
Prep Type	Type	5 ethox	Run	Factor	Amount	Number			
7otTi/MA	Pre5	K03K			K0p a	Kg X	9422	10/14/p1 1p:43	LX
7otTi/MA	AnTlniyi	80p1s		1	Kg X	Kg X	9249	10/19/p1 03:3R	6 B
7otTi/MA	AnTlniyi	7otTi s 7NE		1			9900	10/19/p1 13:4p	AJ

Nuro+ny Eencof CTrlybT,

**Lab Chronicle**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 3140p909.110

**Client Sample ID: PH03C****Lab Sample ID: 890-1304-3**

Date Collectex: 10d0/ d21 11:77

5 atriM Solix

Date Receivex: 10d12d21 13:03

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Preparex or Analyzex	Analyst	Lab
7otTI/MA	AnTlniyi	801KM6		1			9892	10/19/p1 13:pK	AJ	ENM 6 ID
7otTI/MA	Pre5	801KM6 Pre5			10.04 a	10 g X	9484	10/14/p1 14:4K	D6	ENM 6 ID
7otTI/MA	AnTlniyi	801Ks M6		1			9K98	10/1R/p1 14:13	AJ	ENM 6 ID
Soluble	XeTch	DI XeTch			K03 a	K0 g X	9K20	10/1K/p1 1R31	CA	ENM 6 ID
Soluble	AnTlniyi	300.0		1			9RK9	10/19/p1 1p:12	SC	ENM 6 ID

**Laboratory References:**

ENM 6 ID d Nuro+ny Eencof 6 i, ITn, f 1p11 W. Flori, T Avef 6 i, ITn, f 7E R9R01f 7NX(43p)R04-K440

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Nuro+ny Eencof CTrlybT,

## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 3140s909.110

### **Laboratory: Eurofins Xenco, Midland**

Unlehh otwerd ihe note, ayll ynylf teh vor twih lyborytorf d ere couere, Tn, er eycwyccre, ityton/certivicytion belod.

Authority	Program	Identification Number	Expiration Date
xeNyh	EL7AP	x104604400-s1-ss	02-30-ss
xwe vollding ynylf teh yre inclT, e, in twih reportabTt twe lyborytorf ih not certive, bf twe gouerning yTworitf. xwihiht myf inclT, e ynylf teh vor dwicw twe ygencf , oeh not over certivicytion.			
Anylf hih Metwo, 8015 EM xotyl BxLX	Prep Metwo, Soli, Soli,	MytriN Soli, Soli,	Anylf te xotyl xPH xotyl BxLX

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## Method Summary

Client: WSP USA Inc.  
Project Site: zeHzee 0116

Job ID: 890-1402-1  
SDG: 3140r 909.110

Method	Method Description	Protocol	Laboratory
80r 1B	Volatile Organic Compounds (GC)	SW842	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW842	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW842	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW842	XEN MID
8015NM Purge	Microextraction	SW842	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods for Chemical Analysis of Water and Wastes", EPA-200R-79-0r 0, March 1983 And Subsequent Revisions.

SW842 = "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1982 And Its Updates.

TAL SOP = Test Method Laboratory Procedures, Standard Operating Procedure

**Laboratory References:**

XEN MID = Eufins Xenco, Midland, 1r 11 W. Loop 309 Ave, Midland, TX 79701, TEL (432)704-5440

**Sample Summary**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1406-1	PH04	Solid	10/05/21 11:20	10/12/21 14:04	1
890-1406-2	PH04A	Solid	10/05/21 11:23	10/12/21 14:04	2
890-1406-3	PH04B	Solid	10/05/21 11:25	10/12/21 14:04	3
890-1406-4	PH04C	Solid	10/05/21 11:33	10/12/21 14:04	4

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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) 784-1296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900  
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701  
 Atlanta, GA (770) 449-8800

## Chain of Custody

Work Order No.: \_\_\_\_\_

[www.xenco.com](http://www.xenco.com)

Page 1 of 1

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) 683-2503	Email:	kalei.jennings@wsp.com

ANALYSIS REQUEST				Work Order Notes	
Project Name:	Fee Fee 011H	Turn Around			
Project Number:	31402909.110	Routine:	<input checked="" type="checkbox"/>		
Location:	Lea County	Rush:			
Sampler's Name:	Fatima Smith	Due Date:			
SAMPLE RECEIPT	2-16 1/18	Temp Blank: <input checked="" type="checkbox"/> Yes No	Wet Ice: <input checked="" type="checkbox"/> Yes No		
Temperature (°C):	2-4	Thermometer ID: NW-006			
Received intact:	No				
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	MA	Correction Factor:	0.2	
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	WA	Total Containers:		



890-1406 Chain of Custody

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

Number of Containers			
TPH (EPA 8015)			
BTEX (EPA 0-8021)			
Chloride (EPA 300.0)			

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
PH04	S	10/5/2021	1120	1'
PH04A	S	10/5/2021	1123	2'
PH04B	S	10/5/2021	1125	3'
PH04C	S	10/5/2021	1133	4'

**Total 200.7 / 6010 200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> 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-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>	10-12-21 16:00	2 <i>[Signature]</i>	<i>[Signature]</i>	10-12-21 14:04
3					
5					

Eurofins Xenco, Carlsbad

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

## Chain of Custody Record



eurofins

Environment Testing  
America

<b>Client Information</b>	<b>(Sub Contract Lab)</b>	
Address:	1211 W Florida Ave.	
Client Contact:	Sampler	Lab P/M Kramer, Jessica
Shipping/Receiving	Phone	E-Mail jessica.kramer@eurofinsxenco.com
Company:	Eurofins Xenco	
NELAP - Louisiana, NELAP - Texas		
Accrediations Required (See note):		
Due Date Requested 10/18/2021		
TAT Requested (days):		
PO #:		
VO #:		
Project #: 89000004		
Site: SSDW#		
Analysis Requested		
Field Filtered Sample (Yes or No)		
Perform MS/MSD (Yes or No)		
8015MOD_NM/8015NM_S_Prep (MOD) Full TPH		
8015MOD_Calc		
300_ORGFM_28D/DI_LEACH Chloride		
8021B/6036FP_Calc (MOD) BTEX		
Total_BTEX_GCV		
Total Number of containers		
Special Instructions/Note:		
Preservation Codes		
A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ica J - DI Water K - EDTA L - EDA M - Hexane N - None O - Ammonium P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecylglydate U - Acetone V - MCNA W - pH 4-5 Z - other (specify)		
Sample Identification - Client ID (Lab ID)		
Sample ID	Sample Date	Sample Time
PH04 (890-1406-1)	10/5/21	11:20
PH04A (890-1406-2)	10/5/21	11:23
PH04B (890-1406-3)	10/5/21	11:25
PH04C (890-1406-4)	10/5/21	11:33
Note: Since laboratory accreditation 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 compliance. 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 immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.		
<b>Possible Hazard Identification</b> <input type="checkbox"/> Unconfirmed <input type="checkbox"/> Relinquished by <b>JESSICA KRAMER</b> <input type="checkbox"/> Delivered Requested I II III IV Other (specify) <input type="checkbox"/> Primary Deliverable Rank 2		
<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: Method of Shipment:		
Empty Kit Relinquished by	Date	Time
Relinquished by	Date/Time	Company
Relinquished by	Date/Time	Received by <b>JESSICA KRAMER</b>
Custody Seals Intact.	Custody Seal No	
Δ Yes	Δ No	

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1402-1

SDG Number: 3140T909.110

**Login Number: 1406****List Source: Eurofins Xenco, Carlsbad****List Number: 1****Creator: Clifton, Cloe**

Question	Answer	Comment
h' e coolersd cutoya de, If ipvredentf id int, ct.	hrue	
S, mvle cutoya de, ldf ipvredentf , re int, ct.	hrue	
h' e cooler or d, mvled yo not , vve, r to ' , we been comvromidey or t, mverey Oit' .	hrue	
S, mvled Oere receiwey on ice.	hrue	
Cooler hemver, ture id , ccevt, ble.	hrue	
Cooler hemver, ture id recoryey.	hrue	
Ck C id vredent.	hrue	
Ck C id pilley out in ing , ny leFible.	hrue	
Ck C id pilley out Oit' , ll vertinent infrom, tion.	hrue	
Id t' e ?iely S, mvlersd n, me vredent on Ck CH	hrue	
h' ere , re no yidcrev, ncied betOeen t' e cont, inerd receivey , ny t' e Ck C.	hrue	
S, mvled , re receivey Oit' in ( olyinF hime xe) cluyinF tedtd Oit' immeyi, te ( hd/	hrue	
S, mvle cont, inerd ' , we leFible l, beld.	hrue	
Cont, inerd , re not brogen or le, ginF.	hrue	
S, mvle collection y, teVimed , re vrowiyey.	hrue	
Avrovri, te d, mvle cont, inerd , re udey.	hrue	
S, mvle bottled , re comvletela pilley.	hrue	
S, mvle Prederw tion qeripley.	N/A	
h' ere id dupcipient vol. por , ll reMuedtey , n, ladedf incl. , na reMuedtey z SV SDd	hrue	
Cont, inerd reMuirinF <ero ' e, ydv, ce ' , we no ' e, ydv, ce or bubble id 62mm x1\4".	N/A	

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1402-1

SDG Number: 3140T909.110

**Login Number: 1406****List Source: Eurofins Xenco, Midland****List Number: 2****List Creation: 10/13/21 12:17 PM****Creator: Kramer, Jessica**

Question	Answer	Comment
h' e coolersd cutoya de, If ipvredentf id int, ct.	NVA	
S, mvle cutoya de, ldf ipvredentf , re int, ct.	NVA	
h' e cooler or d, mvled yo not , vve, r to ' , we been comvromidey or t, mverey Oit' .	hrue	
S, mvled Oere receiwey on ice.	hrue	
Cooler hemver, ture id , ccevt, ble.	hrue	
Cooler hemver, ture id recoryey.	hrue	1.2M.7
Ck C id vredent.	hrue	
Ck C id pilley out in ing , ny leFible.	hrue	
Ck C id pilley out Oit' , ll vertinent infrom, tion.	hrue	
Id t' e ?iely S, mvlersd n, me vredent on Ck CH	hrue	
h' ere , re no yidcrev, ncied betOeen t' e cont, inerd receivey , ny t' e Ck C.	hrue	
S, mvled , re receivey Oit' in ( olyinF hime xe) cluyinF tedtd Oit' immeyi, te ( hd/	hrue	
S, mvle cont, inerd ' , we leFible l, beld.	hrue	
Cont, inerd , re not brogen or le, ginF.	hrue	
S, mvle collection y, teVimed , re vrowiyey.	hrue	
Avrovri, te d, mvle cont, inerd , re udey.	hrue	
S, mvle bottled , re comvletela pilley.	hrue	
S, mvle Prederw tion qeripley.	hrue	
h' ere id dupcipient vol. por , ll reMuedtey , n, ladedf incl. , na reMuedtey z SV SDd	hrue	
Cont, inerd reMuirinF <ero ' e, ydv, ce ' , we no ' e, ydv, ce or bubble id 62mm x14".	NVA	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1407-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/20/2021 1:53:13 PM

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

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Laboratory Job ID: 890-1407-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1407-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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

**Case Narrative**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1407-1  
SDG: 31402909.110

**Job ID: 890-1406-1**

**Laboratory: Eurofins Xenco, Carlsbad**

**Narrative****Job Narrative  
890-1406-1****Receipt**

The samples were received on 10/12/2021 2:04 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 2.4°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-9466 and analytical batch 880-9649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH05C (890-1407-4), (890-1405-A-1-D) and (890-1405-A-1-B MS). Evidence of matrix interferences is not obvious.

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

**GC Semi VOA**

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-9484 and analytical batch 880-9598 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

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: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Client Sample ID: PH05**  
Date Collected: 10/05/21 11:40  
Date Received: 10/12/21 14:04  
Sample Depth: 1

**Lab Sample ID: 890-1407-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/14/21 12:43	10/19/21 03:56	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/14/21 12:43	10/19/21 03:56	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/14/21 12:43	10/19/21 03:56	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/14/21 12:43	10/19/21 03:56	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/14/21 12:43	10/19/21 03:56	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		10/14/21 12:43	10/19/21 03:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	15		+7 - 507			57354385 58/40	57351385 70/2+	5
594-: ,fluorobenzene (Surr)	D2		+7 - 507			57354385 58/40	57351385 70/2+	5

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/19/21 13:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C* -C10	<49.9	U 71	49.9	mg/Kg		10/14/21 14:45	10/16/21 14:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/14/21 14:45	10/16/21 14:33	1
Oil Range Organics (Over C28-C3*)	<49.9	U	49.9	mg/Kg		10/14/21 14:45	10/16/21 14:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
5-i-Cloroohd ne	D+		+7 - 507			57354385 54/42	5735+385 54/00	5
o-aerTcenpl	1+		+7 - 507			57354385 54/42	5735+385 54/00	5

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.8		4.99	mg/Kg			10/19/21 12:22	1

**Client Sample ID: PH05A**

Date Collected: 10/05/21 11:42  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1407-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 04:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 04:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 04:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/14/21 12:43	10/19/21 04:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 04:16	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/14/21 12:43	10/19/21 04:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	+8		+7 - 507			57354385 58/40	57351385 74/5+	5

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Client Sample ID: PH05A**  
Date Collected: 10/05/21 11:42  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1407-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
594-: ,fluorobenzene (Surr)	+D		+7 - 507	5735435 58/40	57351385 74/5+	5

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/19/21 13:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C*-C10	<50.0	U 71	50.0	mg/Kg		10/14/21 14:45	10/16/21 14:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/16/21 14:53	1
Oil Range Organics (Over C28-C3*)	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/16/21 14:53	1
Surrogate	%Recovery	Qualifier	Limits		Prepared		Analyzed	Dil Fac
5-i-Cloroohd ne	18		+7 - 507		5735435 54/42		5735+35 54/20	5
o-aerTcenpl	570		+7 - 507		5735435 54/42		5735+35 54/20	5

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.4		4.95	mg/Kg			10/18/21 20:11	1

**Client Sample ID: PH05B**

**Lab Sample ID: 890-1407-3**

Matrix: Solid

Date Collected: 10/05/21 11:47

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 0*:0*	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 0*:0*	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 0*:0*	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/14/21 12:43	10/19/21 0*:0*	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/14/21 12:43	10/19/21 0*:0*	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/14/21 12:43	10/19/21 0*:0*	1
Surrogate	%Recovery	Qualifier	Limits		Prepared		Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	18		+7 - 507		5735435 58/40		57351385 7y/7y	5
594-: ,fluorobenzene (Surr)	+7		+7 - 507		5735435 58/40		57351385 7y/7y	5

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/19/21 13:25	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Client Sample ID: PH05B**  
Date Collected: 10/05/21 11:47  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1407-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C*-C10	<50.0	U 71	50.0	mg/Kg		10/14/21 14:45	10/16/21 15:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/16/21 15:14	1
OII Range Organics (Over C28-C3*)	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/16/21 15:14	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
5-i-Cloroohd ne	17		+7 - 507			57354385 54/42	5735+385 52/54	5
o-aerTCenpl	578		+7 - 507			57354385 54/42	5735+385 52/54	5

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	727		5.03	mg/Kg			10/18/21 20:28	1

**Client Sample ID: PH05C**  
Date Collected: 10/05/21 11:54  
Date Received: 10/12/21 14:04  
Sample Depth: 4

**Lab Sample ID: 890-1407-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 0*:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 0*:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 0*:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/14/21 12:43	10/19/21 0*:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/14/21 12:43	10/19/21 0*:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/14/21 12:43	10/19/21 0*:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	Dy		+7 - 507			57354385 58/40	57351385 7y/8+	5
594- ,fluorobenzene (Surr)	542	S56	+7 - 507			57354385 58/40	57351385 7y/8+	5

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/19/21 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/19/21 13:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C*-C10	<49.8	U 71	49.8	mg/Kg		10/14/21 14:45	10/16/21 15:34	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/14/21 14:45	10/16/21 15:34	1
OII Range Organics (Over C28-C3*)	<49.8	U	49.8	mg/Kg		10/14/21 14:45	10/16/21 15:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
5-i-Cloroohd ne	D1		+7 - 507			57354385 54/42	5735+385 52/04	5
o-aerTCenpl	11		+7 - 507			57354385 54/42	5735+385 52/04	5

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**Client Sample Results**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
 SDG: 31402909.110

**Client Sample ID: PH05C**  
**Date Collected:** 10/05/21 11:54  
**Date Received:** 10/12/21 14:04  
**Sample Depth:** 4

**Lab Sample ID: 890-1407-4**  
**Matrix:** Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	585		5.03	mg/Kg			10/18/21 20:34	1

1

2

3

4

5

6

7

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11

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## Surrogate Summary

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: zeHzee 0117

SDG: 3140r 909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Matrix: Solid****Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-140-A-1-6 MS	MBtjia Sxipe	128 S15	r 8+ S15
890-140-A-1-C MSD	MBtjia Sxipe DkxicBte	84	10+
890-1402-1	P70+	91	8+
890-1402-r	P70+A	2r	28
890-1402-3	P70+6	9r	20
890-1402-4	P70+C	8u	14+ S15
LCS 880-94uuF-A	LBb Contjol SBmxle	91	10r
LCSD 880-94uuF-A	LBb Contjol SBmxle Dkx	88	10r
M6 880-94uuF-A	Method 6IBnp	99	104
M6 880-9u3+F-A	Method 6IBnp	98	103

**Surrogate Legend**

6z6 = 4-6-jomoflkobenHene (Skjj)

Dz6Z = 1,4-DiflkobenHene (Skjj)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-140u-A-1-D MS	MBtjia Sxipe	92	9r
890-140u-A-1-O MSD	MBtjia Sxipe DkxicBte	94	90
890-1402-1	P70+	82	92
890-1402-r	P70+A	9r	103
890-1402-3	P70+6	90	10r
890-1402-4	P70+C	89	99
LCS 880-9484F-A	LBb Contjol SBmxle	8r	91
LCSD 880-9484B-A	LBb Contjol SBmxle Dkx	93	91
M6 880-9484F-A	Method 6IBnp	9u	10+

**Surrogate Legend**

1CT = 1-ChloooctBne

TyP7 = o-yejxhenB

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-6744/5-A****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 6744**

Analyte	MB	MB	Result	QualiUser	RL	z nit	D	Prepared	AnalyFed	Dil 3ac
	Result	Qualifier								
Benzene	<0.00200	U	0.00200		mg/Kg	10/14/21 12:43	10/19/21 00:45		1	
Toluene	<0.00200	U	0.00200		mg/Kg	10/14/21 12:43	10/19/21 00:45		1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	10/14/21 12:43	10/19/21 00:45		1	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	10/14/21 12:43	10/19/21 00:45		1	
o-Xylene	<0.00200	U	0.00200		mg/Kg	10/14/21 12:43	10/19/21 00:45		1	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	10/14/21 12:43	10/19/21 00:45		1	
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	11		5+ - 70+		7+34387 78/40	7+31387 ++/42		7		
794-: ,fluorobenzene (Surr)	7+4		5+ - 70+		7+34387 78/40	7+31387 ++/42		7		

**Lab Sample ID: LCS 880-6744/1-A****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 6744**

Analyte	Spikes	LCS	LCS	Result	QualiUser	z nit	D	f Rec	f Rec%	Limits
	Added	Result	Qualifier							
Benzene	0.100	0.0802R		mg/Kg		80	60 - 130			
Toluene	0.100	0.09482		mg/Kg		95	60 - 130			
Ethylbenzene	0.100	0.09859		mg/Kg		99	60 - 130			
m-Xylene & p-Xylene	0.200	0.183R		mg/Kg		92	60 - 130			
o-Xylene	0.100	0.10R3		mg/Kg		10R	60 - 130			
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	17		5+ - 70+		7+34387 78/40	7+31387 ++/42		7		
794-: ,fluorobenzene (Surr)	7+8		5+ - 70+		7+34387 78/40	7+31387 ++/42		7		

**Lab Sample ID: LCSD 880-6744/2-A****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 6744**

Analyte	Spike	LCSD	LCSD	Result	QualiUser	z nit	D	f Rec	f Rec%	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1114		mg/Kg		111	60 - 130		32	35	
Toluene	0.100	0.1143		mg/Kg		114	60 - 130		19	35	
Ethylbenzene	0.100	0.1151		mg/Kg		115	60 - 130		15	35	
m-Xylene & p-Xylene	0.200	0.2203		mg/Kg		110	60 - 130		18	35	
o-Xylene	0.100	0.1163		mg/Kg		116	60 - 130		10	35	
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	DD		5+ - 70+		7+34387 78/40	7+31387 ++/42		7			
794-: ,fluorobenzene (Surr)	7+8		5+ - 70+		7+34387 78/40	7+31387 ++/42		7			

**Lab Sample ID: 860-1705-A-1-B MS****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 6744**

Analyte	Sample	Sample	Spike	MS	MS	Result	QualiUser	z nit	D	f Rec	f Rec%
	Result	QualiUser	Added	Result	QualiUser						
Benzene	<0.00200	U F1 F2	0.100	0.105R		mg/Kg		105	60 - 130		
Toluene	<0.00200	U F1	0.100	0.06530		mg/Kg		65	60 - 130		

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**QC Sample Results**

Client: WSP USA Inc.

Job ID: 890-1406-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 860-1705-A-1-B MS****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 6744**

Analyte	Sample	Sample	Spike	MS	MS	z nit	D	f	Rec%	Limits
	Result	QualiÜer	Added	Result	QualiÜer					
Ethylbenzene	<0.00200	U F1 F2	0.100	0.03958	F1	mg/Kg		39	60 - 130	
m-Xylene & p-Xylene	<0.00400	U F1 F2	0.200	0.05315	F1	mg/Kg		26	60 - 130	
o-Xylene	<0.00200	U F1 F2	0.100	0.0083R9	F1	mg/Kg		8	60 - 130	

**MS****MS**

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	75D	S7i	5+ - 70+
794- ,fluorobenzene (Surr)	8D2	S7i	5+ - 70+

**Lab Sample ID: 860-1705-A-1-C MSD****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 6744**

Analyte	Sample	Sample	Spike	MSD	MSD	z nit	D	f	Rec%	RPD
	Result	QualiÜer	Added	Result	QualiÜer					
Benzene	<0.00200	U F1 F2	0.101	0.009442	F1 F2	mg/Kg		9	60 - 130	1R6
Toluene	<0.00200	U F1	0.101	0.05RR6	F1	mg/Kg		5R	60 - 130	28
Ethylbenzene	<0.00200	U F1 F2	0.101	0.0R85	F1 F2	mg/Kg		RR	60 - 130	51
m-Xylene & p-Xylene	<0.00400	U F1 F2	0.202	0.08556	F1 F2	mg/Kg		42	60 - 130	46
o-Xylene	<0.00200	U F1 F2	0.101	0.06180	F2	mg/Kg		61	60 - 130	158

**MSD****MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	D4		5+ - 70+
794- ,fluorobenzene (Surr)	7+2		5+ - 70+

**Lab Sample ID: MB 880-64. 5/5-A****Matrix: Solid****Analysis Batch: 6476****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 64. 5**

Analyte	MB	MB	RL	z nit	D	Prepared	AnalyFed	Dil 3ac
	Result	QualiÜer						
Benzene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/18/21 09:40	10/18/21 13:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/18/21 09:40	10/18/21 13:12	1

**MB****MB**

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	1D		5+ - 70+	7+3D87 +1/4+	7+3D87 70/78	7
794- ,fluorobenzene (Surr)	7+0		5+ - 70+	7+3D87 +1/4+	7+3D87 70/78	7

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-6787/1-A****Matrix: Solid****Analysis Batch: 6568****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 6787**

Analyte	MB	MB	RL	z nit	D	Prepared	AnalyFed	Dil 3ac
	Result	QualiÜer						
Gasoline ) ange * rganics	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/16/21 11:31	1
TG) * vCR-C10								

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: MB 880-6787/1-A****Matrix: Solid****Analysis Batch: 6568****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 6787**

Analyte	MB		RL	z nit	D	Prepared	Analyzed	Dil 3ac
	Result	QualiÜer						
Diesel ) ange * rganics 7 fer	<50.0	U	50.0	mg/Kg	10/14/21 14:45	10/16/21 11:31		1
C10-C28v								
* II ) ange * rganics 7 fer C28-C3Rv	<50.0	U	50.0	mg/Kg	10/14/21 14:45	10/16/21 11:31		1
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac		
	%Recovery	Qualifier						
7-Chlorooctane	1T		5+ - 70+	7+34387 74/42	7+35387 77/07	7		
o-phenylen6l	7+2		5+ - 70+	7+34387 74/42	7+35387 77/07	7		

**Lab Sample ID: LCS 880-6787/2-A****Matrix: Solid****Analysis Batch: 6568****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 6787**

Analyte	Spike		LCS Result	LCS QualiÜer	z nit	D	f Rec%	
	Added	Rec%					f Rec	Limits
Gasoline ) ange * rganics			1000	680.0	mg/Kg	68	60 - 130	
7G) * vCR-C10								
Diesel ) ange * rganics 7 fer			1000	880.0	mg/Kg	88	60 - 130	
C10-C28v								
Surrogate	LCS		LCS Result	LCS QualiÜer	z nit	D	f Rec%	
	%Recovery	Qualifier					f Rec	Limits
7-Chlorooctane	D8		5+ - 70+					
o-phenylen6l	17		5+ - 70+					

**Lab Sample ID: LCSD 880-6787/. -A****Matrix: Solid****Analysis Batch: 6568****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 6787**

Analyte	Spike		LCSD Result	LCSD QualiÜer	z nit	D	f Rec%	
	Added	Rec%					f Rec	Limit
Gasoline ) ange * rganics			1000	996.9	df	100	60 - 130	25
7G) * vCR-C10								
Diesel ) ange * rganics 7 fer			1000	868.9	mg/Kg	88	60 - 130	0
C10-C28v								20
Surrogate	LCSD		LCSD Result	LCSD QualiÜer	z nit	D	f Rec%	
	%Recovery	Qualifier					f Rec	Limit
7-Chlorooctane	10		5+ - 70+					
o-phenylen6l	17		5+ - 70+					

**Lab Sample ID: 860-1704-A-1-D MS****Matrix: Solid****Analysis Batch: 6568****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 6787**

Analyte	Sample		Spike	MS Result	MS QualiÜer	z nit	D	f Rec%	
	Result	QualiÜer						f Rec	Limits
Gasoline ) ange * rganics	<49.9	U df	996	939.R	mg/Kg	90	60 - 130		
7G) * vCR-C10									
Diesel ) ange * rganics 7 fer	<49.9	U	996	894.6	mg/Kg	90	60 - 130		
C10-C28v									
Surrogate	MS		MS Result	MS QualiÜer	z nit	D	f Rec%		
	%Recovery	Qualifier					f Rec	Limits	
7-Chlorooctane	15		5+ - 70+						
o-phenylen6l	18		5+ - 70+						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1406-1  
SDG: 31402909.110

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

Lab Sample ID: 860-1704-A-1-9 MSD							Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid							Prep Type: Total/NA						
Analysis Batch: 6568							Prep Batch: 6787						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	z nit mg/Kg	D	f Rec	f Rec%	Limits	RPD	RPD	Limit
Gasoline ) ange * rganics TG) * vCR-C10	<49.9	U d1	1000	964.1				93		60 - 130	4		20
Diesel ) ange * rganics 7 fer C10-C28v	<49.9	U	1000	880.8		mg/Kg		88		60 - 130	2		20
Surrogate							MSD %Recovery Qualifier Limits						
7-Chloroocetane	14			5+ - 70+									
o-phenylen6l	1+			5+ - 70+									

**Method: . 00% - AnionsHon Chromatography**

Lab Sample ID: MB 880-6540/1-A							Client Sample ID: Method Blank						
Matrix: Solid							Prep Type: Soluble						
Analysis Batch: 6, 56													
Analyte	MB Result	MB Qualifier		RL		z nit mg/Kg	D	Prepared	AnalyFed				
Chlori( e	<5.00	U		5.00					10/18/21 1R36				1

Lab Sample ID: LCS 880-6540/2-A							Client Sample ID: Lab Control Sample						
Matrix: Solid							Prep Type: Soluble						
Analysis Batch: 6, 56													
Analyte	Spike Added		LCS Result	LCS Qualifier	z nit mg/Kg	D	f Rec	f Rec%	Limits				
Chlori( e	250		240.8		mg/Kg		9R		90 - 110				

Lab Sample ID: LCSD 880-6540/. -A							Client Sample ID: Lab Control Sample Dup						
Matrix: Solid							Prep Type: Soluble						
Analysis Batch: 6, 56													
Analyte	Spike Added		LCSD Result	LCSD Qualifier	z nit mg/Kg	D	f Rec	f Rec%	Limits	RPD	RPD	Limit	
Chlori( e	250		241.5		mg/Kg		96		90 - 110	0			20

Lab Sample ID: 880-, 065-A-1-B MS							Client Sample ID: Matrix Spike						
Matrix: Solid							Prep Type: Soluble						
Analysis Batch: 6, 56													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	z nit mg/Kg	D	f Rec	f Rec%	Limits	RPD	RPD	Limit
Chlori( e	311		248	544.3		mg/Kg		94		90 - 110	0		20

Lab Sample ID: 880-, 065-A-1-C MSD							Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid							Prep Type: Soluble						
Analysis Batch: 6, 56													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	z nit mg/Kg	D	f Rec	f Rec%	Limits	RPD	RPD	Limit
Chlori( e	311		248	545.2		mg/Kg		95		90 - 110	0		20

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**QC Sample Results**

Client: WSP USA Inc.

Job ID: 890-1406-1

Project/Site: Fez Fee 011H

SDG: 31402909.110

**Method: . 00% - AnionsHon Chromatography (Continued)****Lab Sample ID: MB 880-6547/1-A****Client Sample ID: Method Blank****Matrix: Solid****Prep Type: Soluble****Analysis Batch: 6, 6.**

Analyte	MB	MB	QualiÜer	RL	z nit	D	Prepared	AnalyFed	Dil 3ac
	Result	U							
Chlori( e	<5.00			5.00	mg/Kg			10/18/21 19:54	1

**Lab Sample ID: LCS 880-6547/2-A****Client Sample ID: Lab Control Sample****Matrix: Solid****Prep Type: Soluble****Analysis Batch: 6, 6.**

Analyte	Spike	LCS	LCS	QualiÜer	z nit	D	f Rec	f Rec%	Limits
	Added	Result	U						
Chlori( e	250	245.2	U		mg/Kg		98	90 - 110	

**Lab Sample ID: LCSD 880-6547/. -A****Client Sample ID: Lab Control Sample Dup****Matrix: Solid****Prep Type: Soluble****Analysis Batch: 6, 6.**

Analyte	Spike	LCSD	LCSD	QualiÜer	z nit	D	f Rec	f Rec%	Limits	RPD	Limit
	Added	Result	U								
Chlori( e	250	24R1	U		mg/Kg		98	90 - 110		0	20

**Lab Sample ID: 860-170, -2 MS****Client Sample ID: PE05A****Matrix: Solid****Prep Type: Soluble****Analysis Batch: 6, 6.**

Analyte	Sample	Sample	Spike	MS	MS	QualiÜer	z nit	D	f Rec	f Rec%	Limits
	Result	QualiÜer	Added	Result	U						
Chlori( e	18.4		248	2R5.6	U		mg/Kg		100	90 - 110	

**Lab Sample ID: 860-170, -2 MSD****Client Sample ID: PE05A****Matrix: Solid****Prep Type: Soluble****Analysis Batch: 6, 6.**

Analyte	Sample	Sample	Spike	MSD	MSD	QualiÜer	z nit	D	f Rec	f Rec%	Limits
	Result	QualiÜer	Added	Result	U						
Chlori( e	18.4		248	2RR6	U		mg/Kg		100	90 - 110	

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**QC Association Summary**

Client: WSP USA Inc.  
Project Site: zeHzee 011d

Job ID: 890-1402-1  
SDG: 3140r 909.110

**GC VOA****Prep Batch: 9466**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Bot6lfh A	Soli5	M03M	
890-1402-r	Pd 0MA	Bot6lfh A	Soli5	M03M	
890-1402-3	Pd 0Ma	Bot6lfh A	Soli5	M03M	
890-1402-4	Pd 0MC	Bot6lfh A	Soli5	M03M	
k a 880-94TTFMA	k etNb5 al6n7	Bot6lfh A	Soli5	M03M	
LCS 880-94TTF-A	L6b Contjol S6mple	Bot6lfh A	Soli5	M03M	
LCSD 880-94TTF-A	L6b Contjol S6mple Dup	Bot6lfh A	Soli5	M03M	
890-140MA-1-a k S	k 6tjix Spi7e	Bot6lfh A	Soli5	M03M	
890-140MA-1-C k SD	k 6tjix Spi7e Duplic6te	Bot6lfh A	Soli5	M03M	

**Prep Batch: 9635**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
k a 880-9T3MMA	k etNb5 al6n7	Bot6lfh A	Soli5	M03M	

**Analysis Batch: 9649**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Bot6lfh A	Soli5	80r 1a	94TT
890-1402-r	Pd 0MA	Bot6lfh A	Soli5	80r 1a	94TT
890-1402-3	Pd 0Ma	Bot6lfh A	Soli5	80r 1a	94TT
890-1402-4	Pd 0MC	Bot6lfh A	Soli5	80r 1a	94TT
k a 880-94TTFMA	k etNb5 al6n7	Bot6lfh A	Soli5	80r 1a	94TT
k a 880-9T3MMA	k etNb5 al6n7	Bot6lfh A	Soli5	80r 1a	9T3M
LCS 880-94TTF-A	L6b Contjol S6mple	Bot6lfh A	Soli5	80r 1a	94TT
LCSD 880-94TTF-A	L6b Contjol S6mple Dup	Bot6lfh A	Soli5	80r 1a	94TT
890-140MA-1-a k S	k 6tjix Spi7e	Bot6lfh A	Soli5	80r 1a	94TT
890-140MA-1-C k SD	k 6tjix Spi7e Duplic6te	Bot6lfh A	Soli5	80r 1a	94TT

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Bot6lfh A	Soli5	Bot6l aBEX	
890-1402-r	Pd 0MA	Bot6lfh A	Soli5	Bot6l aBEX	
890-1402-3	Pd 0Ma	Bot6lfh A	Soli5	Bot6l aBEX	
890-1402-4	Pd 0MC	Bot6lfh A	Soli5	Bot6l aBEX	

**GC Semi VOA****Prep Batch: 9484**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Bot6lfh A	Soli5	801Mh k Pjep	
890-1402-r	Pd 0MA	Bot6lfh A	Soli5	801Mh k Pjep	
890-1402-3	Pd 0Ma	Bot6lfh A	Soli5	801Mh k Pjep	
890-1402-4	Pd 0MC	Bot6lfh A	Soli5	801Mh k Pjep	
k a 880-9484F-A	k etNb5 al6n7	Bot6lfh A	Soli5	801Mh k Pjep	
LCS 880-9484F-A	L6b Contjol S6mple	Bot6lfh A	Soli5	801Mh k Pjep	
LCSD 880-9484F-A	L6b Contjol S6mple Dup	Bot6lfh A	Soli5	801Mh k Pjep	
890-140T-A-1-D k S	k 6tjix Spi7e	Bot6lfh A	Soli5	801Mh k Pjep	
890-140T-A-1-E k SD	k 6tjix Spi7e Duplic6te	Bot6lfh A	Soli5	801Mh k Pjep	

**Analysis Batch: 9598**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Bot6lfh A	Soli5	801Ma h k	9484

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**QC Association Summary**

Client: WSP USA Inc.

Project Site: zeHzee 011d

Job ID: 890-1402-1

SDG: 3140r 909.110

**GC Semi VOA (Continued)****Analysis Batch: 9598 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-r	Pd 0MA	Bot6lfhA	Soli5	801Ma hk	9484
890-1402-3	Pd 0Ma	Bot6lfhA	Soli5	801Ma hk	9484
890-1402-4	Pd 0MC	Bot6lfhA	Soli5	801Ma hk	9484
k a 880-9484F-A	k etNb5 al6n7	Bot6lfhA	Soli5	801Ma hk	9484
LCS 880-9484F-A	L6b ContJol S6mple	Bot6lfhA	Soli5	801Ma hk	9484
LCSD 880-9484B-A	L6b ContJol S6mple Dup	Bot6lfhA	Soli5	801Ma hk	9484
890-140T-A-1-D k S	k 6tjix Spi7e	Bot6lfhA	Soli5	801Ma hk	9484
890-140T-A-1-E k SD	k 6tjix Spi7e Duplic6te	Bot6lfhA	Soli5	801Ma hk	9484

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Bot6lfhA	Soli5	801Mhk	
890-1402-r	Pd 0MA	Bot6lfhA	Soli5	801Mhk	
890-1402-3	Pd 0Ma	Bot6lfhA	Soli5	801Mhk	
890-1402-4	Pd 0MC	Bot6lfhA	Soli5	801Mhk	

**HPLC/IC****Leach Batch: 9560**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Soluble	Soli5	DI Le6cN	
k a 880-9MT0F-A	k etNb5 al6n7	Soluble	Soli5	DI Le6cN	
LCS 880-9MT0F-A	L6b ContJol S6mple	Soluble	Soli5	DI Le6cN	
LCSD 880-9MT0B-A	L6b ContJol S6mple Dup	Soluble	Soli5	DI Le6cN	
880-209MA-1-a k S	k 6tjix Spi7e	Soluble	Soli5	DI Le6cN	
880-209MA-1-C k SD	k 6tjix Spi7e Duplic6te	Soluble	Soli5	DI Le6cN	

**Leach Batch: 9564**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-r	Pd 0MA	Soluble	Soli5	DI Le6cN	
890-1402-3	Pd 0Ma	Soluble	Soli5	DI Le6cN	
890-1402-4	Pd 0MC	Soluble	Soli5	DI Le6cN	
k a 880-9MT4F-A	k etNb5 al6n7	Soluble	Soli5	DI Le6cN	
LCS 880-9MT4F-A	L6b ContJol S6mple	Soluble	Soli5	DI Le6cN	
LCSD 880-9MT4B-A	L6b ContJol S6mple Dup	Soluble	Soli5	DI Le6cN	
890-1402-r k S	Pd 0MA	Soluble	Soli5	DI Le6cN	
890-1402-r k SD	Pd 0MA	Soluble	Soli5	DI Le6cN	

**Analysis Batch: 9759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-1	Pd 0M	Soluble	Soli5	300.0	9MT0
k a 880-9MT0F-A	k etNb5 al6n7	Soluble	Soli5	300.0	9MT0
LCS 880-9MT0F-A	L6b ContJol S6mple	Soluble	Soli5	300.0	9MT0
LCSD 880-9MT0B-A	L6b ContJol S6mple Dup	Soluble	Soli5	300.0	9MT0
880-209MA-1-a k S	k 6tjix Spi7e	Soluble	Soli5	300.0	9MT0
880-209MA-1-C k SD	k 6tjix Spi7e Duplic6te	Soluble	Soli5	300.0	9MT0

**Analysis Batch: 9793**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-r	Pd 0MA	Soluble	Soli5	300.0	9MT4
890-1402-3	Pd 0Ma	Soluble	Soli5	300.0	9MT4

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**QC Association Summary**

Client: WSP USA Inc.

Job ID: 890-1402-1

Project Site: zeHzee 011d

SDG: 3140r 909.110

**HPLC/IC (Continued)****Analysis Batch: 9793 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1402-4	Pd0MC	Soluble	Soli5	300.0	9MT4
k a 880-9MT4F-A	k etNb5 al6n7	Soluble	Soli5	300.0	9MT4
LCS 880-9MT4F-A	L6b ContJol S6mple	Soluble	Soli5	300.0	9MT4
LCSD 880-9MT4B-A	L6b ContJol S6mple Dup	Soluble	Soli5	300.0	9MT4
890-1402-r k S	Pd0MA	Soluble	Soli5	300.0	9MT4
890-1402-r k SD	Pd0MA	Soluble	Soli5	300.0	9MT4

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**Lab Chronicle**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
SDG: 3140p909.110

**Client Sample ID: PH03**

Date Collected: 10/03/21 11:40  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-1**  
**Matrix: Solid**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared or Analyzed	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number			
Total/MA	Pre5	K03K			4.97 g	KmX	9477	10/14/p1 1p:43	LX
Total/MA	Analysis	80p1B		1	KmX	KmX	9749	10/19/p1 03:K2	6 R
Total/MA	Analysis	Total BTNE		1		9900	10/19/p1 13:4p	AJ	ENM 6 ID
Total/MA	Analysis	801KM6		1		9897	10/19/p1 13:pK	AJ	ENM 6 ID
Total/MA	Pre5	801KM6 Pre5			10.03 g	10 mX	9484	10/14/p1 14:4K	D6
Total/MA	Analysis	801KB M6		1		9K98	10/12/p1 14:33	AJ	ENM 6 ID
Soluble	Xeach	DI Xeach			K01 g	K0 mX	9K70	10/1K/p1 12:31	CA
Soluble	Analysis	300.0		1		92K9	10/19/p1 1p:pp	SC	ENM 6 ID

**Client Sample ID: PH03A**

Date Collected: 10/03/21 11:42  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-2**  
**Matrix: Solid**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared or Analyzed	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number			
Total/MA	Pre5	K03K			K01 g	KmX	9477	10/14/p1 1p:43	LX
Total/MA	Analysis	80p1B		1	KmX	KmX	9749	10/19/p1 04:12	6 R
Total/MA	Analysis	Total BTNE		1		9900	10/19/p1 13:4p	AJ	ENM 6 ID
Total/MA	Analysis	801KM6		1		9897	10/19/p1 13:pK	AJ	ENM 6 ID
Total/MA	Pre5	801KM6 Pre5			10.01 g	10 mX	9484	10/14/p1 14:4K	D6
Total/MA	Analysis	801KB M6		1		9K98	10/12/p1 14:K3	AJ	ENM 6 ID
Soluble	Xeach	DI Xeach			K0Kg	K0 mX	9K74	10/1K/p1 12:32	CA
Soluble	Analysis	300.0		1	0 mX	1.0 mX	9293	10/18/p1 p0:11	SC

**Client Sample ID: PH03B**

Date Collected: 10/03/21 11:45  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-7**  
**Matrix: Solid**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared or Analyzed	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number			
Total/MA	Pre5	K03K			K01 g	KmX	9477	10/14/p1 1p:43	LX
Total/MA	Analysis	80p1B		1	KmX	KmX	9749	10/19/p1 07:07	6 R
Total/MA	Analysis	Total BTNE		1		9900	10/19/p1 13:4p	AJ	ENM 6 ID
Total/MA	Analysis	801KM6		1		9897	10/19/p1 13:pK	AJ	ENM 6 ID
Total/MA	Pre5	801KM6 Pre5			10.01 g	10 mX	9484	10/14/p1 14:4K	D6
Total/MA	Analysis	801KB M6		1		9K98	10/12/p1 1K:14	AJ	ENM 6 ID
Soluble	Xeach	DI Xeach			4.92 g	K0 mX	9K74	10/1K/p1 12:32	CA
Soluble	Analysis	300.0		1	0 mX	1.0 mX	9293	10/18/p1 p0:8	SC

**Client Sample ID: PH03C**

Date Collected: 10/03/21 11:34  
Date Received: 10/12/21 14:04

**Lab Sample ID: 890-1405-4**  
**Matrix: Solid**

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared or Analyzed	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number			
Total/MA	Pre5	K03K			K0p g	KmX	9477	10/14/p1 1p:43	LX
Total/MA	Analysis	80p1B		1	KmX	KmX	9749	10/19/p1 07:p2	6 R
Total/MA	Analysis	Total BTNE		1		9900	10/19/p1 13:4p	AJ	ENM 6 ID

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**Lab Chronicle**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1402-1  
 SDG: 3140p909.110

**Client Sample ID: PH03C**  
**Date Collected: 10/03/21 11:34**  
**Date Received: 10/12/21 14:04**

**Lab Sample ID: 890-1405-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/MA	Analysis	801KM6		1			9897	10/19/p1 13:pK	AJ	ENM 6 ID
Total/MA	Pre5	801KM6 Pre5			10.0Kg	10 mX	9484	10/14/p1 14:4K	D6	ENM 6 ID
Total/MA	Analysis	801KB M6		1			9K98	10/12/p1 1K34	AJ	ENM 6 ID
Soluble	Xeach	DI Xeach			4.92 g	K0 mX	9K74	10/1K/p1 12:32	CA	ENM 6 ID
Soluble	Analysis	300.0		1	0 mX	1.0 mX	9293	10/18/p1 p0:34	SC	ENM 6 ID

**Laboratory References:**

ENM 6 ID d Nuro+ins Eencof 6 i, Ian, f 1p11 W. Flori, a Avef 6 i, Ian, f TE 29201f TNX(43p)204-K440

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Nuro+ins Eencof Carlsba,

## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1402-1

Project/Site: Fez Fee 011H

SDG: 3140s909.110

### **Laboratory: Eurofins Xenco, Midland**

Unlehh otwerd ihe note, ayll ynylf teh vor twih lyborytorf d ere couere, Tn, er eycwyccre, itytion/certivicytion belod .

Authority	Program	Identification Number	Expiration Date
xeNyh	EL7AP	x104204400-s1-ss	06-30-ss
xwe vollding ynylf teh yre inclT, e, in twih reportabTt twe lyborytorf ih not certive, bf twe gouerning yTworitf. xwihiht myf inclT, e ynylf teh vor dwicw twe ygencf , oeh not over certivicytion.			
Anylf hih Metwo, 8015 EM xotyl BxLX	Prep Metwo, Soli, Soli,	MytriN Soli, Soli,	Anylf te xotyl xPH xotyl BxLX

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L Trovinh XencoaCyrlhby,

**Method Summary**

Client: WSP USA Inc.  
Project Site: zeHzee 0116

Job ID: 890-1402-1  
SDG: 3140r 909.110

Method	Method Description	Protocol	Laboratory
80r 1V	aolQile g jmnic Cop uodns( )GCX	SW84B	ENMT ID
LotQ VLNE	LotQ VLNE CQcdlQtion	LA5 Sg P	ENMT ID
801RMT	Die(el , Onre g jmnic( )D, g X)GCX	SW84B	ENMT ID
801RV MT	Die(el , Onre g jmnic( )D, g X)GCX	SW84B	ENMT ID
300.0	Anion(hlon Cyjop QonjQuyx	T CAWW	ENMT ID
R03R	Clo(es Sx(tep Pdjme Ons LjQu	SW84B	ENMT ID
801RMT Pjeu	T icjoe=tjOcton	SW84B	ENMT ID
DI 5eOcy	Deionil=bs WQtej 5eOcyinmPjocesdje	ASLT	ENMT ID

**Protocol References:**

ASLT " ASLT IntejnQtionQ

T CAWW " fT etyos( zoj Cyep icQ AnQx(i( g 7WQej Ans WQ te(fhNPA-B00R4-29-0r 0hT Qcy 1983 Ans Sdb( eqdent , evi( ion(.

SW84B " fLe(t T etyos( zoj NvQdQtimSolis WQ tehPyx(icQFcyep icQ T etyos( fhLyjjs NsitionhMovep bej 198B Ans It( UusQte(.

LA5 Sg P " Le(tAp ejicO5Cboj Qtojie(hStQnsQs g uej QtinmPjocesdje

**Laboratory References:**

ENMT ID " Ndjo7n( EencohT islQsh1r 11 W. zlojisOAvehT islQshLE 29201hLN5 )43r X204-R440

**Sample Summary**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1405-1  
 SDG: 31402909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1405-1	PH0d	Soli7	10/0d/21 11:40	10/12/21 14:04	1
890-1405-2	PH0dA	Soli7	10/0d/21 11:42	10/12/21 14:04	2
890-1405-3	PH0dB	Soli7	10/0d/21 11:45	10/12/21 14:04	3
890-1405-4	PH0dC	Soli7	10/0d/21 11:d4	10/12/21 14:04	4

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## Chain of Custody

Work Order No: \_\_\_\_\_

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334  
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 325-0900  
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 699-6701  
 Atlanta, GA (770) 449-8800

www.xenco.com

Page 1 of 1

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) 683-2503	Email: kalei.jennings@wsp.com
<b>ANALYSIS REQUEST</b>		
Project Name:	Fee Fee 011H	Turn Around
Project Number:	31402909.110	Routine: <input checked="" type="checkbox"/>
Location:	Lea County	Rush:
Sampler's Name:	Fatima Smith	Due Date:
<b>SAMPLE RECEIPT</b>	Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	24.4	Thermometer ID: <b>MWM-5007</b>
Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor: <b>0.2</b>
Cooler Custody Seals:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Total Containers: <b>890-1407</b>
Sample Custody Seals:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
<b>Number of Containers</b>		
TPH (EPA 8015)		
BTEX (EPA 0-8021)		
Chloride (EPA 300.0)		
 <b>890-1407 Chain of Custody</b>		
TAT starts the day received by the lab, if received by 4:30pm		
Work Order Notes		
Work Order Comments		
<input type="checkbox"/> Program: UST/PST <input type="checkbox"/> PRR <input type="checkbox"/> Brownfield <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: <input type="checkbox"/> Reporting Level <input type="checkbox"/> Level <input type="checkbox"/> PST/USS <input type="checkbox"/> TRU <input type="checkbox"/> Level <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:		

**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<sub>2</sub> Na Sr Ti Sn U V Zn  
 Circle Method(s) and Matrix(es) to be analyzed: ICLP/SPLP 6040- 8RCRA-Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U  
 1631 / 245.1 / 7470 / 7471 Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Jette J</i>	<i>Whitney</i>	10-12-21/1600	<i>Quinn</i>	10-12-21/1400	
3		4		5	6

## Chain of Custody Record



eurofins

Environment Testing  
America

<b>Client Information</b> (Sub Contract Lab)		Sampler	Lab P.M.	Carrier Tracking No(s)	COC No
Shipping/Receiving		Kramer Jessica	E-Mail	890-459 1	Page
Company		Accrediations Required (See note):			Page 1 of 1
Eurofins Xenco		NELAP - Louisiana, NELAP - Texas			Job#:
Address: 1211 W Florida Ave		Due Date Requested 10/18/2021	TAT Requested (days):	Analysis Requested	
City: Midland					
State Zip: TX 79701					
Phone: 432-7704-5440(Tel)		PO #:			
Email: fez fee 011n		WO #:			
Project Name: SSW#:		Project #: 89000004			
Site:		SSW#:			
Field Filtered Sample (Yes or No)					
Perform MS/MSD (Yes or No)					
8015MOD_NM/8015NM_S_Prep (MOD) Full TPH					
8015MOD_Calc					
300_ORGFM_28D/DI_LEACH Chloride					
8021B/6036FP_Calc (MOD) BTEX					
Total_BTEX_GCV					
Total Number of containers					
Special Instructions/Note:					
Preservation Codes					
A - HCl      M - Hexane					
B - NaOH      N - None					
C - Zn Acetate      O - AsNaO2					
D - Nitric Acid      P - Na2O5					
E - NaHSO4      Q - Na2S2O3					
F - MeOH      R - Na2S2O3					
G - Amchor      S - H2SO4					
H - Ascorbic Acid      T - TSP Dodecahydrate					
I - Iodine      U - Acetone					
J - DI Water      V - MCAA					
K - EDTA      W - pH 4-5					
L - EDA      Z - other(specify)					
Other:					
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analysis & 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 analytes/test matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instruction will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.					
<b>Possible Hazard Identification</b>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Unconfirmed		<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months
Deliverable Requested I, II, III IV Other (specify)		Primary Deliverable Rank 2			
Empty Kit Relinquished by:		Special Instructions/QC Requirements			
Relinquished by: <u>Cloe</u> 10-12-21		Date/Time:	Received by: <u>J. Kramer</u>	Method of Shipment:	Date/Time: 10-13-21
Relinquished by	Company	Received by	Company	Date/Time:	Company
Relinquished by	Company	Received by	Company	Date/Time:	Company
Custody Seals Intact.	Custody Seal No	Cooler Temperature(s) °C and Other Remarks <u>140/1.7</u>			
Δ Yes	Δ No				

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1402-1

SDG Number: 3140T909.110

**Login Number: 1402****List Source: Eurofins Xenco, Carlsbad****List Number: 1****Creator: Clifton, Cloe**

Question	Answer	Comment
h' e coolersd cutoya de, If ipvredentf id int, ct.	hrue	
S, mvle cutoya de, ldf ipvredentf , re int, ct.	hrue	
h' e cooler or d, mvled yo not , vve, r to ' , we been comvromidey or t, mverey Oit' .	hrue	
S, mvled Oere receiwey on ice.	hrue	
Cooler hemver, ture id , ccevt, ble.	hrue	
Cooler hemver, ture id recoryey.	hrue	
Ck C id vredent.	hrue	
Ck C id pilley out in ing , ny leFible.	hrue	
Ck C id pilley out Oit' , ll vertinent infrom, tion.	hrue	
Id t' e ?iely S, mvlersd n, me vredent on Ck CH	hrue	
h' ere , re no yidcrev, ncied betOeen t' e cont, inerd receivey , ny t' e Ck C.	hrue	
S, mvled , re receivey Oit' in ( olyinF hime xe) cluyinF tedtd Oit' immeyi, te ( hd/	hrue	
S, mvle cont, inerd ' , we leFible l, beld.	hrue	
Cont, inerd , re not brogen or le, ginF.	hrue	
S, mvle collection y, teVimed , re vrowiyey.	hrue	
Avrovri, te d, mvle cont, inerd , re udey.	hrue	
S, mvle bottled , re comvletela pilley.	hrue	
S, mvle Prederw tion qeripley.	N/A	
h' ere id dupcipient vol. por , ll reMuedtey , n, ladedf incl. , na reMuedtey z SV SDd	hrue	
Cont, inerd reMuirinF <ero ' e, ydv, ce ' , we no ' e, ydv, ce or bubble id 6" mm x1\47.	N/A	

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1402-1

SDG Number: 3140T909.110

**Login Number: 1402****List Source: Eurofins Xenco, Midland****List Number: 7****List Creation: 10/13/71 17:12 PM****Creator: Kramer, Jessica**

Question	Answer	Comment
h' e coolersd cutoya de, If ipvredentf id int, ct.	NVA	
S, mvle cutoya de, ldf ipvredentf , re int, ct.	NVA	
h' e cooler or d, mvled yo not , vve, r to ' , we been comvromidey or t, mverey Oit' .	hrue	
S, mvled Oere receiwey on ice.	hrue	
Cooler hemver, ture id , ccevt, ble.	hrue	
Cooler hemver, ture id recoryey.	hrue	1." M.2
Ck C id vredent.	hrue	
Ck C id pilley out in ing , ny leFible.	hrue	
Ck C id pilley out Oit' , ll vertinent infrom, tion.	hrue	
Id t' e ?iely S, mvlersd n, me vredent on Ck CH	hrue	
h' ere , re no yidcrev, ncied betOeen t' e cont, inerd receivey , ny t' e Ck C.	hrue	
S, mvled , re receivey Oit' in ( olyinF hime xe) cluyinF tedtd Oit' immeyi, te ( hd/	hrue	
S, mvle cont, inerd ' , we leFible l, beld.	hrue	
Cont, inerd , re not brogen or le, ginF.	hrue	
S, mvle collection y, teVimed , re vrowiyey.	hrue	
Avrovri, te d, mvle cont, inerd , re udey.	hrue	
S, mvle bottled , re comvletela pilley.	hrue	
S, mvle Prederw tion qeripley.	hrue	
h' ere id dupcipient vol. por , ll reMuedtey , n, ladedf incl. , na reMuedtey z SV SDd	hrue	
Cont, inerd reMuirinF <ero ' e, ydv, ce ' , we no ' e, ydv, ce or bubble id 6" mm x147.	NVA	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 890-1408-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/19/2021 1:42:58 PM

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

### LINKS

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results through

**Total Access**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Laboratory Job ID: 890-1408-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1408-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

**Case Narrative**

Client: WSP USA Inc.

Job ID: 890-1408-1

ProjectSite: / eF / ee 011z

SDH: G1403909.110

**Job ID: 890-1408-1****Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative**

890-1408-1

**Receipt**

2Te hsa mle p ebe gceiwev on 10j13j3031 3:04 Pd . Unlehh otTe6p ihe notev belop MTe hsa mle s6wev in , oov convitionMsnvMp Te6gqibevMh6omebu m6he6wev snv on ice. 2Te tea m6stq6e oyTe coole6st gceint tia e p sh 3.4fC

**GC VOA**

d etTov 8031° : 2Te a st6Bhmxie j a st6Bhmxie vqmlcste kd Sjd SD( gecowebel y6nem6stion bstcT 880-94 ) ) snv snsuticsl bstcT 880-9) 49 p ebe oqthive cont6l lia ith. Ssa mle a st6Binte6e6ence snvjo6non-Toa o, eneitu s6e hqhmectev becsqhe tTe shhocistev lsbo6sto6 cont6l hsa mle kLCS( gecowebu p sh p itTin sccentsnce lia ith.

d etTov 8031° : Sq6o, ste gecowebu y6tTe yollop in, hsa mle p ebe oqthive cont6l lia ith: Pz 0) k890-1408-1(MPz 0) A k890-1408-3(MPz 0) ° k890-1408-G(M890-1405-A-1-D( snv k890-1405-A-1-° d S(. Ewience oya st6Binte6e6enceh ih not obvioqh.

No svvitionsl snsuticsl o6gqslitu ihhqeh p ebe notevMbtTe6tTsn tTohe vehc6bev sbowe o6in tTe Deyinitionhj Hlohhs6u ms, e.

**GC Semi VOA**

d etTov 8015d OD\_Nd : 2Te RPD oyTe lsbo6sto6 cont6l hsa mle kLCS( snv lsbo6sto6 cont6l hsa mle vqrlcste kLCSD( y6nem6stion bstcT 880-9484 snv snsuticsl bstcT 880-9598 gecowebv oqthive cont6l lia ith y6tTe yollop in, snsuteh: Hsholine Rsn, e O6 snich KHRO(-C) -C10

No svvitionsl snsuticsl o6gqslitu ihhqeh p ebe notevMbtTe6tTsn tTohe vehc6bev sbowe o6in tTe Deyinitionhj Hlohhs6u ms, e.

**HPLC/IC**

No svvitionsl snsuticsl o6gqslitu ihhqeh p ebe notevMbtTe6tTsn tTohe vehc6bev sbowe o6in tTe Deyinitionhj Hlohhs6u ms, e.

## Client Sample Results

6@en t WS PWU leAc  
S2or ArjWri : / i F / i i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

## Client Sample ID: 6P0H

Date Collected: 10/05/21 12:02

Date Received: 10/12/21 14:04

Sample Depth: 1

## Lab Sample ID: 890-1408-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Hi eFi ei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 0K45	1
ToQei ei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 0K45	1
Erhy@ei eFi ei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 0K45	1
<-XyCei & p-XyCei	B0d00G98	P	0d00G98	< njg m		10j14j31 13:4G	10j19j31 0K45	1
o-XyCei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 0K45	1
XyCei s, ToraC	B0d00G98	P	0d00G98	< njg m		10j14j31 13:4G	10j19j31 0K45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	15+	S17	03 - 183			13/14/+1 1+28	13/15/+1 39240	1
1:4, Fluorobenzene (Surr)	11i		03 - 183			13/14/+1 1+28	13/15/+1 39240	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCHTEX	B0d00G98	P	0d00G98	< njg m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCTSz	B49@	P	49@	< njg m			10j19j31 1G3R	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
.aso@ei Oaeni ( 2naelAs	B49@	P 71	49@	< njg m		10j14j31 14:4R	10j15j31 1RRR	1
). O( *-6K-610								
Dli si COaeni ( 2naelAs )( vi 2	B49@	P	49@	< njg m		10j14j31 14:4R	10j15j31 1RRR	1
6 10-6 38*								
( ICOaeni ( 2naelAs )( vi 26 38-6 GK*	B49@	P	49@	< njg m		10j14j31 14:4R	10j15j31 1RRR	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	5+		03 - 183			13/14/+1 142i	13/10/+1 1i 2i	1
o-Terphenyl	56		03 - 183			13/14/+1 142i	13/10/+1 1i 2i	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Chloride	140		R01	< njg m			10j18j31 30:G9	1

## Client Sample ID: 6P0HA

Date Collected: 10/05/21 12:00H

Date Received: 10/12/21 14:04

Sample Depth: 2

## Lab Sample ID: 890-1408-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Hi eFi ei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 05:05	1
ToQei ei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 05:05	1
Erhy@ei eFi ei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 05:05	1
<-XyCei & p-XyCei	B0d00G98	P	0d00G98	< njg m		10j14j31 13:4G	10j19j31 05:05	1
o-XyCei	B0d0199	P	0d0199	< njg m		10j14j31 13:4G	10j19j31 05:05	1
XyCei s, ToraC	B0d00G98	P	0d00G98	< njg m		10j14j31 13:4G	10j19j31 05:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		03 - 183			13/14/+1 1+28	13/15/+1 30280	1

Eu2fles Xi eAo, 6 a2Sbad

## Client Sample Results

6@en t WS PWU leAc  
S2ori AjWri : / i F / i i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

**Client Sample ID: 6P0HA**  
Date Collected: 10/05/21 12:0H  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1408-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1:4-, Fluorobenzene (Surr)	186	S17	03 - 183	13/14/+1 1+248	13/15/+1 30280	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCHTEX	B0d0098	P	0d0098	< njg m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCTSz	B498	P	498	< njg m			10j19j31 1G3R	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
. aso@ei Oaeni ( 2naelAs	B498	P 71	498	< njg m			10j14j31 14:4R	10j15j31 1K:1R
). O( *-6K-6 10								
Dli si Oaeni ( 2naelAs )( vi 2	B498	P	498	< njg m			10j14j31 14:4R	10j15j31 1K:1R
6 10-6 38*								
( ICOaem ( 2naelAs )( vi 26 38-6 GK*	B498	P	498	< njg m			10j14j31 14:4R	10j15j31 1K:1R

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	66		03 - 183	13/14/+1 142i	13/10/+1 192i	1
o-Terphenyl	50		03 - 183	13/14/+1 142i	13/10/+1 192i	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Chloride	859		49R	< njg m			10j18j31 30:4R	1

**Client Sample ID: 6P0HB****Lab Sample ID: 890-1408-3**

Matrix: Solid

Date Collected: 10/05/21 12:09

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Hi eFl ei	B0d0198	P	0d0198	< njg m			10j14j31 13:4G	10j19j31 05:38
ToQI ei	B0d0198	P	0d0198	< njg m			10j14j31 13:4G	10j19j31 05:38
Eryhy@ eFl ei	B0d0198	P	0d0198	< njg m			10j14j31 13:4G	10j19j31 05:38
<-Xy@Cei & p-Xy@Cei	B0d009K	P	0d009K	< njg m			10j14j31 13:4G	10j19j31 05:38
o-Xy@Cei	B0d0198	P	0d0198	< njg m			10j14j31 13:4G	10j19j31 05:38
Xy@Cei s, ToraC	B0d009K	P	0d009K	< njg m			10j14j31 13:4G	10j19j31 05:38

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	00		03 - 183	13/14/+1 1+248	13/15/+1 3026	1
1:4-, Fluorobenzene (Surr)	95	S1-	03 - 183	13/14/+1 1+248	13/15/+1 3026	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCHTEX	B0d009K	P	0d009K	< njg m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCTSz	B498	P	498	< njg m			10j19j31 1G3R	1

Eu2@fles Xi eAo, 6 a2\$bad

## Client Sample Results

6@en t WS PWU leAc  
S2ori ArjWri : / i F / i i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

**Client Sample ID: 6P0HB**  
Date Collected: 10/05/21 12:09  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1408-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
. aso@ei Oaeni ( 2raelAs	B49@	P 71	49@	< njg m		10j14j31 14:4R	10j15j31 1K:RK	1
). O( *-6K-6 10								
Dli si COaeni ( 2raelAs )( vi 2	B49@	P	49@	< njg m		10j14j31 14:4R	10j15j31 1K:RK	1
6 10-6 38*								
( ICOaeni ( 2raelAs )( vi 26 38-6 GK*	B49@	P	49@	< njg m		10j14j31 14:4R	10j15j31 1K:RK	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	13+		03 - 183	13/14/+1 142i	13/10/+1 192 9	1
o-Terphenyl	114		03 - 183	13/14/+1 142i	13/10/+1 192 9	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Chloride	7480		R0@	< njg m			10j18j31 31:03	10

**Client Sample ID: 6P0HC**

**Lab Sample ID: 890-1408-4**  
Matrix: Solid

Date Collected: 10/05/21 12:14

Date Received: 10/12/21 14:04

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
Hi eFi ei	B0@0300	P	0@0300	< njg m		10j14j31 13:4G	10j19j31 05:48	1
ToQi ei	B0@0300	P	0@0300	< njg m		10j14j31 13:4G	10j19j31 05:48	1
Erhy@i eFi ei	B0@0300	P	0@0300	< njg m		10j14j31 13:4G	10j19j31 05:48	1
<-Xy@ei & p-Xy@ei	B0@0G99	P	0@0G99	< njg m		10j14j31 13:4G	10j19j31 05:48	1
o-Xy@ei	B0@0300	P	0@0300	< njg m		10j14j31 13:4G	10j19j31 05:48	1
Xy@ei s, ToraC	B0@0G99	P	0@0G99	< njg m		10j14j31 13:4G	10j19j31 05:48	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	6+		03 - 183	13/14/+1 1+2i8	13/15/+1 30246	1
1:4-, Fluorobenzene (Surr)	118		03 - 183	13/14/+1 1+2i8	13/15/+1 30246	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCHTEX	B0@0G99	P	0@0G99	< njg m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
ToraCTSz	BR0@	P	R0@	< njg m			10j19j31 1G3R	1

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

Analyte	Result	Qualifier	RL	Unit	D	6 prepared	Analyzed	Dil Fac
. aso@ei Oaeni ( 2raelAs	BR0@	P 71	R0@	< njg m		10j14j31 14:4R	10j15j31 15:15	1
). O( *-6K-6 10								
Dli si COaeni ( 2raelAs )( vi 2	BR0@	P	R0@	< njg m		10j14j31 14:4R	10j15j31 15:15	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	66		03 - 183	13/14/+1 142i	13/10/+1 10210	1
o-Terphenyl	59		03 - 183	13/14/+1 142i	13/10/+1 10210	1

Eu2@fles Xi eAo, 6 a2\$bad

**Client Sample Results**

6@en t WS PWU leAc  
S2ori AjWri : / i F / i i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

**Client Sample ID: 6P0HC**  
Date Collected: 10/05/21 12:14  
Date Received: 10/12/21 14:04  
Sample Depth: 4

**Lab Sample ID: 890-1408-4**  
Matrix: Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3110		3Rt0	< njgm			10/18/31 31:05	R

1

2

3

4

5

6

7

8

9

10

11

12

13

14

**Surrogate Summary**

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1408-1  
WD. : G1403909d110

**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)										
890-140+U-1-6 MW	MBrrla Wklpi	178 W15	38+ W15										
890-140+U-1-2 MWD	MBrrla Wklpi Dkx0ABri	84	10+										
890-1408-1	SH0u	193 W15	11+										
890-1408-3	SH0uU	111	1G8 W15										
890-1408-G	SH0u6	77	u9 W1-										
890-1408-4	SH0u2	83	11G										
L2 W880-94uu/1-U	LBb 2 oerroOABmxC	91	103										
L2 WD 880-94uu/3-U	LBb 2 oerroOABmxC Dkx	88	103										
M6 880-94uu/+U	Mi rhod 6 Gep	99	104										
M6 880-9uGt/+U	Mi rhod 6 Gep	98	10G										

**Surrogate Legend**

6F6 = 4-6 romof&amp;orobi ezi ei (Wkr)

DF6Z = 1,4-Dif&amp;orobi ezi ei (Wkr)

**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)										
890-140u-U-1-D MW	MBrrla Wklpi	97	93										
890-140u-U-1-O MWD	MBrrla Wklpi Dkx0ABri	94	90										
890-1408-1	SH0u	93	98										
890-1408-3	SH0uU	88	97										
890-1408-G	SH0u6	103	114										
890-1408-4	SH0u2	88	9u										
L2 W880-9484/3-U	LBb 2 oerroOABmxC	83	91										
L2 WD 880-9484/GU	LBb 2 oerroOABmxC Dkx	9G	91										
M6 880-9484/1-U	Mi rhod 6 Gep	9u	10+										

**Surrogate Legend**

12T = 1-2 h@rooABei

TySH = o-yl rxhi eEC

## QC Sample Results

6@en t WS PWU leAc  
S2or ArjWri : / i F / i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-9466/5-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Hi eFi ei	B0d0300	P	0d0300		< njg m		10j14j31 13:4G	10j19j31 00:4K	1
5o@i ei	B0d0300	P	0d0300		< njg m		10j14j31 13:4G	10j19j31 00:4K	1
urEh@i eFi ei	B0d0300	P	0d0300		< njg m		10j14j31 13:4G	10j19j31 00:4K	1
<-y hCei X &-y hCei	B0d0400	P	0d0400		< njg m		10j14j31 13:4G	10j19j31 00:4K	1
o-y hCei	B0d0300	P	0d0300		< njg m		10j14j31 13:4G	10j19j31 00:4K	1
y hCei ps5on C	B0d0400	P	0d0400		< njg m		10j14j31 13:4G	10j19j31 00:4K	1

Surrogate	MB		MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	11			5+ - 70+		7+34387 78/40	7+31387 ++/42	7
794- ,fluorobenzene (Surr)	7+4			5+ - 70+		7+34387 78/40	7+31387 ++/42	7

**Lab Sample ID: LCS 880-9466/1-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Spike		LCS		LCS		%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Hi eFi ei	0d100	0d0803a		< njg m		80	R0 - 1G0		
5o@i ei	0d100	0d09483		< njg m		9K	R0 - 1G0		
urEh@i eFi ei	0d100	0d098K9		< njg m		99	R0 - 1G0		
<-y hCei X &-y hCei	0d300	0d18Ga		< njg m		93	R0 - 1G0		
o-y hCei	0d100	0d10aG		< njg m		10a	R0 - 1G0		

Surrogate	LCS		LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	17		5+ - 70+					
794- ,fluorobenzene (Surr)	7+8		5+ - 70+					

**Lab Sample ID: LCSD 880-9466/2-A****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Spike		LCSD		LCSD		%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Hi eFi ei	0d100	0d1114		< njg m		111	R0 - 1G0	G3	GK
5o@i ei	0d100	0d114G		< njg m		114	R0 - 1G0	19	GK
urEh@i eFi ei	0d100	0d11K1		< njg m		11K	R0 - 1G0	1K	GK
<-y hCei X &-y hCei	0d300	0d330G		< njg m		110	R0 - 1G0	18	GK
o-y hCei	0d100	0d11RG		< njg m		11R	R0 - 1G0	10	GK

Surrogate	LCSD		LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	DD		5+ - 70+					
794- ,fluorobenzene (Surr)	7+8		5+ - 70+					

**Lab Sample ID: 890-1405-A-1-B MS****Matrix: Solid****Analysis Batch: 9649****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 9466**

Analyte	Sample		Spike		MS		%Rec.		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Hi eFi ei	B0d0300	P / 1 / 3	0d100	0d10Ka		< njg m		10K	R0 - 1G0
5o@i ei	B0d0300	P / 1	0d100	0d0RK0		< njg m		RK	R0 - 1G0

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## QC Sample Results

6@en t WS PWU leAc  
S2or ArjWri : / i F / i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

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

Lab Sample ID: 890-1405-A-1-B MS

Matrix: Solid

Analysis Batch: 9649

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 9466

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
urEh@i eFi ei	B0d0300	P / 1 / 3	0cl00	0d0GK8	/ 1	< njg m	G9	R0 - 1G0	
<-y hCei X &-y hCei	B0d0400	P / 1 / 3	0s00	0d0KGK	/ 1	< njg m	3R	R0 - 1G0	
o-y hCei	B0d0300	P / 1 / 3	0cl00	0d008Ga9	/ 1	< njg m	8	R0 - 1G0	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	75D	S7i	5+ - 70+
794- ,fluorobenzene (Surr)	8D2	S7i	5+ - 70+

Lab Sample ID: 890-1405-A-1-C MSD

Matrix: Solid

Analysis Batch: 9649

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 9466

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Hi eFi ei	B0d0300	P / 1 / 3	0cl01	0d09443	/ 1 / 3	< njg m	9	R0 - 1G0	1aR	GK	12
5oCi ei	B0d0300	P / 1	0cl01	0d0KaaR	/ 1	< njg m	Ka	R0 - 1G0	38	GK	13
urEh@i eFi ei	B0d0300	P / 1 / 3	0cl01	0d0aa8K	/ 1 / 3	< njg m	aa	R0 - 1G0	K1	GK	14
<-y hCei X &-y hCei	B0d0400	P / 1 / 3	0s03	0d08KKR	/ 1 / 3	< njg m	43	R0 - 1G0	4R	GK	
o-y hCei	B0d0300	P / 1 / 3	0cl01	0d0R180	/ 3	< njg m	R1	R0 - 1G0	1K8	GK	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	D4		5+ - 70+
794- ,fluorobenzene (Surr)	7+2		5+ - 70+

Lab Sample ID: MB 880-9635/5-A

Matrix: Solid

Analysis Batch: 9649

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 9635

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Hi eFi ei	B0d0300	P	0d0300	< njg m		10j18j31 09:40	10j18j31 1G13	1
5oCi ei	B0d0300	P	0d0300	< njg m		10j18j31 09:40	10j18j31 1G13	1
urEh@i eFi ei	B0d0300	P	0d0300	< njg m		10j18j31 09:40	10j18j31 1G13	1
<-y hCei X &-y hCei	B0d0400	P	0d0400	< njg m		10j18j31 09:40	10j18j31 1G13	1
o-y hCei	B0d0300	P	0d0300	< njg m		10j18j31 09:40	10j18j31 1G13	1
y hCei ps5on C	B0d0400	P	0d0400	< njg m		10j18j31 09:40	10j18j31 1G13	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	1D		5+ - 70+	7+3D87 +1/4+	7+3D87 70/78	7
794- ,fluorobenzene (Surr)	7+0		5+ - 70+	7+3D87 +1/4+	7+3D87 70/78	7

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

Lab Sample ID: MB 880-9484/1-A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 9484

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
. , po@ei ) , emi * 2m elAp	BK0d0	P	K0d0	< njg m		10j14j31 14:4K	10j1Rj31 11:G1	1
7. ) * v6 a-6 10								

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## QC Sample Results

6@en t WS PWU leAc  
S2ori AjWri / i F / i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

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

Lab Sample ID: MB 880-9484/1-A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9484

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Dli pi C , emi * 2m elAp 7 f i 2 6 10-6 38v * IC , emi * 2m elAp 7 f i 26 38-6 Gav	BK00	P	K00	< njg m	10j14j31 14:4K	10j1R31 11:G1	1	
	BK00	P	K00	< njg m	10j14j31 14:4K	10j1R31 11:G1	1	
Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac		
	%Recovery	Qualifier						
7-Chlorooctane	1T		5+ - 70+	7+34387 74/42	7+35387 77/07	7		
o-phenylen6	7+2		5+ - 70+	7+34387 74/42	7+35387 77/07	7		

Lab Sample ID: LCS 880-9484/2-A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec.	
	Added						%Rec.	Limits
. , po@ei ) , emi * 2m elAp 7. ) * v6 a-6 10	1000		R800		< njg m	R8	R0 - 1G0	
Dli pi C , emi * 2m elAp 7 f i 2 6 10-6 38v	1000		8800		< njg m	88	R0 - 1G0	
Surrogate	LCS LCS		Limits					
	%Recovery	Qualifier						
7-Chlorooctane	D8		5+ - 70+					
o-phenylen6	17		5+ - 70+					

Lab Sample ID: LCSD 880-9484/3-A

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Spike		LCSD Result	LCSD Qualifier	Unit	D	%Rec.	
	Added						%Rec.	RPD
. , po@ei ) , emi * 2m elAp 7. ) * v6 a-6 10	1000		99R9	d1	< njg m	100	R0 - 1G0	3K
Dli pi C , emi * 2m elAp 7 f i 2 6 10-6 38v	1000		8R89		< njg m	88	R0 - 1G0	0
Surrogate	LCSD LCSD		Limits					
	%Recovery	Qualifier						
7-Chlorooctane	10		5+ - 70+					
o-phenylen6	17		5+ - 70+					

Lab Sample ID: 890-1406-A-1-D MS

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Sample		Spike	MS Result	MS Qualifier	Unit	D	%Rec.	
	Result	Qualifier	Added	%Rec.	Limits				
. , po@ei ) , emi * 2m elAp 7. ) * v6 a-6 10	B490	P d1	99R	99ca		< njg m	90	R0 - 1G0	
Dli pi C , emi * 2m elAp 7 f i 2 6 10-6 38v	B490	P	99R	894dR		< njg m	90	R0 - 1G0	
Surrogate	MS MS		Limits						
	%Recovery	Qualifier							
7-Chlorooctane	15		5+ - 70+						
o-phenylen6	18		5+ - 70+						

uT2bOep yi eAos6 , 20b, (

## QC Sample Results

6@en t WS PWU leAc  
S2ori ArjWri : / i F / i i 011z

Job ID: 890-1408-1  
WD. : G1403909d110

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

Lab Sample ID: 890-1406-A-1-E MSD

Matrix: Solid

Analysis Batch: 9598

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9484

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
7,10-dimethyl-1,2-dihydro-1,4-dioxin-3-one	B49Q9	P d1	1000	9R4cl		< njg m		9G	R0 - 1G0	4 30
7-Chloro-2-methyloctane	B49Q9	P	1000	8808		< njg m		88	R0 - 1G0	3 30
Surrogate	%Recovery	Qualifier		MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
7-Chlorooctane	14			5+ - 70+						
o-phenylenediamine	1+			5+ - 70+						

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9564/1-A

Matrix: Solid

Analysis Batch: 9793

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
6-EQ2(i)	BK00	P	K00		< njg m			10j18j31 19:K4	1

Lab Sample ID: LCS 880-9564/2-A

Matrix: Solid

Analysis Batch: 9793

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
6-EQ2(i)	3K0	34K8		< njg m		98	90 - 110

Lab Sample ID: LCSD 880-9564/3-A

Matrix: Solid

Analysis Batch: 9793

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
6-EQ2(i)	3K0	34acl		< njg m		98	90 - 110	0 30

Lab Sample ID: 890-1407-A-2-D MS

Matrix: Solid

Analysis Batch: 9793

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	RPD	RPD Limit
6-EQ2(i)	18Q4		348	3akR		< njg m		100	90 - 110	

Lab Sample ID: 890-1407-A-2-E MSD

Matrix: Solid

Analysis Batch: 9793

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
6-EQ2(i)	18Q4		348	3aadR		< njg m		100	90 - 110	0 30

uT2bOep yi eAos6 , 20b, (

**QC Association Summary**

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1408-1  
WD. : G1403909d110

**GC VOA****Prep Batch: 9466**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	Bor60h U	Wb@l	50G5	
890-1408-3	SH0MJ	Bor60h U	Wb@l	50G5	
890-1408-G	SH0Ma	Bor60h U	Wb@l	50G5	
890-1408-4	SH0M2	Bor60h U	Wb@l	50G5	
k a 880-94MM5-U	k i nTod aGeN	Bor60h U	Wb@l	50G5	
72W880-94MM1-U	76b 2 oerroO\6L mC	Bor60h U	Wb@l	50G5	
72WD 880-94MM3-U	76b 2 oerroO\6L mC Dpm	Bor60h U	Wb@l	50G5	
890-1405-U-1-a k W	k 6mlu WhlN	Bor60h U	Wb@l	50G5	
890-1405-U-1-2 k WD	k 6mlu WhlN DpmD6ri	Bor60h U	Wb@l	50G5	

**Prep Batch: 9635**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
k a 880-9MG5/5-U	k i nTod aGeN	Bor60h U	Wb@l	50G5	

**Analysis Batch: 9649**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	Bor60h U	Wb@l	8031a	94MM
890-1408-3	SH0MJ	Bor60h U	Wb@l	8031a	94MM
890-1408-G	SH0Ma	Bor60h U	Wb@l	8031a	94MM
890-1408-4	SH0M2	Bor60h U	Wb@l	8031a	94MM
k a 880-94MM5-U	k i nTod aGeN	Bor60h U	Wb@l	8031a	94MM
k a 880-9MG5/5-U	k i nTod aGeN	Bor60h U	Wb@l	8031a	9MG5
72W880-94MM1-U	76b 2 oerroO\6L mC	Bor60h U	Wb@l	8031a	94MM
72WD 880-94MM3-U	76b 2 oerroO\6L mC Dpm	Bor60h U	Wb@l	8031a	94MM
890-1405-U-1-a k W	k 6mlu WhlN	Bor60h U	Wb@l	8031a	94MM
890-1405-U-1-2 k WD	k 6mlu WhlN DpmD6ri	Bor60h U	Wb@l	8031a	94MM

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	Bor60h U	Wb@l	Bor6CaBx E	
890-1408-3	SH0MJ	Bor60h U	Wb@l	Bor6CaBx E	
890-1408-G	SH0Ma	Bor60h U	Wb@l	Bor6CaBx E	
890-1408-4	SH0M2	Bor60h U	Wb@l	Bor6CaBx E	

**GC Semi VOA****Prep Batch: 9484**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	Bor60h U	Wb@l	8015h k Sri m	
890-1408-3	SH0MJ	Bor60h U	Wb@l	8015h k Sri m	
890-1408-G	SH0Ma	Bor60h U	Wb@l	8015h k Sri m	
890-1408-4	SH0M2	Bor60h U	Wb@l	8015h k Sri m	
k a 880-9484/1-U	k i nTod aGeN	Bor60h U	Wb@l	8015h k Sri m	
72W880-9484/3-U	76b 2 oerroO\6L mC	Bor60h U	Wb@l	8015h k Sri m	
72WD 880-9484/GU	76b 2 oerroO\6L mC Dpm	Bor60h U	Wb@l	8015h k Sri m	
890-140MU-1-D k W	k 6mlu WhlN	Bor60h U	Wb@l	8015h k Sri m	
890-140MU-1-x k WD	k 6mlu WhlN DpmD6ri	Bor60h U	Wb@l	8015h k Sri m	

**Analysis Batch: 9598**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	Bor60h U	Wb@l	8015a h k	9484

x proXef Ei eAos26rCb6d

**QC Association Summary**

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1408-1  
WD. : G1403909d110

**GC Semi VOA (Continued)****Analysis Batch: 9598 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-3	SH0MJ	Bor60h U	WbQd	8015a h k	9484
890-1408-G	SH0Ma	Bor60h U	WbQd	8015a h k	9484
890-1408-4	SH0M2	Bor60h U	WbQd	8015a h k	9484
k a 880-9484/1-U	k i nTod aGeN	Bor60h U	WbQd	8015a h k	9484
72W880-9484/3-U	76b 2 oerroO6L mC	Bor60h U	WbQd	8015a h k	9484
72WD 880-9484/G-U	76b 2 oerroO6L mC Dpm	Bor60h U	WbQd	8015a h k	9484
890-140MU-1-D k W	k 6mlu WhlN	Bor60h U	WbQd	8015a h k	9484
890-140MU-1-x k WD	k 6mlu WhlN DpmD6ri	Bor60h U	WbQd	8015a h k	9484

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	Bor60h U	WbQd	8015 h k	
890-1408-3	SH0MJ	Bor60h U	WbQd	8015 h k	
890-1408-G	SH0Ma	Bor60h U	WbQd	8015 h k	
890-1408-4	SH0M2	Bor60h U	WbQd	8015 h k	

**HPLC/IC****Leach Batch: 9564**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	WbQbC	WbQd	DI 7i 6AT	
890-1408-3	SH0MJ	WbQbC	WbQd	DI 7i 6AT	
890-1408-G	SH0Ma	WbQbC	WbQd	DI 7i 6AT	
890-1408-4	SH0M2	WbQbC	WbQd	DI 7i 6AT	
k a 880-95M4/1-U	k i nTod aGeN	WbQbC	WbQd	DI 7i 6AT	
72W880-95M4/3-U	76b 2 oerroO6L mC	WbQbC	WbQd	DI 7i 6AT	
72WD 880-95M4/G-U	76b 2 oerroO6L mC Dpm	WbQbC	WbQd	DI 7i 6AT	
890-140, -U-3-D k W	k 6mlu WhlN	WbQbC	WbQd	DI 7i 6AT	
890-140, -U-3-x k WD	k 6mlu WhlN DpmD6ri	WbQbC	WbQd	DI 7i 6AT	

**Analysis Batch: 9793**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1408-1	SH0M	WbQbC	WbQd	G00d	95M4
890-1408-3	SH0MJ	WbQbC	WbQd	G00d	95M4
890-1408-G	SH0Ma	WbQbC	WbQd	G00d	95M4
890-1408-4	SH0M2	WbQbC	WbQd	G00d	95M4
k a 880-95M4/1-U	k i nTod aGeN	WbQbC	WbQd	G00d	95M4
72W880-95M4/3-U	76b 2 oerroO6L mC	WbQbC	WbQd	G00d	95M4
72WD 880-95M4/G-U	76b 2 oerroO6L mC Dpm	WbQbC	WbQd	G00d	95M4
890-140, -U-3-D k W	k 6mlu WhlN	WbQbC	WbQd	G00d	95M4
890-140, -U-3-x k WD	k 6mlu WhlN DpmD6ri	WbQbC	WbQd	G00d	95M4

**Lab Chronicle**

Client: WSP USA Inc.  
ProjectSite: / eF / ee 011z

Job ID: 890-1408-1  
SDH: G1403909.110

**Client Sample ID: PH03**

Date Collected: 10/12/2021 12:02  
Date Received: 10/12/2021 14:04

**Lab Sample ID: 890-1408-1**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzed	Analyst	Lab
70tTljNA	P2ep	50G5			5.0Ga	5 g L	9466	10j14j31 13:4G	KL	XEN MID
70tTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9649	10j19j31 06:4B	MR	XEN MID
70tTljNA	AnTlniyi	70tTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID
70tTljNA	AnTlniyi	8015 NM		1			9896	10j19j31 1G35	AJ	XEN MID
70tTljNA	P2ep	8015NM P2ep			10.03 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
70tTljNA	AnTlniyi	8015s NM		1			9598	10j18j31 15:55	AJ	XEN MID
Soluble	LeTch	DI LeTch			4.99 a	50 g L	9564	10j15j31 1B:GB	CA	XEN MID
Soluble	AnTlniyi	G00.0		1	0 g L	1.0 g L	9B9G	10j18j31 30:G9	SC	XEN MID

**Client Sample ID: PH03A**

Date Collected: 10/12/2021 12:03  
Date Received: 10/12/2021 14:04

**Lab Sample ID: 890-1408-2**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzed	Analyst	Lab
70tTljNA	P2ep	50G5			5.03 a	5 g L	9466	10j14j31 13:4G	KL	XEN MID
70tTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9649	10j19j31 0B:OB	MR	XEN MID
70tTljNA	AnTlniyi	70tTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID
70tTljNA	AnTlniyi	8015 NM		1			9896	10j19j31 1G35	AJ	XEN MID
70tTljNA	P2ep	8015NM P2ep			10.05 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
70tTljNA	AnTlniyi	8015s NM		1			9598	10j18j31 16:15	AJ	XEN MID
Soluble	LeTch	DI LeTch			5.05 a	50 g L	9564	10j15j31 1B:GB	CA	XEN MID
Soluble	AnTlniyi	G00.0		1	0 g L	1.0 g L	9B9G	10j18j31 30:45	SC	XEN MID

**Client Sample ID: PH03B**

Date Collected: 10/12/2021 12:09  
Date Received: 10/12/2021 14:04

**Lab Sample ID: 890-1408-7**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzed	Analyst	Lab
70tTljNA	P2ep	50G5			5.05 a	5 g L	9466	10j14j31 13:4G	KL	XEN MID
70tTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9649	10j19j31 0B:38	MR	XEN MID
70tTljNA	AnTlniyi	70tTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID
70tTljNA	AnTlniyi	8015 NM		1			9896	10j19j31 1G35	AJ	XEN MID
70tTljNA	P2ep	8015NM P2ep			10.03 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
70tTljNA	AnTlniyi	8015s NM		1			9598	10j18j31 16:56	AJ	XEN MID
Soluble	LeTch	DI LeTch			4.96 a	50 g L	9564	10j15j31 1B:GB	CA	XEN MID
Soluble	AnTlniyi	G00.0		10			9B9G	10j18j31 31:03	SC	XEN MID

**Client Sample ID: PH03C**

Date Collected: 10/12/2021 12:14  
Date Received: 10/12/2021 14:04

**Lab Sample ID: 890-1408-4**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzed	Analyst	Lab
70tTljNA	P2ep	50G5			5.01 a	5 g L	9466	10j14j31 13:4G	KL	XEN MID
70tTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9649	10j19j31 0B:48	MR	XEN MID
70tTljNA	AnTlniyi	70tTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID

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**Lab Chronicle**

Client: WSP USA Inc.  
Project Site: / eF / ee 011z

Job ID: 890-1408-1  
SDH: G1403909.110

**Client Sample ID: PH03C**  
**Date Collected: 10/01/2021 12:14**  
**Date Received: 10/12/2021 14:04**

**Lab Sample ID: 890-1408-4**  
**5 atrIM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by or Analyzed	Analyst	Lab
70tTljNA	AnTlmyiy	8015 NM		1			9896	10j19j31 1G35	AJ	XEN MID
70tTljNA	P2ep	8015NM P2ep			10.00 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
70tTljNA	AnTlmyiy	8015s NM		1			9598	10j1Bj31 1B:1B	AJ	XEN MID
Soluble	LeTch	DI LeTch			5.01 a	50 g L	9564	10j15j31 1B:GB	CA	XEN MID
Soluble	AnTlmyiy	G00.0		5			9B9G	10j18j31 31:0B	SC	XEN MID

**Laboratory References:**

XEN MID d Eu2bny Xencof Mi, ITn, f 1311 W. / lo2, T Avef Mi, ITn, f 7X B9B01f 7EL (4G3)B04-5440

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Eu2bny Xencof CT2ybT,

## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1408-1

Project Site: / EF / ee 011z

SDH: G1403909.110

**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	T104704400-31-33	06-00-33
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPz
Total BTEX		Solid	Total BTEX

## Method Summary

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1408-1  
WD. : G1403909d110

Method	Method Description	Protocol	Laboratory
8031B	Vo@rlC OrgaelA2 mpoueds (. 2)	Wf 846	XEN MID
ToraCBTEX	ToraCBTEX 2 a@u@rloe	TUL WOS	XEN MID
8015 NM	Dli si CRaegei OrgaelAs (DRO) (. 2)	Wf 846	XEN MID
8015B NM	Dli si CRaegei OrgaelAs (DRO) (. 2)	Wf 846	XEN MID
G00Q	Ueloes, loe 2 hromar@raphy	M2 Ut t	XEN MID
50G5	2 Qsi d Wysri m Surgi aed Trap	Wf 846	XEN MID
8015NM Sri p	MIAroi xrraArloe	Wf 846	XEN MID
DI Li aAh	Di loelzi d t ari r Li aAhleg SroAi duri	UWTM	XEN MID

**Protocol References:**

UWTM = UWTM Ier@ rearloeaC

M2 Ut t = "Mi rhods For 2 hi mlAaQJea@sls Of t ari r Ued t asri s", ESU-6004-79-030, Mar@h 198GUed W@bsi qui enRi vlsloesc

Wf 846 = "Ti snMi rhods For Eva@arleg Wb@t t asni , ShyslAa@2 hi mlAa@Mi rhods", Thlrd Ed@rloe, Novi mbi r 1986 Ued lrs Ppdari sc

TUL WOS = Ti srUmi rlAa Laborarorli s, W@edard Opi rarleg SroAi duri

**Laboratory References:**

XEN MID = Eurofles Xi eAo, Mid@ed, 1311 t cF@rlda Uvi , Mid@ed, TX 79701, TEL (4G3)704-5440

**Sample Summary**

Client: WSP USA Inc.

ProjectSite: / eF / ee 011z

Job ID: 890-1408-1

SD6 : G1403909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1408-1	Pz 0H	Solid	10/05/31 13:03	10/13/31 14:04	1
890-1408-3	Pz 0HA	Solid	10/05/31 13:0H	10/13/31 14:04	3
890-1408-G	Pz 0HB	Solid	10/05/31 13:09	10/13/31 14:04	G
890-1408-4	Pz 0HC	Solid	10/05/31 13:14	10/13/31 14:04	4

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## Chain of Custody

Work Order No:

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334  
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199 Phoenix, AZ (480) 385-0900  
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-5701  
Atlanta, GA (770) 449-8800

<b>Project Manager:</b>	Kalei Jennings	<b>Bill to:</b> (if different)	
<b>Company Name:</b>	WSP USA	<b>Company Name:</b>	
<b>Address:</b>	3300 North A Street	<b>Address:</b>	
<b>City, State ZIP:</b>	Midland, TX 79705	<b>City, State ZIP:</b>	
<b>Phone:</b>	(817) 683-2503	<b>Email:</b>	kalei.jennings@wsp.com
<b>Work Order Comments</b>			
<b>Program:</b> UST/PST <input type="checkbox"/> PRR <input type="checkbox"/> Brownfield <input type="checkbox"/> RR <input type="checkbox"/> Superfund <input type="checkbox"/> <b>State of Project:</b> Reporting: Level <input type="checkbox"/> Level <input type="checkbox"/> PST/STU <input type="checkbox"/> TRF <input type="checkbox"/> Level <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: <input type="checkbox"/>			

Project Name:	Fee Fee 01H	Turn Around	ANALYSIS REQUEST	Work Order Notes
Project Number:	31402909.110	Routine:	<input checked="" type="checkbox"/>	
Location:	Lea County	Rush:		
Sampler's Name:	Fatima Smith	Due Date:		
<b>SAMPLE RECEIPT</b>	Temp Blank: <input checked="" type="radio"/> Yes <input type="radio"/> No	Wet Ice: <input checked="" type="radio"/> Yes <input type="radio"/> No		
Temperature (°C):	2.4	Thermometer ID: TM-007		
Received Intact:	<input checked="" type="radio"/> Yes <input type="radio"/> No			
Cooler Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/> N/A	Correction Factor: -0.2		
Sample Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/> N/A	Total Containers:		
Number of Containers				
PA 8015)				
EPA 0=8021)				
e (EPA 300.0)				
 890-1408 Chain of Custody				
TAT starts the day received by the lab, if received by 4:30pm				

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 <sub>2</sub>	Na	Sr	Tl	Sn	U	V	Zn
Circle Method(s) and Matrix(es) to be analyzed			TCLP / SPLP-6840-8RCRA		Sb	As	Ba	Be	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U	1631 / 245.1 / 7470 / 7471 : Hg													
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.																																	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time																												
1 <i>J. L. G.</i>	<i>Jeffrey</i>	10-12-21 / 4:00	2 <i>Jeffrey</i>	<i>Jeffrey</i>	10-12-21 14:00																												
3			4																														
5			6																														

**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 costs 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.



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1408-1

S2 D Number: G1403909.110

**Login Number: 1408****List Source: Eurofins Xenco, Carlsbad****List Number: 1****Creator: Clifton, Cloe**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MS2 s	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: 890-1408-1

S2D Number: G1403909.110

**Login Number:** 1408**List Source:** Eurofins Xenco, Midland**List Number:** 2**List Creation:** 10/13/21 12:17 PM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MS2 s	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: 890-1409-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/19/2021 1:43:11 PM

Jessica Kramer, Project Manager  
(432)704-5440  
[jessica.kramer@eurofinset.com](mailto: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: Fez Fee 011H

Laboratory Job ID: 890-1409-1  
SDG: 31402909.110

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1409-1  
SDG: 31402909.110

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

**Case Narrative**

Client: WSP USA Inc.  
Project Site: / eF / ee 011z

Job ID: 890-1409-1  
SDH: G1403909.110

**Job ID: 890-1409-1****Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative  
890-1409-1****Receipt**

2Te hsa mle p e7e 7eceiwev on 10j13j3031 3:04 Pd . Unlehh otTe7p ihe notev belop MTe hsa mle s7lwev in , oov convitionMsnvMp Te7e 7eqqi7evMh7om7u mlehe7wev snv on ice. 2Te tea m7stq7e oytTe coole7st 7eceint tia e p sh 3.4fC

**GC VOA**

d etTov 8031° : 2Te a st7Bhmixe j a st7Bhmixe vqmlicste kd Sjd SD( 7ecow7eh yo7m7ens7stion bstcT 880-94) 6 snv snsuticsl bstcT 880-963) p e7e oqthive cont7ol lia ith. Ssa mle a st7Binte7e7ence snvjo7non-Toa o, eneitu s7e hqhmectev becsqhe tTe shhocistev lsbo7sto7u cont7ol hsa mle kLCS( 7ecow7u p sh p iTin sccentsnce lia ith.

d etTov 8031° : Sq77o, ste 7ecow7u yo7tTe yollop in, hsa mle p e7e oqthive cont7ol lia ith: Pz 0) 1890-1409-1(Md ° 880-945) j6-A( snv kd ° 880-94) 6j6-A(. Ewivence oya st7Binte7e7enceh ih not obwoqh.

No svvitionsl snsuticsl o7gqslitu ihhqeh p e7e notevMbtTe7tTsn tTohe vehc7bev sbowe o7in tTe Deyinitionh Hlohhs7u ms, e.

**GC Semi VOA**

d etTov 8016d OD\_Nd : 2Te RPD oytTe lsbo7sto7u cont7ol hsa mle kLCS( snv lsbo7sto7u cont7ol hsa mle vqmlicste kLCSD( yo7m7ens7stion bstcT 880-9484 snv snsuticsl bstcT 880-9698 7ecow7ev oqthive cont7ol lia ith yo7tTe yollop in, snsuteh: Hsholine Rsn, e O7, snich KHRO(-C5-C10

No svvitionsl snsuticsl o7gqslitu ihhqeh p e7e notevMbtTe7tTsn tTohe vehc7bev sbowe o7in tTe Deyinitionh Hlohhs7u ms, e.

**HPLC/IC**

No svvitionsl snsuticsl o7gqslitu ihhqeh p e7e notevMbtTe7tTsn tTohe vehc7bev sbowe o7in tTe Deyinitionh Hlohhs7u ms, e.

## Client Sample Results

6@en t WS PWU leAc  
S2ori ArjWri : / i F / i i 011z

Job ID: 890-1409-1  
WD. : G1403909d110

## Client Sample ID: PH07

Date Collected: 10/05/21 12:18

Date Received: 10/12/21 14:04

Sample Depth: 1

## Lab Sample ID: 890-1409-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hi eFi ei	B0d0199	P / 3 / 1	0d0199	< njg m		10j1kj31 1G1G	10j15j31 30:40	1
ToQi ei	B0d0199	P / 1	0d0199	< njg m		10j1kj31 1G1G	10j15j31 30:40	1
Erhy@i eFi ei	B0d0199	P / 3 / 1	0d0199	< njg m		10j1kj31 1G1G	10j15j31 30:40	1
<-XyCei & p-XyCei	B0d00G98	P / 3 / 1	0d00G98	< njg m		10j1kj31 1G1G	10j15j31 30:40	1
o-XyCei	B0d0199	P / 3 / 1	0d0199	< njg m		10j1kj31 1G1G	10j15j31 30:40	1
XyCei s, ToraC	B0d00G98	P / 3 / 1	0d00G98	< njg m		10j1kj31 1G1G	10j15j31 30:40	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		15+	S17	0+ - 13+		1+8/821 139/3	1+8/5821 2+94+	1
1:4-, Fluorobenzene (Surr)		i 1		0+ - 13+		1+8/821 139/3	1+8/5821 2+94+	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ToraCHTEX	B0d00G98	P	0d00G98	< njg m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ToraCTSz	B49@	P	49@	< njg m			10j19j31 1G3K	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
.aso@i Raeni O2raelAs	B49@	P *1	49@	< njg m		10j14j31 14:4K	10j17j31 17:G7	1
(. RO)-6-5-6-10								
Dli si @Raeni O2raelAs (Ovi 2	B49@	P	49@	< njg m		10j14j31 14:4K	10j17j31 17:G7	1
6 10-6 38)								
OICRaeni O2raelAs (Ovi 26 38-6 G5)	B49@	P	49@	< njg m		10j14j31 14:4K	10j17j31 17:G7	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane		T5		0+ - 13+		1+8/4821 149/	1+8/0821 1080	1
o-phenylbenzene		i 2		0+ - 13+		1+8/4821 149/	1+8/0821 1080	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	640		34@	< njg m			10j18j31 31:1G	K

## Client Sample ID: PH07A

Date Collected: 10/05/21 12:21

Date Received: 10/12/21 14:04

Sample Depth: 2

## Lab Sample ID: 890-1409-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hi eFi ei	B0d0198	P	0d0198	< njg m		10j1kj31 1G1G	10j15j31 31:07	1
ToQi ei	B0d0198	P	0d0198	< njg m		10j1kj31 1G1G	10j15j31 31:07	1
Erhy@i eFi ei	B0d0198	P	0d0198	< njg m		10j1kj31 1G1G	10j15j31 31:07	1
<-XyCei & p-XyCei	B0d00G95	P	0d00G95	< njg m		10j1kj31 1G1G	10j15j31 31:07	1
o-XyCei	B0d0198	P	0d0198	< njg m		10j1kj31 1G1G	10j15j31 31:07	1
XyCei s, ToraC	B0d00G95	P	0d00G95	< njg m		10j1kj31 1G1G	10j15j31 31:07	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		i +		0+ - 13+		1+8/821 139/3	1+8/5821 219/0	1

Eu2fles Xi eAo, 6 a2Sbad

## Client Sample Results

6@en t WS PWU leAc  
S2ori AjWri : / i F / i i 011z

Job ID: 890-1409-1  
WD. : G1403909d110

**Client Sample ID: PH07A**  
Date Collected: 10/05/21 12:21  
Date Received: 10/12/21 14:04  
Sample Depth: 2

**Lab Sample ID: 890-1409-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1:4- Fluorobenzene (Surr)	i 2		0+ - 13+	1+81/821 139/3	1+81/5821 219/0	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TraGHTEX	B000035	P	000035	< njg/m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TraCTSz	B498	P	498	< njg/m			10j19j31 1G3K	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
. aso@ei Raeni O2raelAs	B498	P *1	498	< njg/m		10j14j31 14:4K	10j17j31 17:K7	1
(. RO)-6 5-6 10								
Di si ORaeni O2raelAs (Ovi 2	B498	P	498	< njg/m		10j14j31 14:4K	10j17j31 17:K7	1
6 10-6 38)								
OICRaeni O2raelAs (Ovi 26 38-6 G5)	B498	P	498	< njg/m		10j14j31 14:4K	10j17j31 17:K7	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	T0		0+ - 13+	1+814821 149/	1+810821 109/0	1
o-phenylen6	i /		0+ - 13+	1+814821 149/	1+810821 109/0	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	722		K0K	< njg/m			10j18j31 31:18	1

**Client Sample ID: PH07B**

**Lab Sample ID: 890-1409-3**

Matrix: Solid

Date Collected: 10/05/21 12:27

Date Received: 10/12/21 14:04

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hi eFl ei	B000198	P	000198	< njg/m		10j1k31 1G1G	10j15j31 31:GG	1
ToQ1 ei	B000198	P	000198	< njg/m		10j1k31 1G1G	10j15j31 31:GG	1
Eryh@ eFl ei	B000198	P	000198	< njg/m		10j1k31 1G1G	10j15j31 31:GG	1
<-Xy@ei & p-Xy@ei	B000095	P	000095	< njg/m		10j1k31 1G1G	10j15j31 31:GG	1
o-Xy@ei	B000198	P	000198	< njg/m		10j1k31 1G1G	10j15j31 31:GG	1
Xy@ei s, TraC	B000095	P	000095	< njg/m		10j1k31 1G1G	10j15j31 31:GG	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	i i		0+ - 13+	1+81/821 139/3	1+81/5821 219/3	1
1:4- Fluorobenzene (Surr)	1+2		0+ - 13+	1+81/821 139/3	1+81/5821 219/3	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TraGHTEX	B000035	P	000035	< njg/m			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
TraCTSz	BK00	P	K00	< njg/m			10j19j31 1G3K	1

Eu2fles Xi eAo, 6 a2Sbad

## Client Sample Results

6@en t WS PWU leAc  
S2ori ArjWri : / i F / i i 011z

Job ID: 890-1409-1  
WD. : G1403909d110

**Client Sample ID: PH07B**  
Date Collected: 10/05/21 12:27  
Date Received: 10/12/21 14:04  
Sample Depth: 3

**Lab Sample ID: 890-1409-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Asphaltene	BK00	P *1	K00	< njm		10j14j31 14:4K	10j17j31 18:18	1
(. RO)-6-5-6-10								
Diluted Asphaltenes (Ovi 26-10-6-38)	BK00	P	K00	< njm		10j14j31 14:4K	10j17j31 18:18	1
OICAsphaltenes (Ovi 26-38-6-G5)	BK00	P	K00	< njm		10j14j31 14:4K	10j17j31 18:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	Ti		0+ - 13+			1+8/4821 1494/	1+8/0821 1T91T	1
o-phenylbenzene	i 5		0+ - 13+			1+8/4821 1494/	1+8/0821 1T91T	1

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5020		3K0	< njm			10j18j31 31:34	K

**Client Sample ID: PH07C**  
Date Collected: 10/05/21 12:33  
Date Received: 10/12/21 14:04  
Sample Depth: 4

**Lab Sample ID: 890-1409-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Heptane	B000198	P	000198	< njm		10j1k31 1G1G	10j15j31 31:K9	1
Toluene	B000198	P	000198	< njm		10j1k31 1G1G	10j15j31 31:K9	1
Ethylbenzene	B000198	P	000198	< njm		10j1k31 1G1G	10j15j31 31:K9	1
<-XyCei & p-XyCei	B000097	P	000097	< njm		10j1k31 1G1G	10j15j31 31:K9	1
o-XyCei	B000198	P	000198	< njm		10j1k31 1G1G	10j15j31 31:K9	1
XyCei s, Toluene	B000097	P	000097	< njm		10j1k31 1G1G	10j15j31 31:K9	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	i 2		0+ - 13+			1+8/821 139/3	1+8/5821 219/i	1
1,4-, Fluorobenzene (Surr)	1+1		0+ - 13+			1+8/821 139/3	1+8/5821 219/i	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	B000097	P	000097	< njm			10j19j31 1G43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.1		499	< njm			10j19j31 1G3K	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	53.1	*1	499	< njm		10j14j31 14:4K	10j17j31 18:G8	1
Diluted Asphaltenes (Ovi 26-10-6-38)	B499	P	499	< njm		10j14j31 14:4K	10j17j31 18:G8	1
OICAsphaltenes (Ovi 26-38-6-G5)	B499	P	499	< njm		10j14j31 14:4K	10j17j31 18:G8	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	i 2		0+ - 13+			1+8/4821 1494/	1+8/0821 1T98T	1
o-phenylbenzene	1++		0+ - 13+			1+8/4821 1494/	1+8/0821 1T98T	1

Eu2bfles Xi eAo, 6 a2Sbad

**Client Sample Results**

6@en t WS PWU leAc  
S2ori AjWri : / i F / i i 011z

Job ID: 890-1409-1  
WD. : G1403909d10

**Client Sample ID: PH07C**  
Date Collected: 10/05/21 12:33  
Date Received: 10/12/21 14:04  
Sample Depth: 4

**Lab Sample ID: 890-1409-4**  
Matrix: Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	487	F1	K01	< njgm			10/18/31 31:00	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

**Surrogate Summary**

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1409-1  
WD. : G1403909d110

**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)										
890-1409-1	SH0+	170 W15	91										
890-1409-1 6 W	SH0+	9+	108										
890-1409-1 6 WD	SH0+	118	113										
890-1409-3	SH0+U	90	93										
890-1409-G	SH0+M	99	103										
890-1409-4	SH0+2	93	101										
B2 W880-94+a/1-U	Bxb 2 oerroO\kp kC	90	10G										
B2 WD 880-94+a/3-U	Bxb 2 oerroO\kp kC Duk	91	10a										
6 M880-947+a/U	6 i rLomM&eh	aa W1-	94										
6 M880-94+a/a-U	6 i rLomM&eh	a9 W1-	94										

**Surrogate Legend**

MFMD 4-Mrop o=Qorobi ezi ei fWurr  
DFM d 12-DI-Qorobi ezi ei fWurr

**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)										
890-1407-U-1-D 6 W	6 xrrl, Vklhi	9+	93										
890-1407-U-1-O 6 WD	6 xrrl, Vklhi DukO\xri	94	90										
890-1409-1	SH0+	87	93										
890-1409-3	SH0+U	8+	9a										
890-1409-G	SH0+M	89	97										
890-1409-4	SH0+2	93	100										
B2 W880-9484/3-U	Bxb 2 oerroO\kp kC	83	91										
B2 WD 880-9484/GU	Bxb 2 oerroO\kp kC Duk	9G	91										
6 M880-9484/1-U	6 i rLomM&eh	97	10a										

**Surrogate Legend**

12T d 1-2 LQrooAxei  
TySH d o-yl rkLi eEC

Ourokes Xi eAoZ2 xrGbxm

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1409-1  
SDG: 31402909.110

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

Lab Sample ID: MB 880-674/ 5A-x

MatriP: Solid

x naNsis Batch: 6A2/

Client Sample ID: Method Blank

Trep yNpe: yotal5 x

Trep Batch: 674/

x naNte	MB Result	MB Qualifier	RL	Unit	D	Prepared	x naNzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	10/15/21 10:00	10/16/21 06:13		1
Toluene	<0.00200	U	0.00200	mg/Kg	10/15/21 10:00	10/16/21 06:13		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	10/15/21 10:00	10/16/21 06:13		1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	10/15/21 10:00	10/16/21 06:13		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	10/15/21 10:00	10/16/21 06:13		1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	10/15/21 10:00	10/16/21 06:13		1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	11	S7-	03 - 7/ 3			73515 7 7363	73525 7 3267/	7
7 <i>i</i> -Fluorobenzene (Surr)	, 4		03 - 7/ 3			73515 7 7363	73525 7 3267/	7

Lab Sample ID: MB 880-67/ A5A-x

MatriP: Solid

x naNsis Batch: 6A2/

Client Sample ID: Method Blank

Trep yNpe: yotal5 x

Trep Batch: 67/ A

x naNte	MB Result	MB Qualifier	RL	Unit	D	Prepared	x naNzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	10/15/21 13:13	10/16/21 20:13		1
Toluene	<0.00200	U	0.00200	mg/Kg	10/15/21 13:13	10/16/21 20:13		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	10/15/21 13:13	10/16/21 20:13		1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	10/15/21 13:13	10/16/21 20:13		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	10/15/21 13:13	10/16/21 20:13		1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	10/15/21 13:13	10/16/21 20:13		1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1,	S7-	03 - 7/ 3			73515 7 7 / 67	73525 7 : 367/	7
7 <i>i</i> -Fluorobenzene (Surr)	, 4		03 - 7/ 3			73515 7 7 / 67	73525 7 : 367/	7

Lab Sample ID: LCS 880-67/ A51-x

MatriP: Solid

x naNsis Batch: 6A2/

Client Sample ID: Lab Control Sample

Trep yNpe: yotal5 x

Trep Batch: 67/ A

x naNte	Spike x dded	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Benzene	0.100	0.08997		mg/Kg		90	70 - 130
Toluene	0.100	0.08622		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.08840		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1738		mg/Kg		87	70 - 130
o-Xylene	0.100	0.08893		mg/Kg		89	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	, 3		03 - 7/ 3				
7 <i>i</i> -Fluorobenzene (Surr)	73/		03 - 7/ 3				

Lab Sample ID: LCSD 880-67/ A52-x

MatriP: Solid

x naNsis Batch: 6A2/

Client Sample ID: Lab Control Sample Dup

Trep yNpe: yotal5 x

Trep Batch: 67/ A

x naNte	Spike x dded	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RTD	Limit
Benzene	0.100	0.08597		mg/Kg		86	70 - 130	5	35

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1409-1  
SDG: 31402909.110

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

Lab Sample ID: LCSD 880-67/ A2-x

Client Sample ID: Lab Control Sample Dup

MatriP: Solid

Trep yNpe: totalSx

x naNsis Batch: 6A2/

Trep Batch: 67/ A

x naNsle	Spike	LCSD	LCSD	%Rec.	RTD				
	xxdded	Result	Qualifier	Unit	D	%Rec	Limits	RTD	Limit
Toluene	0.100	0.08904		mg/Kg		89	70 - 130	3	35
Ethylbenzene	0.100	0.08589		mg/Kg		86	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1697		mg/Kg		85	70 - 130	2	35
o-Xylene	0.100	0.08790		mg/Kg		88	70 - 130	1	35

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	, 7		03 - 7/ 3
7 <i>i</i> -Fluorobenzene (Surr)	731		03 - 7/ 3

Lab Sample ID: 860-1706-1 MS

Client Sample ID: T9 0/

MatriP: Solid

Trep yNpe: totalSx

x naNsis Batch: 6A2/

Trep Batch: 67/ A

x naNsle	Sample	Sample	Spike	MS	MS	%Rec.		RTD	
	Result	Qualifier	xxdded	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00199	U F2 F1	0.100	0.07320		mg/Kg		73	70 - 130
Toluene	<0.00199	U F1	0.100	0.06060	F1	mg/Kg		60	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.100	0.07085		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.201	0.01955	F1	mg/Kg		10	70 - 130
o-Xylene	<0.00199	U F2 F1	0.100	0.07847		mg/Kg		78	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	, 0		03 - 7/ 3
7 <i>i</i> -Fluorobenzene (Surr)	73C		03 - 7/ 3

Lab Sample ID: 860-1706-1 MSD

Client Sample ID: T9 0/

MatriP: Solid

Trep yNpe: totalSx

x naNsis Batch: 6A2/

Trep Batch: 67/ A

x naNsle	Sample	Sample	Spike	MSD	MSD	%Rec.		RTD	
	Result	Qualifier	xxdded	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00199	U F2 F1	0.0990	0.03372	F2 F1	mg/Kg		34	70 - 130
Toluene	<0.00199	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.0990	0.03244	F2 F1	mg/Kg		33	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.198	0.01108	F2 F1	mg/Kg		6	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0990	0.04261	F2 F1	mg/Kg		43	70 - 130

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	77C		03 - 7/ 3
7 <i>i</i> -Fluorobenzene (Surr)	77:		03 - 7/ 3

**Method: 801AB 3 M - Diesel Range Organics (DRO) (GC)**

Lab Sample ID: MB 880-678751-x

Client Sample ID: Method Blank

MatriP: Solid

Trep yNpe: totalSx

x naNsis Batch: 6A68

Trep Batch: 6787

x naNsle	MB	MB	RL	Unit	D	Prepared	x naNsled	Dil Fac
	Result	Qualifier		mg/Kg				
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/17/21 11:31	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1409-1  
SDG: 31402909.110

**Method: 801AB 3 M - Diesel Range Organics (DRO) (GC) (Continued)**

Lab Sample ID: MB 880-678751-x

Client Sample ID: Method Blank

MatriP: Solid

Trep yNpe: yotal5x

x naNsis Batch: 6A68

Trep Batch: 6787

x naNte	MB		RL	Unit	D	Tprepared	x naNzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/17/21 11:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/14/21 14:45	10/17/21 11:31	1
Surrogate	MB		MB		Prepared		Analyzed	Dil Fac
7-h chloroot aTne	, 2		Limits			73545 7 74611	73505 7 7767	7
o-percen&l	731		03 - 7/3			73545 7 74611	73505 7 7767	7

Lab Sample ID: LCS 880-678752-x

Client Sample ID: Lab Control Sample

MatriP: Solid

Trep yNpe: yotal5x

x naNsis Batch: 6A68

Trep Batch: 6787

x naNte	Spike		LCS	LCS	Unit	D	%Rec.	
	x dded	Result	Qualifier	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10		1000	780.0	mg/Kg		78	70 - 130	
Diesel Range Organics (Over C10-C28)		1000	880.0	mg/Kg		88	70 - 130	
Surrogate	LCS		LCS		%Rec.		RTD	
7-h chloroot aTne	, G		Limits					
o-percen&l	, 7		03 - 7/3					

Lab Sample ID: LCSD 880-678754-x

Client Sample ID: Lab Control Sample Dup

MatriP: Solid

Trep yNpe: yotal5x

x naNsis Batch: 6A68

Trep Batch: 6787

x naNte	Spike		LCSD	LCSD	Unit	D	%Rec.		RTD
	x dded	Result	Qualifier	%Rec	Limits	RTD	Limit		
Gasoline Range Organics (GRO)-C6-C10		1000	997.9	*1	mg/Kg		100	70 - 130	25
Diesel Range Organics (Over C10-C28)		1000	878.9		mg/Kg		88	70 - 130	0
Surrogate	LCSD		LCSD		%Rec.		RTD		Limit
7-h chloroot aTne	, /		Limits						
o-percen&l	, 7		03 - 7/3						

Lab Sample ID: 860-1704-x-1-D MS

Client Sample ID: MatriP Spike

MatriP: Solid

Trep yNpe: yotal5x

x naNsis Batch: 6A68

Trep Batch: 6787

x naNte	Sample		Spike	MS	MS	Unit	D	%Rec.	
	Result	Qualifier						%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	997	939.6		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	894.7		mg/Kg		90	70 - 130
Surrogate	MS		MS		%Rec.		RTD		Limit
7-h chloroot aTne	, 0		Limits						
o-percen&l	, :		03 - 7/3						

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1409-1  
SDG: 31402909.110

**Method: 801AB 3 M - Diesel Range Organics (DRO) (GC) (Continued)**

Lab Sample ID: 860-1704-x-1-, MSD							Client Sample ID: MatriP Spike Duplicate						
MatriP: Solid							Trep yNpe: yotal5 x						
x naiNsis Batch: 6A68							Trep Batch: 6787						
x naiNte	Sample Result	Sample Qualifier	Spike x dded	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RTD	RTD	RTD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	1000	974.1		mg/Kg		93	70 - 130	4		20	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	880.8		mg/Kg		88	70 - 130	2		20	
Surrogate							MSD %Recovery						
7-h clorooot aTne		, 4		03 - 7 / 3									
o-percen8l		, 3		03 - 7 / 3									

**Method: H00.0 - x nionsElon ChromatographN**

Lab Sample ID: MB 880-6A4751-x							Client Sample ID: Method Blank						
MatriP: Solid							Trep yNpe: Soluble						
x naiNsis Batch: 6/ 6H													
x naiNte	MB Result	MB Qualifier	RL			Unit	D	Prepared	x naiNzed				Dil Fac
Chloride	<5.00	U		5.00		mg/Kg			10/18/21 19:54				1

Lab Sample ID: LCS 880-6A4752-x							Client Sample ID: Lab Control Sample						
MatriP: Solid							Trep yNpe: Soluble						
x naiNsis Batch: 6/ 6H													
x naiNte	Spike x dded	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits						
Chloride	250	245.2		mg/Kg		98	90 - 110						

Lab Sample ID: LCSD 880-6A4754-x							Client Sample ID: Lab Control Sample Dup						
MatriP: Solid							Trep yNpe: Soluble						
x naiNsis Batch: 6/ 6H													
x naiNte	Spike x dded	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits						RTD
Chloride	250	246.1		mg/Kg		98	90 - 110						20

Lab Sample ID: 860-1706-7 MS							Client Sample ID: T9 0/ C						
MatriP: Solid							Trep yNpe: Soluble						
x naiNsis Batch: 6/ 6H													
x naiNte	Sample Result	Sample Qualifier	Spike x dded	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RTD	RTD	RTD	Limit
Chloride	487	F1	251	804.2	F1	mg/Kg		126	90 - 110	0		20	

Lab Sample ID: 860-1706-7 MSD							Client Sample ID: T9 0/ C						
MatriP: Solid							Trep yNpe: Soluble						
x naiNsis Batch: 6/ 6H													
x naiNte	Sample Result	Sample Qualifier	Spike x dded	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RTD	RTD	RTD	Limit
Chloride	487	F1	251	805.1	F1	mg/Kg		127	90 - 110	0		20	

Eurofins Xenco, Carlsbad

**QC Association Summary**

20 en t WS PWU leAc  
Sroj ArWri : Fi z Fi i 011H

Job ID: 890-1409-1  
WD. : G1403909d110

**GC VOA****Prep Batch: 9467**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-946h/5-U	Mi naod B&eT	NbrkOT U	Wb@I	50G5	

**Prep Batch: 9475**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	NbrkOT U	Wb@I	50G5	
890-1409-3	SH0hU	NbrkOT U	Wb@I	50G5	
890-1409-G	SH0hB	NbrkOT U	Wb@I	50G5	
890-1409-4	SH0h2	NbrkOT U	Wb@I	50G5	
MB 880-94h5/5-U	Mi naod B&eT	NbrkOT U	Wb@I	50G5	
L2W880-94h5/1-U	Lkb 2 oerroO\kmpC	NbrkOT U	Wb@I	50G5	
L2WD 880-94h5/3-U	Lkb 2 oerroO\kmpC Dup	NbrkOT U	Wb@I	50G5	
890-1409-1 MW	SH0h	NbrkOT U	Wb@I	50G5	
890-1409-1 MWD	SH0h	NbrkOT U	Wb@I	50G5	

**Analysis Batch: 9527**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	NbrkOT U	Wb@I	8031B	94h5
890-1409-3	SH0hU	NbrkOT U	Wb@I	8031B	94h5
890-1409-G	SH0hB	NbrkOT U	Wb@I	8031B	94h5
890-1409-4	SH0h2	NbrkOT U	Wb@I	8031B	94h5
MB 880-946h/5-U	Mi naod B&eT	NbrkOT U	Wb@I	8031B	946h
MB 880-94h5/5-U	Mi naod B&eT	NbrkOT U	Wb@I	8031B	94h5
L2W880-94h5/1-U	Lkb 2 oerroO\kmpC	NbrkOT U	Wb@I	8031B	94h5
L2WD 880-94h5/3-U	Lkb 2 oerroO\kmpC Dup	NbrkOT U	Wb@I	8031B	94h5
890-1409-1 MW	SH0h	NbrkOT U	Wb@I	8031B	94h5
890-1409-1 MWD	SH0h	NbrkOT U	Wb@I	8031B	94h5

**Analysis Batch: 9900**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	NbrkOT U	Wb@I	NbrkBNx E	
890-1409-3	SH0hU	NbrkOT U	Wb@I	NbrkBNx E	
890-1409-G	SH0hB	NbrkOT U	Wb@I	NbrkBNx E	
890-1409-4	SH0h2	NbrkOT U	Wb@I	NbrkBNx E	

**GC Semi VOA****Prep Batch: 9484**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	NbrkOT U	Wb@I	80157 M Sri p	
890-1409-3	SH0hU	NbrkOT U	Wb@I	80157 M Sri p	
890-1409-G	SH0hB	NbrkOT U	Wb@I	80157 M Sri p	
890-1409-4	SH0h2	NbrkOT U	Wb@I	80157 M Sri p	
MB 880-9484/1-U	Mi naod B&eT	NbrkOT U	Wb@I	80157 M Sri p	
L2W880-9484/3-U	Lkb 2 oerroO\kmpC	NbrkOT U	Wb@I	80157 M Sri p	
L2WD 880-9484/GU	Lkb 2 oerroO\kmpC Dup	NbrkOT U	Wb@I	80157 M Sri p	
890-1406-U-1-D MW	MkrnIX\plTi	NbrkOT U	Wb@I	80157 M Sri p	
890-1406-U-1-x MWD	MkrnIX\plTi Dup\kri	NbrkOT U	Wb@I	80157 M Sri p	

**Analysis Batch: 9598**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	NbrkOT U	Wb@I	8015B 7 M	9484

x urofles Ei eAo, 2kr@bkd

**QC Association Summary**

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1409-1  
WD. : G1403909d110

**GC Semi VOA 3Continued(****Analysis Batch: 9598 3Continued(**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-3	SH0hU	Nbrk7 U	WbQd	8015B 7 M	9484
890-1409-G	SH0hB	Nbrk7 U	WbQd	8015B 7 M	9484
890-1409-4	SH0h2	Nbrk7 U	WbQd	8015B 7 M	9484
MB 880-9484/1-U	Mi naod B&eT	Nbrk7 U	WbQd	8015B 7 M	9484
L2W880-9484/3-U	Lkb 2 oerroO&kmpC	Nbrk7 U	WbQd	8015B 7 M	9484
L2WD 880-9484/GU	Lkb 2 oerroO&kmpC Dup	Nbrk7 U	WbQd	8015B 7 M	9484
890-1406-U-1-D MW	MkrlXWpITi	Nbrk7 U	WbQd	8015B 7 M	9484
890-1406-U-1-x MWD	MkrlXWpITi DupO&ki	Nbrk7 U	WbQd	8015B 7 M	9484

**Analysis Batch: 9896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	Nbrk7 U	WbQd	8015 7 M	
890-1409-3	SH0hU	Nbrk7 U	WbQd	8015 7 M	
890-1409-G	SH0hB	Nbrk7 U	WbQd	8015 7 M	
890-1409-4	SH0h2	Nbrk7 U	WbQd	8015 7 M	

**) PLCHC****Leach Batch: 9564**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	WbQbC	WbQd	DI Li kAa	
890-1409-3	SH0hU	WbQbC	WbQd	DI Li kAa	
890-1409-G	SH0hB	WbQbC	WbQd	DI Li kAa	
890-1409-4	SH0h2	WbQbC	WbQd	DI Li kAa	
MB 880-9564/1-U	Mi naod B&eT	WbQbC	WbQd	DI Li kAa	
L2W880-9564/3-U	Lkb 2 oerroO&kmpC	WbQbC	WbQd	DI Li kAa	
L2WD 880-9564/GU	Lkb 2 oerroO&kmpC Dup	WbQbC	WbQd	DI Li kAa	
890-1409-4 MW	SH0h2	WbQbC	WbQd	DI Li kAa	
890-1409-4 MWD	SH0h2	WbQbC	WbQd	DI Li kAa	

**Analysis Batch: 979/**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1409-1	SH0h	WbQbC	WbQd	G00d	9564
890-1409-3	SH0hU	WbQbC	WbQd	G00d	9564
890-1409-G	SH0hB	WbQbC	WbQd	G00d	9564
890-1409-4	SH0h2	WbQbC	WbQd	G00d	9564
MB 880-9564/1-U	Mi naod B&eT	WbQbC	WbQd	G00d	9564
L2W880-9564/3-U	Lkb 2 oerroO&kmpC	WbQbC	WbQd	G00d	9564
L2WD 880-9564/GU	Lkb 2 oerroO&kmpC Dup	WbQbC	WbQd	G00d	9564
890-1409-4 MW	SH0h2	WbQbC	WbQd	G00d	9564
890-1409-4 MWD	SH0h2	WbQbC	WbQd	G00d	9564

x urofles Ei eAo, 2krGbkd

**Lab Chronicle**

Client: WSP USA Inc.  
ProjectSite: / eF / ee 011z

Job ID: 890-1409-1  
SDH: G1403909.110

**Client Sample ID: PH03**

Date Collectex: 10d/ d21 12:18  
Date Receivex: 10d2d21 14:04

**Lab Sample ID: 890-1409-1**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzex	Analyst	Lab
7otTljNA	P2ep	50G5			5.0Ga	5 g L	9465	10j15j31 1G1G	KL	XEN MID
7otTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10j1Bj31 30:40	MR	XEN MID
7otTljNA	AnTlniyi	7otTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID
7otTljNA	AnTlniyi	8015 NM		1			989B	10j19j31 1G35	AJ	XEN MID
7otTljNA	P2ep	8015NM P2ep			10.0Ga	10 g L	9484	10j14j31 14:45	DM	XEN MID
7otTljNA	AnTlniyi	8015s NM		1			9598	10j16j31 16:G6	AJ	XEN MID
Soluble	LeTch	DI LeTch			5.0Ga	50 g L	95B4	10j15j31 16:G6	CA	XEN MID
Soluble	AnTlniyi	G00.0		5			969G	10j18j31 31:1G	SC	XEN MID

**Client Sample ID: PH03A**

Date Collectex: 10d/ d21 12:21  
Date Receivex: 10d2d21 14:04

**Lab Sample ID: 890-1409-2**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzex	Analyst	Lab
7otTljNA	P2ep	50G5			5.05 a	5 g L	9465	10j15j31 1G1G	KL	XEN MID
7otTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10j1Bj31 31:06	MR	XEN MID
7otTljNA	AnTlniyi	7otTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID
7otTljNA	AnTlniyi	8015 NM		1			989B	10j19j31 1G35	AJ	XEN MID
7otTljNA	P2ep	8015NM P2ep			10.04 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
7otTljNA	AnTlniyi	8015s NM		1			9598	10j16j31 16:56	AJ	XEN MID
Soluble	LeTch	DI LeTch			4.95 a	50 g L	95B4	10j15j31 16:G6	CA	XEN MID
Soluble	AnTlniyi	G00.0		1	0 g L	1.0 g L	969G	10j18j31 31:18	SC	XEN MID

**Client Sample ID: PH03B**

Date Collectex: 10d/ d21 12:23  
Date Receivex: 10d2d21 14:04

**Lab Sample ID: 890-1409-7**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzex	Analyst	Lab
7otTljNA	P2ep	50G5			5.05 a	5 g L	9465	10j15j31 1G1G	KL	XEN MID
7otTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10j1Bj31 31:GG	MR	XEN MID
7otTljNA	AnTlniyi	7otTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID
7otTljNA	AnTlniyi	8015 NM		1			989B	10j19j31 1G35	AJ	XEN MID
7otTljNA	P2ep	8015NM P2ep			10.01 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
7otTljNA	AnTlniyi	8015s NM		1			9598	10j16j31 18:18	AJ	XEN MID
Soluble	LeTch	DI LeTch			5.00 a	50 g L	95B4	10j15j31 16:G6	CA	XEN MID
Soluble	AnTlniyi	G00.0		5	0 g L	1.0 g L	969G	10j18j31 31:34	SC	XEN MID

**Client Sample ID: PH03C**

Date Collectex: 10d/ d21 12:77  
Date Receivex: 10d2d21 14:04

**Lab Sample ID: 890-1409-4**  
**5 atriM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by Analyzex	Analyst	Lab
7otTljNA	P2ep	50G5			5.04 a	5 g L	9465	10j15j31 1G1G	KL	XEN MID
7otTljNA	AnTlniyi	8031s		1	5 g L	5 g L	9536	10j1Bj31 31:59	MR	XEN MID
7otTljNA	AnTlniyi	7otTl s 7EX		1			9900	10j19j31 1G43	AJ	XEN MID

Eu2b+ny Xencof CT2ybT,

**Lab Chronicle**

Client: WSP USA Inc.  
Project Site: / eF / ee 011z

Job ID: 890-1409-1  
SDH: G1403909.110

**Client Sample ID: PH03C**  
**Date Collected: 10/01/21 12:77**  
**Date Received: 10/12/21 14:04**

**Lab Sample ID: 890-1409-4**  
**5 atrIM Solix**

Prep Type	Batch Type	Batch	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared by or Analyzed	Analyst	Lab
70tTljNA	AnTlmyiy	8015 NM		1			989B	10j19j31 1G35	AJ	XEN MID
70tTljNA	P2ep	8015NM P2ep			10.03 a	10 g L	9484	10j14j31 14:45	DM	XEN MID
70tTljNA	AnTlmyiy	8015s NM		1			9598	10j16j31 18:G8	AJ	XEN MID
Soluble	LeTch	DI LeTch			4.99 a	50 g L	95B4	10j15j31 16:G6	CA	XEN MID
Soluble	AnTlmyiy	G00.0		1	0 g L	1.0 g L	969G	10j18j31 31:G0	SC	XEN MID

**Laboratory References:**

XEN MID d Eu2bny Xencof Mi, ITn, f 1311 W. / lo2, T Avef Mi, ITn, f 7X 69601f 7EL (4G3)604-5440

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## Accreditation/Certification Summary

Client: WSP USA Inc.

Job ID: 890-1409-1

Project Site: / EF / ee 011z

SDH: G1403909.110

**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	T104704400-31-33	06-03-33
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPz
Total BTEX		Solid	Total BTEX

## Method Summary

20 en t WS PWU leAc  
Sroji ArWri : Fi z Fi i 011H

Job ID: 890-1409-1  
WD. : G1403909d110

Method	Method Description	Protocol	Laboratory
8031B	Vo@rlC OrgaelA2 mpoueds (. 2)	Wf 846	XEN MID
ToraCBTEX	ToraCBTEX 2 a@u@rloe	TUL WOS	XEN MID
8015 NM	Dli si CRaegei OrgaelAs (DRO) (. 2)	Wf 846	XEN MID
8015B NM	Dli si CRaegei OrgaelAs (DRO) (. 2)	Wf 846	XEN MID
G00Q	Ueloes, loe 2 hromar@raphy	M2 Ut t	XEN MID
50G5	2 Qsi d Wysri m Surgi aed Trap	Wf 846	XEN MID
8015NM Sri p	MIAroi xrraArloe	Wf 846	XEN MID
DI Li aAh	Di loelzi d t ari r Li aAhleg SroAi duri	UWTM	XEN MID

**Protocol References:**

UWTM = UWTM Ier@ rearloeaC

M2 Ut t = "Mi rhods For 2 hi mlAaQJea@sls Of t ari r Ued t asni s", ESU-6004-79-030, Mar@h 198GUed W@bsi qui enRi vlsloesc

Wf 846 = "Ti snMi rhods For Eva@arleg Wb@t t asni , ShyslAa@2 hi mlAa@Mi rhods", Thlrd Ed@rloe, Novi mbi r 1986 Ued lrs Ppdari sc

TUL WOS = Ti srUmi rlAa Laborarorli s, W@edard Opi rarleg SroAi duri

**Laboratory References:**

XEN MID = Eurofles Xi eAo, Mid@ed, 1311 t cF@rlda Uvi , Mid@ed, TX 79701, TEL (4G3)704-5440

**Sample Summary**

Client: WSP USA Inc.

ProjectSite: / eF / ee 011z

Job ID: 890-1409-1

SD5 : G1403909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1409-1	Pz 0H	Solid	10/07/31 13:18	10/13/31 14:04	1
890-1409-3	Pz 0HA	Solid	10/07/31 13:31	10/13/31 14:04	3
890-1409-G	Pz 0HB	Solid	10/07/31 13:3H	10/13/31 14:04	G
890-1409-4	Pz 0HC	Solid	10/07/31 13:GG	10/13/31 14:04	4

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### Chain of Custody

Work Order No:

Houston, TX (281) 240-4200, Dallas, TX (214) 992-0300, San Antonio, TX (210) 509-3334  
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Mobile, AL (514) 3202-7850, Carlsbad, NM (575) 598-3198, Phoenix, AZ (480) 355-0900  
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 755-0747, Delray Beach, FL (561) 659-6701  
Atlanta, GA (770) 449-8800

Atlanta, GA (770) 449-8800

Dr. 1

<b>Project Manager:</b> <u>Kalei Jennings</u>		<b>Bill to:</b> (if different)	<b>Work Order Comments</b>			
<b>Company Name:</b> <u>WSP USA</u>		<b>Company Name:</b>				
<b>Address:</b> <u>3300 North A Street</u>		<b>Address:</b>				
<b>City, State ZIP:</b> <u>Midland, TX 79705</u>		<b>City, State ZIP:</b>				
<b>Phone:</b>	(817) 683-2503	<b>Email:</b> <u>kalei.jennings@wsp.com</u>				
<b>Program:</b> <input checked="" type="checkbox"/> UST <input type="checkbox"/> PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfield <input type="checkbox"/> RR <input type="checkbox"/> Superfund <input type="checkbox"/> <b>State of Project:</b> <input checked="" type="checkbox"/> Reporting Level <input type="checkbox"/> Level <input type="checkbox"/> PSTIUS <input type="checkbox"/> TRF <input type="checkbox"/> Level <b>Deliverables:</b> <input checked="" type="checkbox"/> EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: <input type="checkbox"/>						

Work Order Notes

**Notice:** Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. We assume no liability 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.

## Chain of Custody Record



eurofins

Environment Testing

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

**Euromis Xer**  
1089 N Canal St  
Carlsbad NM 88220  
Phone: 575-988-3

160

Call 575-988-3199

Note: Since laboratory accreditations are subject to change, Eurofins Xeno LLC places the ownership of method, analytic & 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 Oregon listed above for analysis/test/submit, being analyzed, the samples must be shipped back to the Eurofins Xeno LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Xeno LLC immediately if all requested accreditations are current to date. Return the signed Chain of Custody attesting to sample compliance to Eurofins Xeno LLC.

הנומינציה לפרס נובל

**Deliverable Requested I, II III, IV Other (specify)**

Empty Kit Relinquished by \_\_\_\_\_

Reinforced by	Date/Time	Entered by	Company	Received by	Date/Time
Mr 10.12.21	10:12:21	user 1000	Comcast	NAME	10.13.22

Custody Seals Intact:  Custody Seal No  
△ Yes △ No

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1409-1

S2D Number: G1403909.110

**Login Number: 1409****List Source: Eurofins Xenco, Carlsbad****List Number: 1****Creator: Clifton, Cloe**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MS2 s	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: 890-1409-1

S2D Number: G1403909.110

**Login Number: 1409****List Source: Eurofins Xenco, Midland****List Number: 2****List Creation: 10/13/21 12:17 PM****Creator: Kramer, Jessica**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MS2 s	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: 890-1452-1

Laboratory Sample Delivery Group: 31402909.110  
Client Project/Site: Fez Fee 011H

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

Attn: Kalei Jennings

A handwritten signature in black ink that reads "JESSICA KRAMER".

Authorized for release by:  
10/28/2021 3:13:20 PM

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

### LINKS

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results through

**Total Access**

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Ask  
The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Laboratory Job ID: 890-1452-1  
SDG: 31402909.110

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## Definitions/Glossary

I ient WS PU APc It . G  
Urojn. WPN: Fnz Fnn 011H

Job ID: 890-145C-1  
PD3 : 2140C909G10

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
F1	MP at d/or MPD rn. ovnry nx. nnds . ot Wbi iem&G
FC	MP/MPD RUD nx. nnds . ot Wbi iem&G
A	It de aWs Wh at aiyW u as at aiyznd gr b, W oWdnW. WdG

#### GC Semi VOA

Qualifier	Qualifier Description
P1h	P, rrowalW rn. ovnry nx. nnds . ot Wbi iem&G +ew+ basndG
A	It de aWs Wh at aiyW u as at aiyznd gr b, W oWdnW. WdG

#### HPLC/IC

Qualifier	Qualifier Description
A	It de aWs Wh at aiyW u as at aiyznd gr b, W oWdnW. WdG

### Glossary

#### Abbreviation

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	LsWd , t dnr Wh "D" . oi, mt W dnsext aW WaWn rns, iW s rnporWd ot a dry u neWbass
%R	Unr. nt WRn. ovnry
I FL	I ot Ws Frnn Lq, q
I FA	I oiot y Forme wAt &V
I NF	I ot Ws No Frnn Lq, q
DER	D, pie aW Error RaW (t ormaiend absoi, W degnrt . n)
Dé Fa.	Dé, Wt Fa. W
DL	DnW. Wt Lené(DoD/DOE)
DLf Rcf REf IN	It de aWs a Dé, Wt f Rn-at aiysaf Rn-nxW. Wt f or addot ai It aai mnWfs/at ot at aiysogWh sampin
DLI	Dn. eset Lvnvi l ot . nt Wt (Rado. +nmesW)
EDL	EsWnawd DnW. Wt Lené(Doexé )
LOD	LenéWgDnW. Wt (DoD/DOE)
LOQ	LenéWgQ, at Wt (DoD/DOE)
MI L	EUC rn. ommnt dnd "Maxen, m l ot Wm at WLvnvi"
MDC	Mé en, m DnW. Wt bin c. Wt (Rado. +nmesW)
MDI	Mé en, m DnW. Wt bin l ot . nt Wt (Rado. +nmesW)
MDL	MnWod DnW. Wt LenéW
ML	Mé en, m Lvnvi (Doexé )
MUN	MosWUrobabin N, mbnr
MQL	MnWod Q, at Wt LenéW
NI	NoW ai. , iaWd
ND	NoWDnW. Wd aWWh rnporWwienéW (or MDL or EDL egs+out )
NE3	NnwWn / cbsnt W
UOP	UoseWn / Urnsnt W
UQL	Ura. Wai Q, at Wt LenéW
UREP	Urns, mpWn
QI	Q, aiyWl ot Wbi
RER	RniaWn Error RaW (Rado. +nmesW)
RL	RnporWwLenéWor Rnq, nsWd LenéW(Rado. +nmesW)
RUD	RniaWn Un. nt WDgnrt . nf a mnas, rn ogWh rniaWn degnrt . n bnWnnt Wo poé W
TEF	Toxe &W Eq, evaint WFa. W (Doexé )
TEQ	Toxe &W Eq, evaint WQ, oWt W(Doexé )
TNTI	Too N, mnro, s To l o, t W

E, rogs Xnt . of I arisbad

**Case Narrative**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Job ID: 890-1452-1**

**Laboratory: Eurofins Xenco, Carlsbad**

**Narrative****Job Narrative  
890-1452-1****Receipt**

The samples were received on 10/19/2021 3:53 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 4.0°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-10014 and analytical batch 880-10340 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-10015 and analytical batch 880-10201 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (890-1450-A-1-D). Evidence of matrix interferences is not obvious.

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

**HPLC/IC**

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

**Client Sample Results**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Client Sample ID: FS01**  
Date Collected: 10/18/21 14:10  
Date Received: 10/19/21 15:53  
Sample Depth: 4

**Lab Sample ID: 890-1452-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:21	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/21/21 14:36	10/25/21 01:21	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/21/21 14:36	10/25/21 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	17		03 - / 53	/ 32 , 2 / / 467	/ 32 , 2 / 3 / 6 /	/
/ <i>p</i> -i Fluorobenzene (Surr)	/ 37		03 - / 53	/ 32 , 2 / / 467	/ 32 , 2 / 3 / 6 /	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/25/21 19:23	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	<49.9	U	49.9	mg/Kg		10/25/21 10:09	10/25/21 14:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/25/21 10:09	10/25/21 14:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/25/21 10:09	10/25/21 14:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
/ -Chlorooctane	14		03 - / 53	/ 32 , 2 / / 361	/ 32 , 2 / / 46 T	/
<i>o</i> -perhydro <i>n</i>	/ 33		03 - / 53	/ 32 , 2 / / 361	/ 32 , 2 / / 46 T	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5390		25.0	mg/Kg			10/25/21 23:15	5

**Client Sample ID: FS02**  
Date Collected: 10/18/21 14:12  
Date Received: 10/19/21 15:53  
Sample Depth: 4

**Lab Sample ID: 890-1452-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:42	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:42	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/21/21 14:36	10/25/21 01:42	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/21/21 14:36	10/25/21 01:42	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/21/21 14:36	10/25/21 01:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1T		03 - / 53	/ 32 / 2 / / 467	/ 32 , 2 / 3 / 6 /	/

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Client Sample ID: FS02**  
Date Collected: 10/18/21 14:12  
Date Received: 10/19/21 15:53  
Sample Depth: 4

**Lab Sample ID: 890-1452-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
/D <i>i</i> -Fluorobenzene (Surr)	/ 3:		03 - / 53	/ 32 / 2 / 467	/ 32 , 2 / 3/ 6:	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 11:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 00:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 00:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
/-Chlorooctane	/ 35		03 - / 53	/ 32 02 / / 563	/ 32 T2 / / 336 /	/
<i>o</i> -phenylbenzene	/ : 3		03 - / 53	/ 32 02 / / 563	/ 32 T2 / / 336 /	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6560		50.0	mg/Kg			10/25/21 23:33	10

**Client Sample ID: FS03**

**Lab Sample ID: 890-1452-3**

Matrix: Solid

Date Collected: 10/18/21 14:15

Date Received: 10/19/21 15:53

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/21/21 14:36	10/25/21 02:02	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/21/21 14:36	10/25/21 02:02	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/21/21 14:36	10/25/21 02:02	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/21/21 14:36	10/25/21 02:02	1
<i>o</i> -Xylene	<0.00202	U	0.00202	mg/Kg		10/21/21 14:36	10/25/21 02:02	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		10/21/21 14:36	10/25/21 02:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	T1		03 - / 53	/ 32 / 2 / / 467	/ 32 , 2 / 3/ 6:	/
/D <i>i</i> -Fluorobenzene (Surr)	/ 33		03 - / 53	/ 32 / 2 / / 467	/ 32 , 2 / 3/ 6:	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 11:09	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Client Sample ID: FS03**  
Date Collected: 10/18/21 14:15  
Date Received: 10/19/21 15:53  
Sample Depth: 4

**Lab Sample ID: 890-1452-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
/ -Chlorooctane	/ 30		03 - / 53			/ 32 02 / / 5613	/ 32 T2 / 3 / 6 /	/
o-phenylbenzene	/ : 3		03 - / 53			/ 32 02 / / 5613	/ 32 T2 / 3 / 6 /	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6560		49.8	mg/Kg			10/25/21 23:38	10

**Client Sample ID: FS04**  
Date Collected: 10/18/21 16:05  
Date Received: 10/19/21 15:53  
Sample Depth: 4

**Lab Sample ID: 890-1452-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/21 14:36	10/25/21 02:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/21 14:36	10/25/21 02:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/21 14:36	10/25/21 02:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/21/21 14:36	10/25/21 02:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/21 14:36	10/25/21 02:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/21/21 14:36	10/25/21 02:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	15		03 - / 53			/ 32 2 / / 4657	/ 32 , 2 / 3: 6 5	/
/ 4-i Fluorobenzene (Surr)	/ 3/		03 - / 53			/ 32 2 / / 4657	/ 32 , 2 / 3: 6 5	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 11:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:30	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
/ -Chlorooctane	/ 33		03 - / 53			/ 32 02 / / 5613	/ 32 T2 / 3 / 653	/
o-phenylbenzene	/ : 3		03 - / 53			/ 32 02 / / 5613	/ 32 T2 / 3 / 653	/

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**Client Sample Results**

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Client Sample ID: FS04**  
Date Collected: 10/18/21 16:05  
Date Received: 10/19/21 15:53  
Sample Depth: 4

**Lab Sample ID: 890-1452-4**  
Matrix: Solid

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1360		4.95	mg/Kg			10/25/21 23:44	1

**Client Sample ID: SW01**

Date Collected: 10/18/21 14:50  
Date Received: 10/19/21 15:53  
Sample Depth: 0 - 4

**Lab Sample ID: 890-1452-5**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 11:55	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 11:55	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 11:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/22/21 09:45	10/24/21 11:55	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 11:55	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/22/21 09:45	10/24/21 11:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	15		03 - / 53			/ 32 : 2 / 316,	/ 32 42 / // 6 ,	/
/D-i Fluorobenzene (Surr)	/ 31		03 - / 53			/ 32 : 2 / 316,	/ 32 42 / // 6 ,	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 11:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 01:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
/-Chlorooctane	/ 3/		03 - / 53			/ 32 02 / / 563	/ 32 T2 / 3/ 6 3	/
o-phenylphenol	// 5		03 - / 53			/ 32 02 / / 563	/ 32 T2 / 3/ 6 3	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	188		4.97	mg/Kg			10/25/21 23:50	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Client Sample ID: SW02**  
Date Collected: 10/18/21 15:46  
Date Received: 10/19/21 15:53  
Sample Depth: 0 - 4

**Lab Sample ID: 890-1452-6**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 12:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 12:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 12:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/22/21 09:45	10/24/21 12:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/22/21 09:45	10/24/21 12:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/22/21 09:45	10/24/21 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	/ 3:		03 - / 53	/ 32 : 2 / 316,	/ 32 42 / / : 67	/
/ <i>i</i> -Fluorobenzene (Surr)	//,		03 - / 53	/ 32 : 2 / 316,	/ 32 42 / / : 67	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/27/21 11:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/28/21 02:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/28/21 02:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/27/21 13:40	10/28/21 02:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
/ -Chlorooctane	/ 3/		03 - / 53	/ 32 02 / / 503	/ 32 T2 / 3: 63	/
<i>o</i> -perhydro <i>n</i>	// 3		03 - / 53	/ 32 02 / / 503	/ 32 T2 / 3: 63	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		4.99	mg/Kg			10/25/21 23:56	1

**Client Sample ID: SW03**

Date Collected: 10/18/21 14:54  
Date Received: 10/19/21 15:53  
Sample Depth: 0 - 4

**Lab Sample ID: 890-1452-7**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:39	10/24/21 13:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:39	10/24/21 13:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:39	10/24/21 13:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/20/21 14:39	10/24/21 13:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 14:39	10/24/21 13:30	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/20/21 14:39	10/24/21 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	14		03 - / 53	/ 32 32 / / 461	/ 32 42 / / 563	/

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
SDG: 31402909.110

**Client Sample ID: SW03**  
Date Collected: 10/18/21 14:54  
Date Received: 10/19/21 15:53  
Sample Depth: 0 - 4

**Lab Sample ID: 890-1452-7**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
/D <i>i</i> -Fluorobenzene (Surr)	11		03 - / 53	/ 32 32 / / 461	/ 32 42 / / 563	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/27/21 12:13	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	<49.8	U	49.8	mg/Kg			10/27/21 13:40	10/28/21 02:30
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg			10/27/21 13:40	10/28/21 02:30
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg			10/27/21 13:40	10/28/21 02:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
/-Chlorooctane	/ 3/		03 - / 53	/ 32 02 / / 563	/ 32 T2 / / 563	/
o-phenylphenol	/ 31		03 - / 53	/ 32 02 / / 563	/ 32 T2 / / 563	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		5.05	mg/Kg			10/26/21 00:02	1

**Client Sample ID: SW04**

**Lab Sample ID: 890-1452-8**

Matrix: Solid

Date Collected: 10/18/21 16:12

Date Received: 10/19/21 15:53

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg			10/20/21 14:39	10/24/21 13:50
Toluene	<0.00199	U	0.00199	mg/Kg			10/20/21 14:39	10/24/21 13:50
Ethylbenzene	<0.00199	U	0.00199	mg/Kg			10/20/21 14:39	10/24/21 13:50
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg			10/20/21 14:39	10/24/21 13:50
o-Xylene	<0.00199	U	0.00199	mg/Kg			10/20/21 14:39	10/24/21 13:50
Xylenes, Total	<0.00398	U	0.00398	mg/Kg			10/20/21 14:39	10/24/21 13:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	17		03 - / 53	/ 32 32 / / 461	/ 32 42 / / 563	/
/D <i>i</i> -Fluorobenzene (Surr)	/ 35		03 - / 53	/ 32 32 / / 461	/ 32 42 / / 563	/

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/26/21 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/27/21 12:13	1

Eurofins Xenco, Carlsbad

**Client Sample Results**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
 SDG: 31402909.110

**Client Sample ID: SW04**  
**Date Collected: 10/18/21 16:12**  
**Date Received: 10/19/21 15:53**  
**Sample Depth: 0 - 4**

**Lab Sample ID: 890-1452-8**  
**Matrix: Solid**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 02:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 02:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/27/21 13:40	10/28/21 02:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
/ -Chlorooctane	/ 35		03 - / 53			/ 32 02 / / 5613	/ 32 T2 / 3: 6 3	/
o-phenylbenzaldehyde	//:		03 - / 53			/ 32 02 / / 5613	/ 32 T2 / 3: 6 3	/

**Method: 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.9		5.02	mg/Kg			10/26/21 00:08	1

Eurofins Xenco, Carlsbad

**Surrogate Summary**

I iet WS PU APc It . G  
Ujo/n. WPN: znhznn 0117

Job ID: 890-142C-1  
PD3 : r 140C909G10

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-5C2C-c-1-D + P	+ 6WMPBn	99	9r
880-5C2C-c-1-p + PD	+ 6WMPBn DkBie 6W	10x	92
890-1449-c-1-c + P	+ 6WMPBn	9x	10C
890-1449-c-1-u + PD	+ 6WMPBn DkBie 6W	9r	99
890-142C-1	zP01	9x	10x
890-142C-C	zP0C	98	10C
890-142Cr	zP0r	89	100
890-142C-4	zP04	9r	101
890-142C-2	PS 01	9r	109
890-142Cx	PS 0C	10C	112
890-142C-5	PS 0r	94	99
890-142C-8	PS 04	9x	10r
890-142r-c-1-u + PD	+ 6WMPBn DkBie 6W	80	100
890-142r-c-1-D + P	+ 6WMPBn	105	95
LI P 880-10009F-c	L6b I ot Wbi P6mBin	92	88
LI P 880-10014F-c	L6b I ot Wbi P6mBin	88	99
LI P 880-10012F-c	L6b I ot Wbi P6mBin	88	95
LI PD 880-10009FC-c	L6b I ot Wbi P6mBin DkB	100	85
LI PD 880-10012FC-c	L6b I ot Wbi P6mBin DkB	90	99
+ u 880-10005F2-c	+ nWod ui6t a	99	10C
+ u 880-10009F2-c	+ nWod ui6t a	119	99
+ u 880-10014F2-c	+ nWod ui6t a	95	104
+ u 880-10012F2-c	+ nWod ui6t a	98	10x
+ u 880-9992F2-c	+ nWod ui6t a	101	105

**Surrogate Legend**

uzu = 4-ujomofikojobnt Ht n (Pkjj)

DzuZ = 1,4-Dékjokojobnt Ht n (Pkjj)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
LI PD 880-10014FC-c	L6b I ot Wbi P6mBin DkB		

**Surrogate Legend**

uzu = 4-ujomofikojobnt Ht n (Pkjj)

DzuZ = 1,4-Dékjokojobnt Ht n (Pkjj)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1420-c-1-p + P	+ 6WMPBn	111	11r
890-1420-c-1-z + PD	+ 6WMPBn DkBie 6W	1C5	1C9
890-142C-1	zP01	94	100
890-142C-C	zP0C	10r	100

pkjofk OTnt . o, l 6jiOb6d

**Surrogate Summary**

I int WS PU APc It . G

Job ID: 890-142C-1

Ujo/n. WPN: znHznn 0117

PD3 : r 140C909G10

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		1CO1 (70-130)	OTPH1 (70-130)	
890-142C-r	zP0r	105	100	
890-142C-4	zP04	100	11C	
890-142C-2	PS 01	101	11r	
890-142C-x	PS 0C	101	110	
890-142C-5	PS 0r	101	109	
890-142C-8	PS 04	10r	11C	
890-1451-c-1-l + P	+ 6WMPBan	110	10x	
890-1451-c-1-D + PD	+ 6WMPBan DkBie 6W	11C	108	
LI P 880-10r 54FC-c	L6b l ot \6i P6mBin	101	10C	
LI P 880-1052CF-c	L6b l ot \6i P6mBin	85	94	
LI PD 880-10r 54Fr-c	L6b l ot \6i P6mBin DkB	109	11r	
LI PD 880-1052CF-c	L6b l ot \6i P6mBin DkB	85	9C	
+ u 880-10r 54Fr-c	+ n\6od ui6t a	11r	1C5	
+ u 880-1052CF-c	+ n\6od ui6t a	1C4	14r P1y	

**Surrogate Legend**

1I E = 1-I hiojoo. \6t n

EsU7 = o-snjbhnt X

## QC Sample Results

I int WS PU APC It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

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

Lab Sample ID: MB 880-100094-

Matri5: Solid

/ naIPsis Batch: 10yy2

Client Sample ID: Method Blank

Arep xPpe: xotal4T /

Arep Batch: 10009

/ naIPte	MB	MB	Result	QualiUser	RL	z nit	D	Arepared	/ naIPFed	Dil Nac
	Surrogate	%Recovery								
<nt Ht n	n0@0000	A	0@0000		g KfK	10F0FC1 14:02	10F0FC1 16:19		1	
Toiunt n	n0@0000	A	0@0000		g KfK	10F0FC1 14:02	10F0FC1 16:19		1	
EWyibnt Ht n	n0@0000	A	0@0000		g KfK	10F0FC1 14:02	10F0FC1 16:19		1	
g -Xyint n & p-Xyint n	n0@0400	A	0@0400		g KfK	10F0FC1 14:02	10F0FC1 16:19		1	
o-Xyint n	n0@0000	A	0@0000		g KfK	10F0FC1 14:02	10F0FC1 16:19		1	
Xyint ns, ToV	n0@0400	A	0@0400		g KfK	10F0FC1 14:02	10F0FC1 16:19		1	
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		11			5+ - 70+			7+3+37 74/+2	7+3037 75/71	7
794- ,fluorobenzene (Surr)		7+8			5+ - 70+			7+3+37 74/+2	7+3037 75/71	7

Lab Sample ID: MB 880-1000f 4-

Matri5: Solid

/ naIPsis Batch: 10yy2

Client Sample ID: Method Blank

Arep xPpe: xotal4T /

Arep Batch: 1000f

/ naIPte	MB	MB	Result	QualiUser	RL	z nit	D	Arepared	/ naIPFed	Dil Nac
	Surrogate	%Recovery								
<nt Ht n	n0@0000	A	0@0000		g KfK	10F0FC1 14:10	10F0FC1 04:18		1	
Toiunt n	n0@0000	A	0@0000		g KfK	10F0FC1 14:10	10F0FC1 04:18		1	
EWyibnt Ht n	n0@0000	A	0@0000		g KfK	10F0FC1 14:10	10F0FC1 04:18		1	
g -Xyint n & p-Xyint n	n0@0400	A	0@0400		g KfK	10F0FC1 14:10	10F0FC1 04:18		1	
o-Xyint n	n0@0000	A	0@0000		g KfK	10F0FC1 14:10	10F0FC1 04:18		1	
Xyint ns, ToV	n0@0400	A	0@0400		g KfK	10F0FC1 14:10	10F0FC1 04:18		1	
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		771			5+ - 70+			7+3+37 74/7+	7+3437 +4/7D	7
794- ,fluorobenzene (Surr)		11			5+ - 70+			7+3+37 74/7+	7+3437 +4/7D	7

Lab Sample ID: LCS 880-1000f 41-

Matri5: Solid

/ naIPsis Batch: 10yy2

Client Sample ID: Lab Control Sample

Arep xPpe: xotal4T /

Arep Batch: 1000f

/ naIPte	Spike	LCS		LCS		%Rec.		
	/ dded	Result	QualiUser	z nit	D	%Rec	Limits	
<nt Ht n	0@00	0@6299		g KfK	6R	60 - 1r 0		
Toiunt n	0@00	0@629r		g KfK	6R	60 - 1r 0		
EWyibnt Ht n	0@00	0@6989		g KfK	80	60 - 1r 0		
g -Xyint n & p-Xyint n	0@00	0@2r 6		g KfK	66	60 - 1r 0		
o-Xyint n	0@00	0@6949		g KfK	69	60 - 1r 0		
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits			
4-Bromofluorobenzene (Surr)	12		5+ - 70+					
794- ,fluorobenzene (Surr)	DD		5+ - 70+					

Lab Sample ID: LCSD 880-1000f 42-

Matri5: Solid

/ naIPsis Batch: 10yy2

Client Sample ID: Lab Control Sample Dup

Arep xPpe: xotal4T /

Arep Batch: 1000f

/ naIPte	Spike	LCSD		LCSD		%Rec.		
	/ dded	Result	QualiUser	z nit	D	%Rec	Limits	
<nt Ht n	0@00	0@6962		g KfK	80	60 - 1r 0		

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## QC Sample Results

I int WS PU APc It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C1  
PD3 : r 140C909G10

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

Lab Sample ID: LCSD 880-1000f 4/-

Client Sample ID: Lab Control Sample Dup

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10yy2

Arep Batch: 1000f

/ naIPte	Spike / dded	LCSD		z nit	D	%Rec	Limits	RAD	RAD Limit
		Result	QualiUser						
Toiunt n	0G00	0G811R	g K5K		81	60 - 1r0	6	r2	
EWyibnt Ht n	0G00	0G84R8	g K5K		82	60 - 1r0	R	r2	
g -Xyint n & p-Xyint n	0G00	0G846	g K5K		8C	60 - 1r0	6	r2	
o-Xyint n	0G00	0G84R2	g K5K		82	60 - 1r0	R	r2	

LCSD LCSD

Surrogate	%Recovery	MS		z nit	D	%Rec	Limits	RAD	RAD Limit
		Result	Qualifier						
4-Bromofluorobenzene (Surr)	7++		5+ - 70+						
794- ,fluorobenzene (Surr)	D5		5+ - 70+						

Lab Sample ID: 880-9262/-1-D MS

Client Sample ID: Matri5 Spike

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10yy2

Arep Batch: 1000f

/ naIPte	Sample Result	Sample QualiUser	Spike		MS		z nit	D	%Rec	Limits	RAD	RAD Limit
			/ dded	Result	QualiUser	Result						
<nt Ht n	n0G0C00	A z1	0G01	0GRR00	z1	g K5K		RR	60 - 1r0			
Toiunt n	n0G0C00	A	0G01	0G61R1		g K5K		61	60 - 1r0			
EWyibnt Ht n	n0G0C00	A	0G01	0G6R0r		g K5K		62	60 - 1r0			
g -Xyint n & p-Xyint n	n0G0401	A	0G0C	0G212		g K5K		62	60 - 1r0			
o-Xyint n	n0G0C00	A	0G01	0G6284		g K5K		62	60 - 1r0			

MS MS

Surrogate	%Recovery	MS		z nit	D	%Rec	Limits	RAD	RAD Limit
		Result	Qualifier						
4-Bromofluorobenzene (Surr)	11		5+ - 70+						
794- ,fluorobenzene (Surr)	10		5+ - 70+						

Lab Sample ID: 880-9262/-1-3 MSD

Client Sample ID: Matri5 Spike Duplicate

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10yy2

Arep Batch: 1000f

/ naIPte	Sample Result	Sample QualiUser	Spike		MSD		z nit	D	%Rec	Limits	RAD	RAD Limit
			/ dded	Result	QualiUser	Result						
<nt Ht n	n0G0C00	A z1	0G998	0G6r61		g K5K		64	60 - 1r0	11	r2	
Toiunt n	n0G0C00	A	0G998	0G6rR9		g K5K		64	60 - 1r0	r	r2	
EWyibnt Ht n	n0G0C00	A	0G998	0G6R0r		g K5K		6R	60 - 1r0	0	r2	
g -Xyint n & p-Xyint n	n0G0401	A	0G00	0G210		g K5K		6R	60 - 1r0	0	r2	
o-Xyint n	n0G0C00	A	0G998	0G6206		g K5K		62	60 - 1r0	1	r2	

MSD MSD

Surrogate	%Recovery	MSD		z nit	D	%Rec	Limits	RAD	RAD Limit
		Result	Qualifier						
4-Bromofluorobenzene (Surr)	7+i		5+ - 70+						
794- ,fluorobenzene (Surr)	12		5+ - 70+						

Lab Sample ID: MB 880-1001E6/-

Client Sample ID: Method Blank

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10yE0

Arep Batch: 1001E

/ naIPte	Sample Result	Sample QualiUser	MB		RL	z nit	D	Arepared	/ naIPFed	Dil Nac
			/ dded	Result						
<nt Ht n	n0G0000	A	0G0000		g K5K		10FC1FC1 14:r R	10FC4FC1 16:28		1
Toiunt n	n0G0000	A	0G0000		g K5K		10FC1FC1 14:r R	10FC4FC1 16:28		1
EWyibnt Ht n	n0G0000	A	0G0000		g K5K		10FC1FC1 14:r R	10FC4FC1 16:28		1
g -Xyint n & p-Xyint n	n0G0400	A	0G0400		g K5K		10FC1FC1 14:r R	10FC4FC1 16:28		1

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## QC Sample Results

I int WS PU APc It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C1  
PD3 : r 140C909G10

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

Lab Sample ID: MB 880-1001E4/-

Matri5: Solid

/ naIPsis Batch: 10yE0

/ naIPte	MB MB		RL	z nit	D	Arepared		/ naIPFed	Dil Nac
	Result	QualiÜer							
o-Xyint n	m0@0000	A	0@0000	g K5K		10FC1FC1 14:r R	10FC4FC1 16:28		1
Xyint ns, ToV@	m0@0400	A	0@0400	g K5K		10FC1FC1 14:r R	10FC4FC1 16:28		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	15				5+ - 70+		7+@7877 74/0i	7+@4387 75/2D	7
794-: ,fluorobenzene (Surr)		7+4			5+ - 70+		7+@7877 74/0i	7+@4387 75/2D	7

Lab Sample ID: LCS 880-1001E4/-

Matri5: Solid

/ naIPsis Batch: 10yE0

/ naIPte	Spike		LCS LCS		D	%Rec.		Limits
	Result	QualiÜer	z nit	D		%Rec		
<nt Ht n	0@00	0@080	g K5K		108	60 - 1r 0		
Toiunt n	0@00	0@1C1	g K5K		11C	60 - 1r 0		
EWyibnt Ht n	0@00	0@188	g K5K		119	60 - 1r 0		
g -Xyint n & p-Xyint n	0@00	0@64	g K5K		119	60 - 1r 0		
o-Xyint n	0@00	0@0C1	g K5K		10C	60 - 1r 0		
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits			
4-Bromofluorobenzene (Surr)	DD				5+ - 70+			
794-: ,fluorobenzene (Surr)	11				5+ - 70+			

Lab Sample ID: LCSD 880-1001E4/-

Matri5: Solid

/ naIPsis Batch: 10yE0

/ naIPte	Spike		LCSD LCSD		D	%Rec.		RAD	RAD
	Result	QualiÜer	z nit	D		%Rec	Limits		
<nt Ht n	0@00	0@8C41	g K5K						
Toiunt n	0@00	0@619R	g K5K						
EWyibnt Ht n	0@00	0@9R R	g K5K						
g -Xyint n & p-Xyint n	0@00	0@20C	g K5K						
o-Xyint n	0@00	0@110	g K5K						
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	DD				5+ - 70+				
794-: ,fluorobenzene (Surr)	11				5+ - 70+				

Lab Sample ID: 8f 0-1E6y/- -1-B MSD

Matri5: Solid

/ naIPsis Batch: 10yE0

/ naIPte	Sample		Spike		MSD MSD		D	%Rec.		RAD	RAD
	Result	QualiÜer	/ dded	Result	QualiÜer	z nit		D	%Rec	Limits	
<nt Ht n	m0@0198	A zCz1	0@99R	0@1Q 8	zCz1	g K5K		1C	60 - 1r 0	108	r 2
Toiunt n	m0@0198	A zCz1	0@99R	0@06108	zCz1	g K5K		6	60 - 1r 0	1RC	r 2
EWyibnt Ht n	m0@0198	A zCz1	0@99R	0@19C4	zCz1	g K5K		19	60 - 1r 0	112	r 2
g -Xyint n & p-Xyint n	m0@0r 96	A zCz1	0@99	0@41R1	zCz1	g K5K		00	60 - 1r 0	10R	r 2
o-Xyint n	m0@0198	A zCz1	0@99R	0@0082	zCz1	g K5K		Or	60 - 1r 0	100	r 2

Client Sample ID: Matri5 Spike Duplicate

Arep xPpe: xtal4T /

Arep Batch: 1001E

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## QC Sample Results

I int WS PU APC It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 8f 0-1E6y/-1-B MSD****Matri5: Solid****/ naIPsis Batch: 10yE0****Client Sample ID: Matri5 Spike Duplicate****Arep xPpe: xotal4T/****Arep Batch: 1001E**

Surrogate	MSD	MSD
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	D+	5+ - 70+
794-: ,fluorobenzene (Surr)	78+	5+ - 70+

**Lab Sample ID: 8f 0-1E6y/-1-D MS****Matri5: Solid****/ naIPsis Batch: 10yE0****Client Sample ID: Matri5 Spike****Arep xPpe: xotal4T/****Arep Batch: 1001E**

/ naIPte	Sample	Sample	Spike	MS	MS	%Rec.			
	Result	QualiUer	/ dded	Result	QualiUer	z nit	D	%Rec	Limits
<nt Ht n	m0@0198	A zCz1	0@990	0@22r8	z1	g KfK	22	60 - 1r0	
Toiunt n	m0@0198	A zCz1	0@990	0@R6C4	z1	g KfK	R8	60 - 1r0	
EWyibnt Ht n	m0@0198	A zCz1	0@990	0@6114		g KfK	6C	60 - 1r0	
g -Xyint n & p-Xyint n	m0@0r96	A zCz1	0@98	0@r22	z1	g KfK	R8	60 - 1r0	
o-Xyint n	m0@0198	A zCz1	0@990	0@R892	z1	g KfK	R9	60 - 1r0	

Surrogate	MSD	MSD
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	7+5	5+ - 70+
794-: ,fluorobenzene (Surr)	15	5+ - 70+

**Lab Sample ID: MB 880-100164/-****Matri5: Solid****/ naIPsis Batch: 10201****Client Sample ID: Method Blank****Arep xPpe: xotal4T/****Arep Batch: 10016**

/ naIPte	MB	MB	RL	z nit	D	Arepared	/ naIPFed	Dil Nac
	Result	QualiUer						
<nt Ht n	m0@0000	A	0@0000	g KfK	10F0FC1 14:r 9	10F0FC1 02:4R		1
Toiunt n	m0@0000	A	0@0000	g KfK	10F0FC1 14:r 9	10F0FC1 02:4R		1
EWyibnt Ht n	m0@0000	A	0@0000	g KfK	10F0FC1 14:r 9	10F0FC1 02:4R		1
g -Xyint n & p-Xyint n	m0@0400	A	0@0400	g KfK	10F0FC1 14:r 9	10F0FC1 02:4R		1
o-Xyint n	m0@0000	A	0@0000	g KfK	10F0FC1 14:r 9	10F0FC1 02:4R		1
Xyint ns, ToW	m0@0400	A	0@0400	g KfK	10F0FC1 14:r 9	10F0FC1 02:4R		1

Surrogate	MB	MB
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	1D	5+ - 70+
794-: ,fluorobenzene (Surr)	7+i	5+ - 70+

**Lab Sample ID: LCS 880-100164/-****Matri5: Solid****/ naIPsis Batch: 10201****Client Sample ID: Lab Control Sample****Arep xPpe: xotal4T/****Arep Batch: 10016**

/ naIPte	Spike	LCs	LCs	%Rec.			
	/ dded	Result	QualiUer	z nit	D	%Rec	
<nt Ht n	0@00	0@0R1		g KfK	10R	60 - 1r0	
Toiunt n	0@00	0@121		g KfK	112	60 - 1r0	
EWyibnt Ht n	0@00	0@196		g KfK	100	60 - 1r0	
g -Xyint n & p-Xyint n	0@00	0@09R		g KfK	112	60 - 1r0	
o-Xyint n	0@00	0@168		g KfK	118	60 - 1r0	

Surrogate	LCS	LCS
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	DD	5+ - 70+

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## QC Sample Results

I int WS PU APc It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: LCS 880-100164/-****Matri5: Solid****/ naIPsiS Batch: 10201**

Surrogate	LCS	LCS
	%Recovery	Qualifier
794- ,fluorobenzene (Surr)	15	5+ - 70+

**Lab Sample ID: LCSD 880-100164/-****Matri5: Solid****/ naIPte Batch: 10201**

/ naIPte	Spike	LCSD	LCSD	%Rec.			RAD
	/ dded	Result	QualiUser	z nit	D	Limit	
<nt Ht n	0G00	0G061	g KfK	106	60 - 1r0	1	r2
Toiunt n	0G00	0G1CR	g KfK	11r	60 - 1r0	C	r2
EWyibnt Ht n	0G00	0G186	g KfK	119	60 - 1r0	1	r2
g -Xyint n & p-Xyint n	0G00	0G0R0R	g KfK	112	60 - 1r0	0	r2
o-Xyint n	0G00	0G00r	g KfK	100	60 - 1r0	C	r2

Surrogate	LCSD	LCSD
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	1+	5+ - 70+
794- ,fluorobenzene (Surr)	11	5+ - 70+

**Lab Sample ID: 8f 0-1EEf / -1-/- MS****Matri5: Solid****/ naIPsiS Batch: 10201**

/ naIPte	Sample	Sample	Spike	MS	MS	%Rec.		
	Result	QualiUser	/ dded	Result	QualiUser	z nit	D	Limit
<nt Ht n	n0G0199	A	0G01	0G0R6	g KfK	102	60 - 1r0	
Toiunt n	n0G0199	A	0G01	0G084	g KfK	106	60 - 1r0	
EWyibnt Ht n	n0G0199	A	0G01	0G12r	g KfK	114	60 - 1r0	
g -Xyint n & p-Xyint n	n0G0r98	A	0G0C	0G01r	g KfK	110	60 - 1r0	
o-Xyint n	n0G0199	A zCz1	0G01	0G186	g KfK	116	60 - 1r0	

Surrogate	MS	MS
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	1i	5+ - 70+
794- ,fluorobenzene (Surr)	7+8	5+ - 70+

**Lab Sample ID: 8f 0-1EEf / -1-B MSD****Matri5: Solid****/ naIPsiS Batch: 10201**

/ naIPte	Sample	Sample	Spike	MSD	MSD	%Rec.			RAD	
	Result	QualiUser	/ dded	Result	QualiUser	z nit	D	%Rec	Limit	
<nt Ht n	n0G0199	A	0G990	0G012	g KfK	10C	60 - 1r0	2	r2	
Toiunt n	n0G0199	A	0G990	0G0Or	g KfK	10r	60 - 1r0	R	r2	
EWyibnt Ht n	n0G0199	A	0G990	0G029	g KfK	106	60 - 1r0	9	r2	
g -Xyint n & p-Xyint n	n0G0r98	A	0G98	0G04r	g KfK	10r	60 - 1r0	8	r2	
o-Xyint n	n0G0199	A zCz1	0G990	0G2R08	zCz1	g KfK	2R	60 - 1r0	6C	r2

Surrogate	MSD	MSD
	%Recovery	Qualifier
4-Bromofluorobenzene (Surr)	10	5+ - 70+
794- ,fluorobenzene (Surr)	11	5+ - 70+

**Client Sample ID: Lab Control Sample****AreP xPpe: xotal4T/****AreP Batch: 10016****Client Sample ID: Matri5 Spike****AreP xPpe: xotal4T/****AreP Batch: 10016****Client Sample ID: Matri5 Spike Duplicate****AreP xPpe: xotal4T/****AreP Batch: 10016**

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## QC Sample Results

I lot WS PU APc It . G  
Uo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

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

Lab Sample ID: MB 880-fff 646-

Matri5: Solid

/ naIPsis Batch: 10201

Client Sample ID: Method Blank

Arep xPpe: xtotal4T /

Arep Batch: fff 6

/ naIPte	MB MB		RL	z nit	D	Arepared		/ naIPFed	Dil Nac
	Result	QualiUer							
<nt Ht n	n0@0000	A	0@0000	g KfK	10F00C1 1r:44	10F00C1 18:1C		1	
Toiunt n	n0@0000	A	0@0000	g KfK	10F00C1 1r:44	10F00C1 18:1C		1	
EWyibnt Ht n	n0@0000	A	0@0000	g KfK	10F00C1 1r:44	10F00C1 18:1C		1	
g -Xyint n & p-Xyint n	n0@0400	A	0@0400	g KfK	10F00C1 1r:44	10F00C1 18:1C		1	
o-Xyint n	n0@0000	A	0@0000	g KfK	10F00C1 1r:44	10F00C1 18:1C		1	
Xyint ns, ToM	n0@0400	A	0@0400	g KfK	10F00C1 1r:44	10F00C1 18:1C		1	
Surrogate	MB MB		Limits		D	Prepared		Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	7+7		5+ - 70+			7+38+37 70/44		7+30387 7D78	7
794- ,fluorobenzene (Surr)	7+5		5+ - 70+			7+38+37 70/44		7+30387 7D78	7

## Method: 8016B TM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-10y9E41-

Matri5: Solid

/ naIPsis Batch: 10y, 1

Client Sample ID: Method Blank

Arep xPpe: xtotal4T /

Arep Batch: 10y9E

/ naIPte	MB MB		RL	z nit	D	Arepared		/ naIPFed	Dil Nac
	Result	QualiUer							
3 asoié n ) at Kn 7 jKat es v8 ) 7 f-l Rl 10	n20@	A	20@	g KfK	10F2FC1 10:09	10F2FC1 1C:0		1	
Densni ) at Kn 7 jKat es v7 dnj l 10-l C8f	n20@	A	20@	g KfK	10F2FC1 10:09	10F2FC1 1C:0		1	
7 li ) at Kn 7 jKat es v7 dnj l C8-l rRf	n20@	A	20@	g KfK	10F2FC1 10:09	10F2FC1 1C:0		1	
Surrogate	MB MB		Limits		D	Prepared		Analyzed	Dil Fac
	%Recovery	Qualifier							
7-Chlorooctane	770		5+ - 70+			7+32387 7+/+1		7+32387 78/80	7
o-Terphenyl	785		5+ - 70+			7+32387 7+/+1		7+32387 78/80	7

Lab Sample ID: LCS 880-10y9E42-

Matri5: Solid

/ naIPsis Batch: 10y, 1

Client Sample ID: Lab Control Sample

Arep xPpe: xtotal4T /

Arep Batch: 10y9E

/ naIPte	Spike		LCS	LCS	z nit	D	%Rec.	
	/ dded	Result	QualiUer	%Rec	Limits			
3 asoié n ) at Kn 7 jKat es v8 ) 7 f-l Rl 10	1000	8RR4	g KfK	86	60 - 1r 0			
Densni ) at Kn 7 jKat es v7 dnj l 10-l C8f	1000	100R	g KfK	101	60 - 1r 0			
LCS LCS								
Surrogate	%Recovery		Limits					
	7-Chlorooctane	7+7						
o-Terphenyl	7+8		5+ - 70+					

Lab Sample ID: LCSD 880-10y9E44-

Matri5: Solid

/ naIPsis Batch: 10y, 1

Client Sample ID: Lab Control Sample Dup

Arep xPpe: xtotal4T /

Arep Batch: 10y9E

/ naIPte	Spike		LCSD	LCSD	z nit	D	%Rec.	
	/ dded	Result	QualiUer	%Rec	Limits			
3 asoié n ) at Kn 7 jKat es v8 ) 7 f-l Rl 10	1000	8r8@	g KfK	84	60 - 1r 0			

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## QC Sample Results

I lot WS PU APC It . G  
Uo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

## Method: 8016B TM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-10y9E4/-

Client Sample ID: Lab Control Sample Dup

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10y, 1

Arep Batch: 10y9E

/ naIPte	Spike / dded	LCSD Result	LCSD QualiUser	z nit g KFK	D	%Rec. 11r	%Rec.	RAD Limits	RAD 11	RAD Limit CO
Densni ) at Kn 7jKat es v7 dnj I 10-l C8f	1000	11CR								

Surrogate	LCSD %Recovery	LCSD Qualifier	MSD Limits
7-Chlorooctane	7+1		5+ - 70+
o-Terphenyl	770		5+ - 70+

Lab Sample ID: 8f 0-1E91/- -1-C MS

Client Sample ID: Matri5 Spike

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10y, 1

Arep Batch: 10y9E

/ naIPte	Sample Result	Sample QualiUser	Spike / dded	MSD Result	MSD QualiUser	z nit g KFK	D	%Rec.	%Rec.	Limits
Densni ) at Kn 7jKat es v8 ) 7f-l RI 10	m49G	A	996	9RrG				96	60 - 1r0	
Densni ) at Kn 7jKat es v7 dnj I 10-l C8f	m49G	A	996	9r rG		g KFK		91	60 - 1r0	

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
7-Chlorooctane	77+		5+ - 70+
o-Terphenyl	7+i		5+ - 70+

Lab Sample ID: 8f 0-1E91/- -1-D MSD

Client Sample ID: Matri5 Spike Duplicate

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10y, 1

Arep Batch: 10y9E

/ naIPte	Sample Result	Sample QualiUser	Spike / dded	MSD Result	MSD QualiUser	z nit g KFK	D	%Rec.	%Rec.	RAD	RAD	Limit
Densni ) at Kn 7jKat es v8 ) 7f-l RI 10	m49G	A	1000	1019				10C	60 - 1r0	R	R	CO
Densni ) at Kn 7jKat es v7 dnj I 10-l C8f	m49G	A	1000	964G		g KFK		94	60 - 1r0	4	4	CO

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
7-Chlorooctane	778		5+ - 70+
o-Terphenyl	7+D		5+ - 70+

Lab Sample ID: MB 880-109624/-

Client Sample ID: Method Blank

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10, , 1

Arep Batch: 10962

/ naIPte	MB Result	MB QualiUser	RL	z nit g KFK	D	Arepared 10F06FC1 1r:40	/ naIPFed 10F06FC1 19:08	Dil Nac
Densni ) at Kn 7jKat es v8 ) 7f-l RI 10	m20G	A	20G	g KFK				1
Densni ) at Kn 7jKat es v7 dnj I 10-l C8f	m20G	A	20G	g KFK		10F06FC1 1r:40	10F06FC1 19:08	1
7li ) at Kn 7jKat es v7 dnj I C8-l rR	m20G	A	20G	g KFK		10F06FC1 1r:40	10F06FC1 19:08	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared 7+35387 70/4+	Analyzed 7+35387 71/8D	Dil Fac 7
7-Chlorooctane	784		5+ - 70+			
o-Terphenyl	740	S76	5+ - 70+	7+35387 70/4+	7+35387 71/8D	7

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## QC Sample Results

I int WS PU APc It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

**Method: 8016B TM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: LCS 880-109624/-****Matri5: Solid****/ naIPsis Batch: 10, , 1**

/ naIPte	Spike / dded	LCS		QualiÜer	z nit	D	%Rec.	Limits
		Result	LCS					
3 asoie n ) at Kn 7 jKat es v3 ) 7 f-l R-l 10 Densni ) at Kn 7 jKat es v7 dnj I 10-I C8f	1000	906G		g KFK		9r	60 - 1r 0	
	1000	900G		g KFK		9C	60 - 1r 0	

Surrogate	%Recovery	LCS	LCS
7-Chlorooctane	D5	5+ - 70+	
o-Terphenyl	14	5+ - 70+	

**Lab Sample ID: LCSD 880-109624/-****Matri5: Solid****/ naIPsis Batch: 10, , 1**

/ naIPte	Spike / dded	LCSD		QualiÜer	z nit	D	%Rec.	Limits	RAD	RAD
		Result	LCSD							
3 asoie n ) at Kn 7 jKat es v3 ) 7 f-l R-l 10 Densni ) at Kn 7 jKat es v7 dnj I 10-I C8f	1000	1112		g KFK		111	60 - 1r 0		18	CO
	1000	660G		g KFK		66	60 - 1r 0		18	CO

Surrogate	%Recovery	LCSD	LCSD
7-Chlorooctane	D5	5+ - 70+	
o-Terphenyl	18	5+ - 70+	

**Lab Sample ID: 8f 0-1E60/-1-3 MS****Matri5: Solid****/ naIPsis Batch: 10, , 1**

/ naIPte	Sample Result	Sample QualiÜer	Spike / dded	MS		MS	QualiÜer	z nit	D	%Rec.	Limits
				Result	MS						
3 asoie n ) at Kn 7 jKat es v3 ) 7 f-l R-l 10 Densni ) at Kn 7 jKat es v7 dnj I 10-I C8f	m49G	A	996	119C		g KFK		g KFK		100	60 - 1r 0
	R2G		996	1092		g KFK		g KFK		10r	60 - 1r 0

Surrogate	%Recovery	MS	MS
7-Chlorooctane	777	5+ - 70+	
o-Terphenyl	770	5+ - 70+	

**Lab Sample ID: 8f 0-1E60/-1-N MSD****Matri5: Solid****/ naIPsis Batch: 10, , 1**

/ naIPte	Sample Result	Sample QualiÜer	Spike / dded	MSD		MSD	QualiÜer	z nit	D	%Rec.	Limits	RAD
				Result	MSD							
3 asoie n ) at Kn 7 jKat es v3 ) 7 f-l R-l 10 Densni ) at Kn 7 jKat es v7 dnj I 10-I C8f	m49G	A	1000	1001		g KFK		g KFK		100	60 - 1r 0	C
	R2G		1000	10r r		g KFK		g KFK		116	60 - 1r 0	1C

Surrogate	%Recovery	MSD	MSD
7-Chlorooctane	785	5+ - 70+	

**Client Sample ID: Lab Control Sample****ArepxPpe: xotal4T/****Arep Batch: 10962****Client Sample ID: Lab Control Sample Dup****ArepxPpe: xotal4T/****Arep Batch: 10962****Client Sample ID: Matri5 Spike****ArepxPpe: xotal4T/****Arep Batch: 10962****Client Sample ID: Matri5 Spike Duplicate****ArepxPpe: xotal4T/****Arep Batch: 10962**

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## QC Sample Results

I iot WS PU APc It . G  
Ujo/n. WPN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

**Method: 8016B TM - Diesel Range Organics (DRO) (GC) (Continued)**

Lab Sample ID: 8f 0-1E60/-1-N MSD

Client Sample ID: Matri5 Spike Duplicate

Matri5: Solid

Arep xPpe: xotal4T/

/ naIPsis Batch: 10, , 1

Arep Batch: 10962

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
o-Terphenyl			781		5+ - 70+

**Method: y00.0 - / nions7Ion ChromatographP**

Lab Sample ID: MB 880-10y014/-

Client Sample ID: Method Blank

Matri5: Solid

Arep xPpe: Soluble

/ naIPsis Batch: 10, 21

/ naIPte	MB	MB	Result	QualiÜer	RL	z nit	D	Arepared	/ naIPFed	Dil Nac
I hioj€n			n2@0	A	2@0	g Kf5K			10FC2FC1 C1:11	1

Lab Sample ID: LCS 880-10y014/-

Client Sample ID: Lab Control Sample

Matri5: Solid

Arep xPpe: Soluble

/ naIPsis Batch: 10, 21

/ naIPte	Spike	LCS	LCS	Result	QualiÜer	z nit	D	%Rec.	Limts
I hioj€n	/ dded	C20	C29@	C29@	C	g Kf5K	104	90 - 110	

Lab Sample ID: LCSD 880-10y014/-

Client Sample ID: Lab Control Sample Dup

Matri5: Solid

Arep xPpe: Soluble

/ naIPsis Batch: 10, 21

/ naIPte	Spike	LCSD	LCSD	Result	QualiÜer	z nit	D	%Rec.	RAD	Limit
I hioj€n	/ dded	C20	C2R@	C2R@	C	g Kf5K	10r	90 - 110	1	co

Lab Sample ID: 880-9yEy/-21-B MS

Client Sample ID: Matri5 Spike

Matri5: Solid

Arep xPpe: Soluble

/ naIPsis Batch: 10, 21

/ naIPte	Sample	Sample	Spike	MS	MS	z nit	D	%Rec.	Limts
	Result	QualiÜer	/ dded	Result	QualiÜer	g Kf5K			
I hioj€n			C480	10100		g Kf5K		101	90 - 110

Lab Sample ID: 880-9yEy/-21-C MSD

Client Sample ID: Matri5 Spike Duplicate

Matri5: Solid

Arep xPpe: Soluble

/ naIPsis Batch: 10, 21

/ naIPte	Sample	Sample	Spike	MSD	MSD	z nit	D	%Rec.	RAD	Limit
	Result	QualiÜer	/ dded	Result	QualiÜer	g Kf5K				
I hioj€n			C480	10080		g Kf5K		100	90 - 110	0

Lab Sample ID: 8f 0-1E61/-2-C MS

Client Sample ID: Matri5 Spike

Matri5: Solid

Arep xPpe: Soluble

/ naIPsis Batch: 10, 21

/ naIPte	Sample	Sample	Spike	MS	MS	z nit	D	%Rec.	Limts
	Result	QualiÜer	/ dded	Result	QualiÜer	g Kf5K			
I hioj€n			1RC	10R0		g Kf5K		106	90 - 110

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**QC Sample Results**

I int WS PU APc It . G  
Ujo/n. WPeN: znhznn 011B

Job ID: 890-142C-1  
PD3 : r 140C909G10

**Method: y00.0 - / nions7Ion ChromatographP (Continued)**

Lab Sample ID: 8f 0-1E61-/ -2-D MSD

Client Sample ID: Matri5 Spike Duplicate  
Arep xPpe: Soluble

Matri5: Solid

/ naIPsiS Batch: 10, 21

/ naIPte	Sample	Sample	Spike	MSD	MSD	z nit	D	%Rec.	Limits	RAD	RAD
	Result	QualiUser	/ dded	Result	QualiUser						
I hioj€n	r RC		10R0	1R91							

## QC Association Summary

I iet WS PU APc It . G  
Ujo/n. WPN: znhznn 011d

Job ID: 890-142C-1  
PD3 : r 140C909G10

### GC VOA

#### Prep Batch: 9995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-9992f2-c	MnW65 Biht a	koWIFTc	Poi&	20r 2	

#### Prep Batch: 10007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1000N2-c	MnW65 Biht a	koWIFTc	Poi&	20r 2	

#### Prep Batch: 10009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-10009f2-c	MnW65 Biht a	koWIFTc	Poi&	20r 2	
7I P 880-10009f1-c	7hb l ot W6i PhL min	koWIFTc	Poi&	20r 2	
7I PD 880-10009fC-c	7hb l ot W6i PhL min Dpm	koWIFTc	Poi&	20r 2	
880-NC2C-c-1-D MP	MhW6i Pm&n	koWIFTc	Poi&	20r 2	
880-NC2C-c-1-x MPD	MhW6i Pm&n Dpmie hW	koWIFTc	Poi&	20r 2	

#### Prep Batch: 10014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	koWIFTc	Poi&	20r 2	
890-142C-C	zP0C	koWIFTc	Poi&	20r 2	
890-142C-r	zP0r	koWIFTc	Poi&	20r 2	
890-142C-4	zP04	koWIFTc	Poi&	20r 2	
MB 880-10014f2-c	MnW65 Biht a	koWIFTc	Poi&	20r 2	
7I P 880-10014f1-c	7hb l ot W6i PhL min	koWIFTc	Poi&	20r 2	
7I PD 880-10014fC-c	7hb l ot W6i PhL min Dpm	koWIFTc	Poi&	20r 2	
890-142r-c-1-B MPD	MhW6i Pm&n Dpmie hW	koWIFTc	Poi&	20r 2	
890-142r-c-1-D MP	MhW6i Pm&n	koWIFTc	Poi&	20r 2	

#### Prep Batch: 10015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-N	PS 0r	koWIFTc	Poi&	20r 2	
890-142C-8	PS 04	koWIFTc	Poi&	20r 2	
MB 880-10012f2-c	MnW65 Biht a	koWIFTc	Poi&	20r 2	
7I P 880-10012f1-c	7hb l ot W6i PhL min	koWIFTc	Poi&	20r 2	
7I PD 880-10012fC-c	7hb l ot W6i PhL min Dpm	koWIFTc	Poi&	20r 2	
890-1449-c-1-c MP	MhW6i Pm&n	koWIFTc	Poi&	20r 2	
890-1449-c-1-B MPD	MhW6i Pm&n Dpmie hW	koWIFTc	Poi&	20r 2	

#### Prep Batch: 10199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-2	PS 01	koWIFTc	Poi&	20r 2	
890-142C-E	PS 0C	koWIFTc	Poi&	20r 2	

#### Analysis Batch: 10201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142CN	PS 0r	koWIFTc	Poi&	80C1B	10012
890-142C-8	PS 04	koWIFTc	Poi&	80C1B	10012
MB 880-10012f2-c	MnW65 Biht a	koWIFTc	Poi&	80C1B	10012
MB 880-9992f2-c	MnW65 Biht a	koWIFTc	Poi&	80C1B	9992
7I P 880-10012f1-c	7hb l ot W6i PhL min	koWIFTc	Poi&	80C1B	10012
7I PD 880-10012fC-c	7hb l ot W6i PhL min Dpm	koWIFTc	Poi&	80C1B	10012
890-1449-c-1-c MP	MhW6i Pm&n	koWIFTc	Poi&	80C1B	10012
890-1449-c-1-B MPD	MhW6i Pm&n Dpmie hW	koWIFTc	Poi&	80C1B	10012

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**QC Association Summary**

I int WS PU APc It . G  
Ujo/n. WPN: znhznn 011d

Job ID: 890-142C-1  
PD3 : r 140C909G10

**GC VOA****Analysis Batch: 10332**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-2	PS 01	koMFTc	Poi $\delta$	80C1B	10199
890-142C-E	PS 0C	koMFTc	Poi $\delta$	80C1B	10199
MB 880-1000N2-c	Mn $\delta$ 05 Biht a	koMFTc	Poi $\delta$	80C1B	1000N
MB 880-1000N2-c	Mn $\delta$ 05 Biht a	koMFTc	Poi $\delta$	80C1B	10009
71 P 880-1000N2-c	7hb l ot $\delta$ bi PhL min	koMFTc	Poi $\delta$	80C1B	10009
71 PD 880-1000N2-c	7hb l ot $\delta$ bi PhL min Dpm	koMFTc	Poi $\delta$	80C1B	10009
880-NC2C-c-1-D MP	Mh $\delta$ l Pran	koMFTc	Poi $\delta$	80C1B	10009
880-NC2C-c-1-x MPD	Mh $\delta$ l Pran Dpmie hW	koMFTc	Poi $\delta$	80C1B	10009

**Analysis Batch: 10340**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	koMFTc	Poi $\delta$	80C1B	10014
890-142C-C	zP0C	koMFTc	Poi $\delta$	80C1B	10014
890-142C-r	zP0r	koMFTc	Poi $\delta$	80C1B	10014
890-142C-4	zP04	koMFTc	Poi $\delta$	80C1B	10014
MB 880-10014N2-c	Mn $\delta$ 05 Biht a	koMFTc	Poi $\delta$	80C1B	10014
71 P 880-10014N2-c	7hb l ot $\delta$ bi PhL min	koMFTc	Poi $\delta$	80C1B	10014
71 PD 880-10014N2-c	7hb l ot $\delta$ bi PhL min Dpm	koMFTc	Poi $\delta$	80C1B	10014
890-142r-c-1-B MPD	Mh $\delta$ l Pran Dpmie hW	koMFTc	Poi $\delta$	80C1B	10014
890-142r-c-1-D MP	Mh $\delta$ l Pran	koMFTc	Poi $\delta$	80C1B	10014

**Analysis Batch: 10619**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-C	zP0C	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-r	zP0r	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-4	zP04	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-2	PS 01	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-E	PS 0C	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-N	PS 0r	koMFTc	Poi $\delta$	koW Bkxs	
890-142C-8	PS 04	koMFTc	Poi $\delta$	koW Bkxs	

**GC Semi VOA****Analysis Batch: 10361**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	koMFTc	Poi $\delta$	8012B TM	10r N4
MB 880-10r N4F-c	Mn $\delta$ 05 Biht a	koMFTc	Poi $\delta$	8012B TM	10r N4
71 P 880-10r N4F-c	7hb l ot $\delta$ bi PhL min	koMFTc	Poi $\delta$	8012B TM	10r N4
71 PD 880-10r N4F-c	7hb l ot $\delta$ bi PhL min Dpm	koMFTc	Poi $\delta$	8012B TM	10r N4
890-14N1-c-1-l MP	Mh $\delta$ l Pran	koMFTc	Poi $\delta$	8012B TM	10r N4
890-14N1-c-1-D MPD	Mh $\delta$ l Pran Dpmie hW	koMFTc	Poi $\delta$	8012B TM	10r N4

**Prep Batch: 10374**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	koMFTc	Poi $\delta$	8012TM Ujnm	
MB 880-10r N4F-c	Mn $\delta$ 05 Biht a	koMFTc	Poi $\delta$	8012TM Ujnm	
71 P 880-10r N4F-c	7hb l ot $\delta$ bi PhL min	koMFTc	Poi $\delta$	8012TM Ujnm	
71 PD 880-10r N4F-c	7hb l ot $\delta$ bi PhL min Dpm	koMFTc	Poi $\delta$	8012TM Ujnm	
890-14N1-c-1-l MP	Mh $\delta$ l Pran	koMFTc	Poi $\delta$	8012TM Ujnm	
890-14N1-c-1-D MPD	Mh $\delta$ l Pran Dpmie hW	koMFTc	Poi $\delta$	8012TM Ujnm	

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**QC Association Summary**

I iet WS PU APc It . G  
Ujo/n. WPN: znhznn 011d

Job ID: 890-142C-1  
PD3 : r 140C909G10

**GC Semi VOA****Analysis Batch: 10533**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	koWfFc	Poi $\sigma$	8012 TM	

**Analysis Batch: 10661**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-C	zP0C	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-142C-r	zP0r	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-142C-4	zP04	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-142C-2	PS 01	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-142C-E	PS 0C	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-142C-N	PS 0r	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-142C-8	PS 04	koWfFc	Poi $\sigma$	8012B TM	10N2C
MB 880-10N2CPI-c	Mn $\sigma$ 05 Biht a	koWfFc	Poi $\sigma$	8012B TM	10N2C
71 P 880-10N2CFC-c	7hb l ot yoi PhL min	koWfFc	Poi $\sigma$	8012B TM	10N2C
71 PD 880-10N2CFF-c	7hb l ot yoi PhL min Dpm	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-1420-c-1-x MP	Mh $\sigma$ u Pran	koWfFc	Poi $\sigma$	8012B TM	10N2C
890-1420-c-1-z MPD	Mh $\sigma$ u Pran Dpmie hW	koWfFc	Poi $\sigma$	8012B TM	10N2C

**Analysis Batch: 10676**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-C	zP0C	koWfFc	Poi $\sigma$	8012 TM	
890-142C-r	zP0r	koWfFc	Poi $\sigma$	8012 TM	
890-142C-4	zP04	koWfFc	Poi $\sigma$	8012 TM	
890-142C-2	PS 01	koWfFc	Poi $\sigma$	8012 TM	
890-142C-E	PS 0C	koWfFc	Poi $\sigma$	8012 TM	
890-142C-N	PS 0r	koWfFc	Poi $\sigma$	8012 TM	
890-142C-8	PS 04	koWfFc	Poi $\sigma$	8012 TM	

**Prep Batch: 10752**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-C	zP0C	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-142C-r	zP0r	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-142C-4	zP04	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-142C-2	PS 01	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-142C-E	PS 0C	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-142C-N	PS 0r	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-142C-8	PS 04	koWfFc	Poi $\sigma$	8012TM Ujnm	
MB 880-10N2CPI-c	Mn $\sigma$ 05 Biht a	koWfFc	Poi $\sigma$	8012TM Ujnm	
71 P 880-10N2CFC-c	7hb l ot yoi PhL min	koWfFc	Poi $\sigma$	8012TM Ujnm	
71 PD 880-10N2CFF-c	7hb l ot yoi PhL min Dpm	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-1420-c-1-x MP	Mh $\sigma$ u Pran	koWfFc	Poi $\sigma$	8012TM Ujnm	
890-1420-c-1-z MPD	Mh $\sigma$ u Pran Dpmie hW	koWfFc	Poi $\sigma$	8012TM Ujnm	

**HPLC/IC****Leach Batch: 10301**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	Poipbin	Poi $\sigma$	DI 7nh. 6	
890-142C-C	zP0C	Poipbin	Poi $\sigma$	DI 7nh. 6	
890-142C-r	zP0r	Poipbin	Poi $\sigma$	DI 7nh. 6	
890-142C-4	zP04	Poipbin	Poi $\sigma$	DI 7nh. 6	
890-142C-2	PS 01	Poipbin	Poi $\sigma$	DI 7nh. 6	

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**QC Association Summary**

I iet WS PU APc It . G  
Ujo/n. WPN: znhznn 011d

Job ID: 890-142C-1  
PD3 : r 140C909G10

**HPLC/IC (Continued)****Leach Batch: 10301 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-E	PS 0C	Poipbin	Poi <del>5</del>	DI 7nh. 6	
890-142C-N	PS 0r	Poipbin	Poi <del>5</del>	DI 7nh. 6	
890-142C-8	PS 04	Poipbin	Poi <del>5</del>	DI 7nh. 6	
MB 880-10r 01F-c	Mn <del>605</del> Biht a	Poipbin	Poi <del>5</del>	DI 7nh. 6	
71 P 880-10r 01F-c	7hb l ot <del>W</del> i PhL min	Poipbin	Poi <del>5</del>	DI 7nh. 6	
71 PD 880-10r 01F-c	7hb l ot <del>W</del> i PhL min Dpm	Poipbin	Poi <del>5</del>	DI 7nh. 6	
880-Nr 4r -c-C1-B MP	Mh <del>W</del> l Pran	Poipbin	Poi <del>5</del>	DI 7nh. 6	
880-Nr 4r -c-C1-I MPD	Mh <del>W</del> l Pran Dpmie hW	Poipbin	Poi <del>5</del>	DI 7nh. 6	
890-1421-c-C1 MP	Mh <del>W</del> l Pran	Poipbin	Poi <del>5</del>	DI 7nh. 6	
890-1421-c-C1 MPD	Mh <del>W</del> l Pran Dpmie hW	Poipbin	Poi <del>5</del>	DI 7nh. 6	

**Analysis Batch: 10621**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-142C-1	zP01	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-C	zP0C	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-r	zP0r	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-4	zP04	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-2	PS 01	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-E	PS 0C	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-N	PS 0r	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-142C-8	PS 04	Poipbin	Poi <del>5</del>	r 00@	10r 01
MB 880-10r 01F-c	Mn <del>605</del> Biht a	Poipbin	Poi <del>5</del>	r 00@	10r 01
71 P 880-10r 01F-c	7hb l ot <del>W</del> i PhL min	Poipbin	Poi <del>5</del>	r 00@	10r 01
71 PD 880-10r 01F-c	7hb l ot <del>W</del> i PhL min Dpm	Poipbin	Poi <del>5</del>	r 00@	10r 01
880-Nr 4r -c-C1-B MP	Mh <del>W</del> l Pran	Poipbin	Poi <del>5</del>	r 00@	10r 01
880-Nr 4r -c-C1-I MPD	Mh <del>W</del> l Pran Dpmie hW	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-1421-c-C1 MP	Mh <del>W</del> l Pran	Poipbin	Poi <del>5</del>	r 00@	10r 01
890-1421-c-C1 MPD	Mh <del>W</del> l Pran Dpmie hW	Poipbin	Poi <del>5</del>	r 00@	10r 01

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**Lab Chronicle**

Client: WSP USA Inc.  
Project Site: zeHzee 011G

Job ID: 890-142r -1  
SD3 : p140r 909.110

**Client Sample ID: FS01**

Date Collected: 10/18/21 14:10

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-1**

Matrix: Solid

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number	or Analyzed		
7otTIRMA	Pje5	20p2			2.0r a	2 g L	10014	10F 1F 1 14:pX	KL
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10p40	10F 2F 1 01:r 1	6 B
7otTIRMA	AnTlniyi	7otTi s 7NE		1			10X19	10F XF 1 12:1r	KL
7otTIRMA	AnTlniyi	8012 M6		1			102pp	10F 2F 1 19:r p	AJ
7otTIRMA	Pje5	8012M6 Pje5			10.0r a	10 g L	10pR4	10F 2F 1 10:09	AJ
7otTIRMA	AnTlniyi	8012s M6		1			10pX1	10F 2F 1 14:r 8	AJ
Soluble	LeTch	DI LeTch			2 a	20 g L	10p01	10F r F 1 1R4X	SC
Soluble	AnTlniyi	p00.0		2			10Xr 1	10F 2F 1 r p:12	CG

**Client Sample ID: FS02**

Date Collected: 10/18/21 14:12

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-2**

Matrix: Solid

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number	or Analyzed		
7otTIRMA	Pje5	20p2			2.0r a	2 g L	10014	10F 1F 1 14:pX	KL
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10p40	10F 2F 1 01:4r	6 B
7otTIRMA	AnTlniyi	7otTi s 7NE		1			10X19	10F XF 1 12:1r	KL
7otTIRMA	AnTlniyi	8012 M6		1			10XRX	10F RF 1 11:09	AJ
7otTIRMA	Pje5	8012M6 Pje5			10.0p a	10 g L	10R2r	10F RF 1 1p:40	D6
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10F 8F 1 00:21	AJ
Soluble	LeTch	DI LeTch			2 a	20 g L	10p01	10F r F 1 1R4X	SC
Soluble	AnTlniyi	p00.0		10			10Xr 1	10F 2F 1 r p:pp	CG

**Client Sample ID: FS03**

Date Collected: 10/18/21 14:15

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-3**

Matrix: Solid

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number	or Analyzed		
7otTIRMA	Pje5	20p2			4.9X a	2 g L	10014	10F 1F 1 14:pX	KL
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10p40	10F 2F 1 0r :0r	6 B
7otTIRMA	AnTlniyi	7otTi s 7NE		1			10X19	10F XF 1 12:1r	KL
7otTIRMA	AnTlniyi	8012 M6		1			10XRX	10F RF 1 11:09	AJ
7otTIRMA	Pje5	8012M6 Pje5			10.0p a	10 g L	10R2r	10F RF 1 1p:40	D6
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10F 8F 1 01:11	AJ
Soluble	LeTch	DI LeTch			2.0r a	20 g L	10p01	10F r F 1 1R4X	SC
Soluble	AnTlniyi	p00.0		10			10Xr 1	10F 2F 1 r p:p8	CG

**Client Sample ID: FS04**

Date Collected: 10/18/21 16:05

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-4**

Matrix: Solid

Prep Type	Batch	Batch	Dil	Initial	Final	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Amount	Number	or Analyzed		
7otTIRMA	Pje5	20p2			2.00 a	2 g L	10014	10F 1F 1 14:pX	KL
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10p40	10F 2F 1 0r :r p	6 B
7otTIRMA	AnTlniyi	7otTi s 7NE		1			10X19	10F XF 1 12:1r	KL

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**Lab Chronicle**

Client: WSP USA Inc.  
Project Site: zeHzee 011G

Job ID: 890-142r -1  
SD3 : p140r 909.110

**Client Sample ID: FS04**

Date Collected: 10/18/21 16:05

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTIRMA	AnTlniyi	8012 M6		1			10XRX	10Fr Fr 1 11:09	AJ	ENM 6 ID
7otTIRMA	Pje5	8012M6 Pje5			10.0p a	10 g L	10R2r	10Fr Fr 1 1p:40	D6	ENM 6 ID
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10Fr 8Fr 1 01:p0	AJ	ENM 6 ID
Soluble	LeTch	DI LeTch			2.02 a	20 g L	10p01	10Fr Fr 1 1R4X	SC	ENM 6 ID
Soluble	AnTlniyi	p00.0		1			10Xr 1	10Fr 2Fr 1 rp:44	CG	ENM 6 ID

**Client Sample ID: SW01**

Date Collected: 10/18/21 14:50

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-5**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTIRMA	Pje5	20p2			2.0r a	2 g L	10199	10Fr Fr 1 09:42	KL	ENM 6 ID
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10ppr	10Fr 4Fr 1 11:22	KL	ENM 6 ID
7otTIRMA	AnTlniyi	7otTl s 7NE		1			10X19	10Fr XFr 1 12:1r	KL	ENM 6 ID
7otTIRMA	AnTlniyi	8012 M6		1			10XRX	10Fr Fr 1 11:09	AJ	ENM 6 ID
7otTIRMA	Pje5	8012M6 Pje5			10.0p a	10 g L	10R2r	10Fr Fr 1 1p:40	D6	ENM 6 ID
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10Fr 8Fr 1 01:20	AJ	ENM 6 ID
Soluble	LeTch	DI LeTch			2.0p a	20 g L	10p01	10Fr Fr 1 1R4X	SC	ENM 6 ID
Soluble	AnTlniyi	p00.0		1			10Xr 1	10Fr 2Fr 1 rp:20	CG	ENM 6 ID

**Client Sample ID: SW02**

Date Collected: 10/18/21 15:46

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-6**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTIRMA	Pje5	20p2			2.0r a	2 g L	10199	10Fr Fr 1 09:42	KL	ENM 6 ID
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10ppr	10Fr 4Fr 1 1r:1X	KL	ENM 6 ID
7otTIRMA	AnTlniyi	7otTl s 7NE		1			10X19	10Fr XFr 1 12:1r	KL	ENM 6 ID
7otTIRMA	AnTlniyi	8012 M6		1			10XRX	10Fr Fr 1 11:09	AJ	ENM 6 ID
7otTIRMA	Pje5	8012M6 Pje5			10.00 a	10 g L	10R2r	10Fr Fr 1 1p:40	D6	ENM 6 ID
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10Fr 8Fr 1 0r:10	AJ	ENM 6 ID
Soluble	LeTch	DI LeTch			2.01 a	20 g L	10p01	10Fr Fr 1 1R4X	SC	ENM 6 ID
Soluble	AnTlniyi	p00.0		1			10Xr 1	10Fr 2Fr 1 rp:2X	CG	ENM 6 ID

**Client Sample ID: SW03**

Date Collected: 10/18/21 14:54

Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTIRMA	Pje5	20p2			4.99 a	2 g L	10012	10Fr Fr 1 14:p9	KL	ENM 6 ID
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10r 01	10Fr 4Fr 1 1p:p0	6B	ENM 6 ID
7otTIRMA	AnTlniyi	7otTl s 7NE		1			10X19	10Fr XFr 1 12:1r	KL	ENM 6 ID
7otTIRMA	AnTlniyi	8012 M6		1			10XRX	10Fr Fr 1 1r:1p	AJ	ENM 6 ID
7otTIRMA	Pje5	8012M6 Pje5			10.04 a	10 g L	10R2r	10Fr Fr 1 1p:40	D6	ENM 6 ID
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10Fr 8Fr 1 0r:p0	AJ	ENM 6 ID

Nujo+ny Eencof CTjlybT,

**Lab Chronicle**

Client: WSP USA Inc.  
 Project Site: zeHzee 011G

Job ID: 890-142r -1  
 SD3 : p140r 909.110

**Client Sample ID: SW03**

Date Collected: 10/18/21 14:54  
 Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	LeTch	DI LeTch			4.92 a	20 g L	10p01	10Fr Fr 1 1R4X	SC	ENM 6 ID
Soluble	AnTlniyi	p00.0		1			10Xr 1	10Fr XFr 1 00:0r	CG	ENM 6 ID

**Client Sample ID: SW04**

Date Collected: 10/18/21 16:12  
 Date Received: 10/19/21 15:53

**Lab Sample ID: 890-1452-8**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
7otTIRMA	Pje5	20p2			2.0p a	2 g L	10012	10Fr 0Fr 1 14:p9	KL	ENM 6 ID
7otTIRMA	AnTlniyi	80r 1s		1	2 g L	2 g L	10r 01	10Fr 4Fr 1 1p:20	6 B	ENM 6 ID
7otTIRMA	AnTlniyi	7otTi s 7NE		1			10X19	10Fr XFr 1 12:1r	KL	ENM 6 ID
7otTIRMA	AnTlniyi	8012 M6		1			10RX	10Fr RFr 1 1r:1p	AJ	ENM 6 ID
7otTIRMA	Pje5	8012M6 Pje5			10.0r a	10 g L	10R2r	10Fr RFr 1 1p:40	D6	ENM 6 ID
7otTIRMA	AnTlniyi	8012s M6		1			10XX1	10Fr 8Fr 1 0r:20	AJ	ENM 6 ID
Soluble	LeTch	DI LeTch			4.98 a	20 g L	10p01	10Fr Fr 1 1R4X	SC	ENM 6 ID
Soluble	AnTlniyi	p00.0		1			10Xr 1	10Fr XFr 1 00:08	CG	ENM 6 ID

**Laboratory References:**

ENM 6 ID d NujoIny Eencof 6 i, ITn, f 1r 11 W. zloji, T Avef 6 i, ITn, f 7E F9R01f 7NL (4pr )R04-2440

NujoIny Eencof CTjlybT,

**Accreditation/Certification Summary**

Client: WSP USA Inc.

Job ID: 890-142r -1

Project Site: zeHzee 011G

SD3 : s140r 909.110

**Laboratory: Eurofins Xenco, Midland**

Unlehh otwejd ihe note, ayll ynylf teh vaj twih lybojytof deje coueje, Tn, ej eycwyccje, itytionfcej tivcytion belod.

Authority	Program	Identification Number	Expiration Date
xeNyh	EL7AP	x104604400-r 1-r r	0g-s0-r r
Anylf hih 5 etwo, 8012 E5 xotyl BxLX	Pjem5 etwo, Soli, Soli,	5 ytiN xotyl xPG xotyl BxLX	Anylf te

**Method Summary**

I iet WS PU APc It . G  
Ujo/n. WPN: znhznn 0116

Job ID: 890-142C-1  
PD3 : r 140C909G10

Method	Method Description	Protocol	Laboratory
80C1V	aoiO&h gjm&e l op uodt s( )3l X	PS 84B	ENMT ID
Lo& VLNE	Lo& VLNE I A. di&at	Lc5 Pg U	ENMT ID
8012 MT	D&(ni RQ mn gjm&e( )DRg X)3l X	PS 84B	ENMT ID
8012V MT	D&(ni RQ mn gjm&e( )DRg X)3l X	PS 84B	ENMT ID
r 00G	c t &t ( , lot l hjoj O&njQuhy	TI cS S	ENMT ID
20r 2	I io(ns Py(Wp Udjmn &s LjQu	PS 84B	ENMT ID
8012MT Ujnu	T ejonxylQ &t	PS 84B	ENMT ID
DI 5nQ h	Dn&t &hs S ONj 5nQ h&mUjo. nsdjn	cPLT	ENMT ID

**Protocol References:**

cPLT = cPLT It Wjt O&amp;t A

TI cS S = "T nWos( zoj l hnp eQ ct Qy( &amp; g f S ONj cts S Q(W( ", NUc-B004-79-0C0, T Q. h 198r cts Pdb(nqdnt WRnv&amp;t ( G

PS 84B = "Ln(WT nWos( zoj NvAdO&amp;mpoies S Q(W, Uhy(eQf hnp eQ T nWos( ", Lh&amp;s Ns&amp;t, Movnp brj 198B cts IW AusON(G

Lc5 Pg U = Ln(Wp nje O5Cboj O&amp;j( , PW&amp;t sQs g unj O&amp;mUjo. nsdjn

**Laboratory References:**

ENMT ID = Ndjof&amp; ( Ent . o, T &amp;i&amp;s, 1C11 S GziojsOcvn, T &amp;i&amp;s, LE 79701, LN5 )4r C704-2440

Ndjof&amp; ( Ent . o, I Qj(bOs

**Sample Summary**

Client: WSP USA Inc.  
 Project/Site: Fez Fee 011H

Job ID: 890-1452-1  
 SDG: 31402909.110

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1452-1	FS01	Solid	10/18/21 14:10	10/19/21 15:53	4
890-1452-2	FS02	Solid	10/18/21 14:12	10/19/21 15:53	4
890-1452-3	FS03	Solid	10/18/21 14:15	10/19/21 15:53	4
890-1452-4	FS04	Solid	10/18/21 16:05	10/19/21 15:53	4
890-1452-5	SW01	Solid	10/18/21 14:50	10/19/21 15:53	0 - 4
890-1452-6	SW02	Solid	10/18/21 15:46	10/19/21 15:53	0 - 4
890-1452-7	SW03	Solid	10/18/21 14:54	10/19/21 15:53	0 - 4
890-1452-8	SW04	Solid	10/18/21 16:12	10/19/21 15:53	0 - 4



1  
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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



**eurofins**

Environment Testing  
America

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab P.M.	Carrier Tracking No(s)	CCG No
Client Contact: Shipping/R Receiving		Phone	Kramer, Jessica	State of Origin:	890-471-1
Company: Eurofins Xenco		E-Mail	jessica.kramer@eurofinsnet.com	New Mexico	Page:
Address: 1211 W Florida Ave		Due Date Requested	10/25/2021	Job #:	Page 1 of 1
City: Midland		TAT Requested (days)			
State Zip: TX 79701		PO #			
Phone: 432-704-5440(Tel)		VNO #:			
Email: Site: Fez Fee 011H		Project #:	89000048		
		SSDN#:			
<b>Analysis Requested</b>					
NE/LAP - Louisiana NELAP - Texas					
Field Filtered Sample (Yes or No)					
Perform MS/MSD (Yes or No)					
B015MOD_NM/8015NM_S_Prep Full TPH					
300_ORGFM_2SD/DI_LEACH Chloride					
8021B/6036FP_Calc BTEX					
Total_BTEX_GCV					
8015MOD_Calc					
Total Number of containers					
Special Instructions/Note:					
Preservation Codes					
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sewage, Downseep, Driftwater, Aerial, Surface, Ground, Other)	Preservation Code:
FS01 (890-1452-1)	10/18/21	14 10	Solid	X X X X X	A HCl
FS02 (890-1452-2)	10/18/21	14 12	Solid	X X X X X	B NaOH
FS03 (890-1452-3)	10/18/21	14 15	Solid	X X X X X	C Zn Acetate
FS04 (890-1452-4)	10/18/21	16 05	Solid	X X X X X	D Nitric Acid
SW01 (890-1452-5)	10/18/21	14 50	Solid	X X X X X	E NaHSO4
SW02 (890-1452-6)	10/18/21	15 46	Solid	X X X X X	F MeOH
SW03 (890-1452-7)	10/18/21	14 54	Solid	X X X X X	G Antiflame
SW04 (890-1452-8)	10/18/21	16 12	Solid	X X X X X	H Ascorbic Acid
					I I <sub>2</sub>
					J Di Water
					K EDTA
					L EDA
					M Hexane
					N None
					O AsNaO2
					P Na2OAs
					Q Na2SO3
					R Na2S2O3
					S HSO4
					T TSP Dodecahydrate
					U Acetone
					V MCA
					W pH 4-5
					Z other (specify)
Other:					
Total Number of containers					
Special Instructions/Note:					
Preservation Codes					
Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months	
Special Instructions/Q.C. Requirements					
Method of Shipment:					
Empty Kit Relinquished by:	Date	Time	Received By		
Relinquished by	10-20-21	Date/Time	Kramer	Date/Time	Company
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank 2		Received by	10-21-21	Company
Relinquished by		Date/Time	Received by	Date/Time	Company
Custody Seals Intact:		Custody Seal No	Received by	Date/Time	Company
Δ Yes Δ No					
Cooler Temperature(s) °C and Other Remarks					
14/11/7					

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-145D-1

SG3 Number: 2140D909.110

**Login Number:** 1452**List Source:** Eurofins Xenco, Carlsbad**List Number:** 1**Creator:** Olivas, Nathaniel

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSGs	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: 890-145D-1

SG3 Number: 2140D909.110

**Login Number:** 1452**List Source:** Eurofins Xenco, Midland**List Number:** 2**List Creation:** 10/21/21 10:24 AM**Creator:** Kramer, Jessica

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	1.6/1.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSGs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

ATTACHMENT 4: FINAL C-141

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	NAPP2118732077
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Kelsy Waggaman	Contact Telephone	(432) 688-9057
Contact email	Kelsy.Waggaman@conocophillips.com	Incident # (assigned by OCD)	NAPP2118732077
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

### Location of Release Source

Latitude 32.15092 Longitude -103.37879

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Fez Fee 011H	Site Type	Flow Line
Date Release Discovered	June 22, 2021	API# (if applicable)	Quail Ranch, LLC

Unit Letter	Section	Township	Range	County
D	09	25S	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <u>8</u>	Volume Recovered (bbls) <u>5</u>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

The release was caused by a hole in the riser due to internal corrosion.

The release was in the Pasture. A vacuum truck was dispatched to remove all freestanding fluids.

Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

Incident ID	NAPP2118732077
District RP	
Facility ID	
Application ID	

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

## 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 not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name **Brittany N. Esparza**

Title: **Environmental Technician**

Signature: 

Date: **7/6/2021**

email: Brittany.Esparza@conocophillips.com

Telephone: **(432) 221-0398**

### **OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

## L48 Spill Volume Estimate Form

Facility Name & Number:		FEZ FEE 11H							
Asset Area:									
Release Discovery Date & Time:		6/22/2021							
Release Type:									
Provide any known details about the event:									
<b>Spill Calculation - On Pad Surface Pool Spill</b>									
Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated Pool Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	36.0	12.0	3.00	3	432.000	0.083	6.408	0.004	6.435
Rectangle B	12.0	9.0	2.00	3	108.000	0.056	1.068	0.003	1.071
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume Release:									7.506

Incident ID	NAPP2118732077
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico  
Oil Conservation Division

Incident ID	NAPP2118732077
District RP	
Facility ID	
Application ID	

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

Printed Name: Kelsy Waggaman Title: Environmental Coordinator

Signature:  Date: 11/11/21

email: kelsy.waggaman@conocophillips.com Telephone: (505) 577-9071

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

State of New Mexico  
Oil Conservation Division

Incident ID	NAPP2118732077
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Kelsy Waggaman Title: Environmental Coordinator

Signature: Kelsy Waggaman Date: 11/11/21

email: kelsy.waggaman@conocophillips.com Telephone: (505) 577-9071

**OCD Only**

Received by: Chad Hensley Date: 12/09/2021

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: Chad Hensley Date: 12/09/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

**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 61717

**CONDITIONS**

Operator:  COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 61717
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
chensley	None	12/9/2021