

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	NAPP2118039585
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

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

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input 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		

Incident ID	NAPP2118039585
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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
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

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Adrian Bates</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>7/6/2021</u>

Location:	EMSU B 925 Injection Line	
Spill Date:	6/19/2021	
Area 1		
Approximate Area =	5124.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.20	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	13.60	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	13.60	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	0.00	bbls
Total Produced Water =	6.00	bbls

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 34241

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 34241
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
marcus	None	7/6/2021

Incident ID	NAPP2118039585
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Site Assessment/Characterization

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

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

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

Printed Name: Toby Holland Title: Environmental Coordinator

Signature: _____ Date: 9-16-2021

email: holland@empirepetrocorp.com Telephone: (575) 704-2329

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2118039585
District RP	
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Closure

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

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

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

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

Printed Name: Toby Holland Title: Environmental Coordinator

Signature: _____ Date: 9-16-2021

email: holland@empirepetrocorp.com Telephone: (575) 704-2329

OCD Only

Received by: Chad Hensley Date: 10/13/2021

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

Closure Approved by:  Date: 10/13/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced



WSP USA

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

September 16, 2021

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

**RE: Closure Request
EMSU B 925
Incident Number NAPP2118039585
Lea County, New Mexico**

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of Empire New Mexico, LLC (Empire), presents the following Closure Request detailing site assessment, soil sampling, and excavation activities at the EMSU B 925 (Site) in Unit L, Section 24, Township 20 South, Range 36 East, in Lea County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of produced water at the Site. Based on the excavation activities and soil sample analytical results, Empire is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2118039585.

RELEASE BACKGROUND

On June 19, 2021, pipeline deterioration caused the release of 13.60 barrels (bbls) of produced water into the surrounding pasture. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, and approximately 6 bbls of produced water were recovered. XTO Energy, Inc. (XTO), the operator of the facility prior to Empire, submitted a Form C-141 on June 29, 2021 to the New Mexico Oil Conservation Division (NMOCD). The release was assigned Incident Number NAPP2118039585. Empire completed site assessment and remediation activities as the current operators of the facility.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L 11184, located approximately 0.4 miles south of the Site. The groundwater well has a reported depth to groundwater of 32 feet bgs and a total depth of 50 feet bgs. All wells used for depth to



groundwater determination are depicted on Figure 1 and the associated well records are included in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent stream, located approximately 4,500 feet northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On August 11, 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 photo-ionization 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) and are presented on Figure 2. Photographic documentation was conducted during the Site visit. A photographic log is included in Attachment 2.

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, and 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 Xenco Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.



Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS01 through SS03. However, additional delineation activities were scheduled to confirm the vertical extent of the release.

DELINEATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On August 24, 2021, WSP personnel were at the Site to oversee delineation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples. Boreholes BH01 through BH06 were advanced via hand auger to a depth of 4 feet bgs within the release extent, to further assess the lateral and vertical extent of impacted soil. Delineation soil samples were collected from each borehole from depths ranging from 1 foot to 4 feet bgs. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each borehole were logged on lithologic/soil sampling logs, which are included in Attachment 3. The borehole soil sample locations are presented on Figure 2. The delineation soil samples were collected, handled, and analyzed as described above at Eurofins in Carlsbad, New Mexico.

Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in the delineation soil samples collected from boreholes BH01 and BH03 through BH06. Laboratory analytical results indicated that TPH concentrations exceeded Closure Criteria in borehole delineation soil samples BH02 and BH02A, collected at 2 feet and 4 feet bgs. Based on the laboratory analytical results, excavation activities were scheduled to remove impacted soil from the area surrounding borehole BH02.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On September 13, 2021, WSP personnel returned to the Site to oversee excavation of impacted soil around borehole BH02. Excavation activities were performed using track-mounted backhoe and transport vehicle. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to a depth of 4 feet bgs. Following removal of impacted soil, WSP collected 5-point composite soil samples at least every 200 square feet from the floor and sidewalls 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. Floor soil sample FS01 was collected from the floor of the excavation at a depth of 4 feet bgs. Sidewall soil samples SW01 through SW04 were collected from the sidewalls of the excavation at depths ranging from ground surface to 4 feet bgs. The excavation soil samples were collected, handled, and analyzed as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

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Page 4

The final excavation extent measured approximately 50 square feet. A total of approximately 8 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the Sundance Facility located in Eunice, New Mexico. After the completion of confirmation sampling, the excavation was secured with fencing.

Laboratory analytical results for excavation floor sample FS01 and excavation sidewall samples SW01 through SW04, collected from the final excavation extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 4.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the June 19, 2021 release of produced water. Based on the laboratory analytical results for delineation soil samples BH02 and BH02A, impacted soil was excavated. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the excavation soil sample analytical results, no further remediation was required.

Empire will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. As such, Empire respectfully requests NFA for Incident Number NAPP2118039585.

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 'T Morrissey'.

Tacoma Morrissey
Consultant, Geologist

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

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

cc: Toby Holland, Empire
Dale Cooper Family Trust

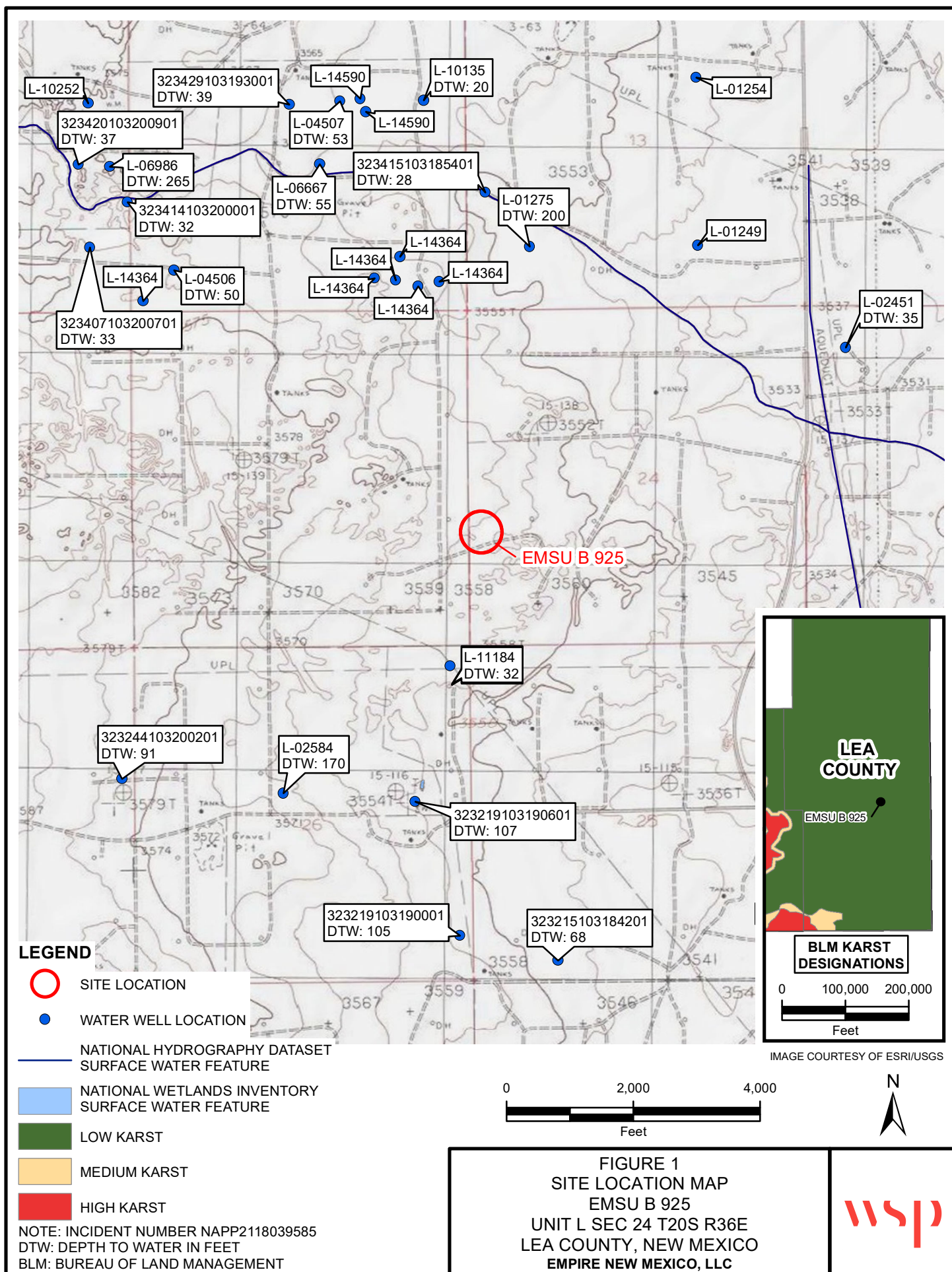


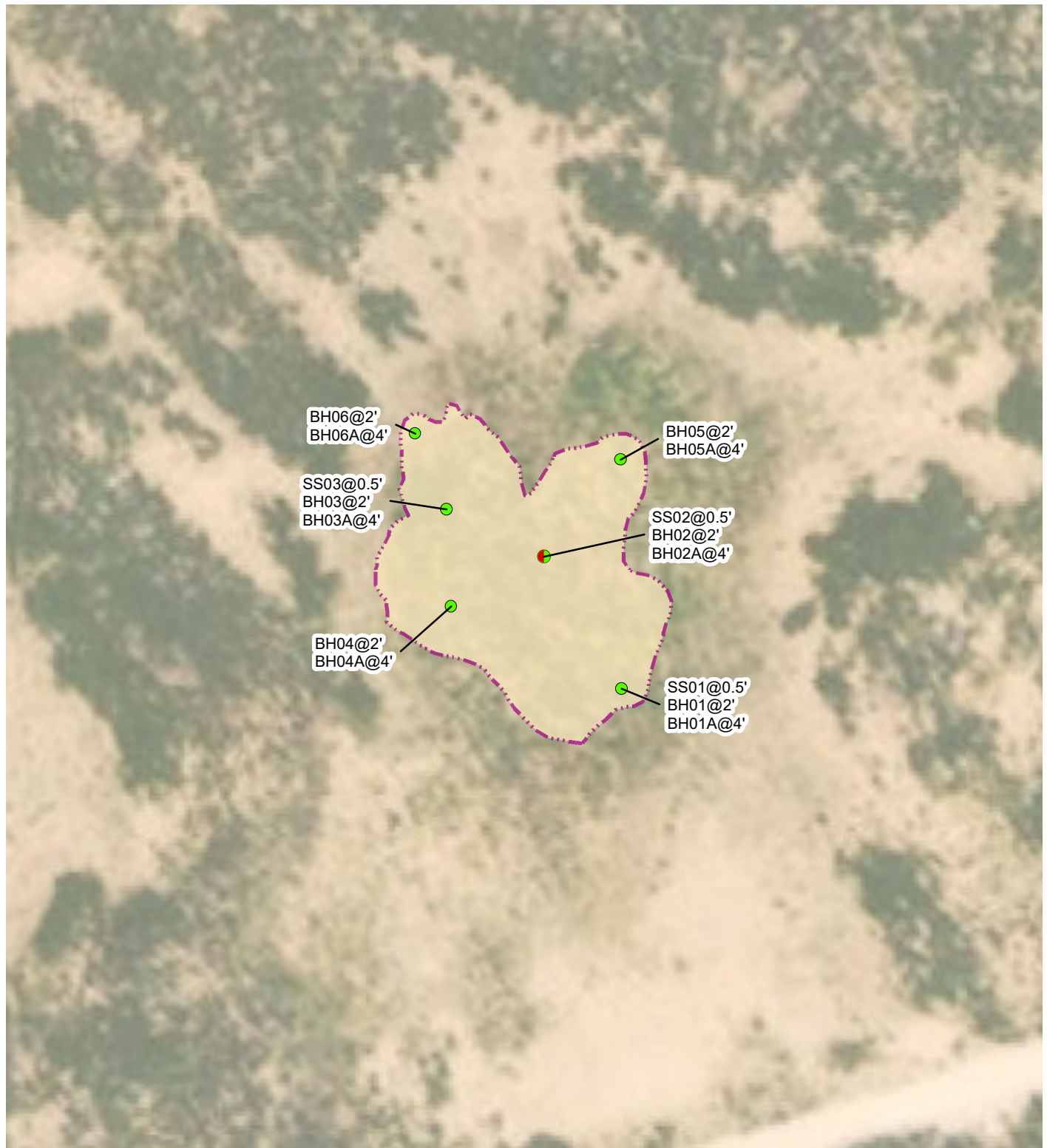
District II
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Attachments:

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

FIGURES



**LEGEND**

SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY
EXCEEDING APPLICABLE CLOSURE CRITERIA

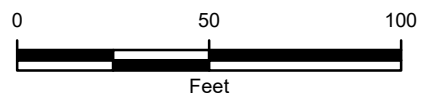


SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA



RELEASE EXTENT

IMAGE COURTESY OF ESRI



NOTE: INCIDENT NUMBER NAPP2118039585
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)



FIGURE 2
SOIL SAMPLE LOCATIONS
EMSU B 925
UNIT L SEC 24 T20S R36E
LEA COUNTY, NEW MEXICO
EMPIRE NEW MEXICO, LLC



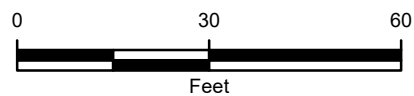


LEGEND

IMAGE COURTESY OF ESRI

-  FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
-  SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

 EXCAVATION EXTENT



NOTE: INCIDENT NUMBER NAPP2118039585
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
EMSU B 925
UNIT L SEC 24 T20S R36E
LEA COUNTY, NEW MEXICO
EMPIRE NEW MEXICO, LLC



TABLES

**TABLE 1
SOIL ANALYTICAL RESULTS**

**EMSU B 925
INCIDENT NUMBER NAPP2118039585
LEA COUNTY, NEW MEXICO
EMPIRE NEW MEXICO, LLC**

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	NE	100	600
Surface Samples										
SS01	0.5	08/11/2021	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	21.6
SS02	0.5	08/11/2021	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	26.1
SS03	0.5	08/11/2021	0.00506	0.00843	<49.9	<49.9	<49.9	<49.9	<49.9	37.1
Delineation Samples										
BH01	2	08/24/2021	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	12.8
BH01A	4	08/24/2021	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	12.0
BH02	2	08/24/2021	<0.00199	<0.00398	<49.8	349	<49.8	349	349	21.7
BH02A	4	08/24/2021	<0.00199	<0.00398	<50.0	462	<50.0	462	462	23.3
BH03	2	08/24/2021	<0.00201	<0.00402	<49.8	88.6	<49.8	88.6	88.6	22.9
BH03A	4	08/24/2021	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	24.4
BH04	1	08/24/2021	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	62.2
BH04A	4	08/24/2021	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	24.8
BH05	1	08/24/2021	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	22.3
BH05A	4	08/24/2021	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	23.4
BH06	1	08/24/2021	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	22.5
BH06A	4	08/24/2021	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	23.8

**TABLE 1
SOIL ANALYTICAL RESULTS**

**EMSU B 925
INCIDENT NUMBER NAPP2118039585
LEA COUNTY, NEW MEXICO
EMPIRE NEW MEXICO, LLC**

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	NE	100	600
Excavation Samples										
FS01	4	09/13/2021	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	17.3
SW01	0-4	09/13/2021	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	14.5
SW02	0-4	09/13/2021	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	11.2
SW03	0-4	09/13/2021	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	16.4
SW04	0-4	09/13/2021	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	16.8

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

Bold - indicates result exceeds the applicable regulatory standard

< - indicates result is below laboratory reporting limits

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

ATTACHMENT 1: REFERENCED WELL RECORDS

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Jim Cooper Owner's Well No. 501959
 Street or Post Office Address P.O. Box 55
 City and State Monument, NM 88265

Well was drilled under Permit No. L 11184 and is located in the:

a. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 26 Township 20S Range 36E N.M.P.M.
 in Lea County.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
 Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in
 the _____ Grant.

(B) Drilling Contractor Alan Eades License No. WD 1044

Address 1200 E. Bender Blvd., Hobbs, NM 88240

Drilling Began 4-16-01 Completed 4-16-01 Type tools rotary Size of hole 8 3/4 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 50 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well _____ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
13	32	19	Sand & Gravel	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6	160psi				50		30	50

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received 07/26/01

#208617

Quad _____ FWL _____ FSL _____

File No. L-11,184 Use DOM Location No. 20.36.26.222



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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Site Information ▼

Geographic Area:

United States ▼

GO

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- [Full News](#) 

USGS 323219103190601 20S.36E.26.24344

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°32'40", Longitude 103°19'08" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 265 feet
Land surface altitude: 3,555.00 feet above NGVD29.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Chinle Formation" (231CHNL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1961-03-02	1996-02-07	9
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
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Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=323219103190601)

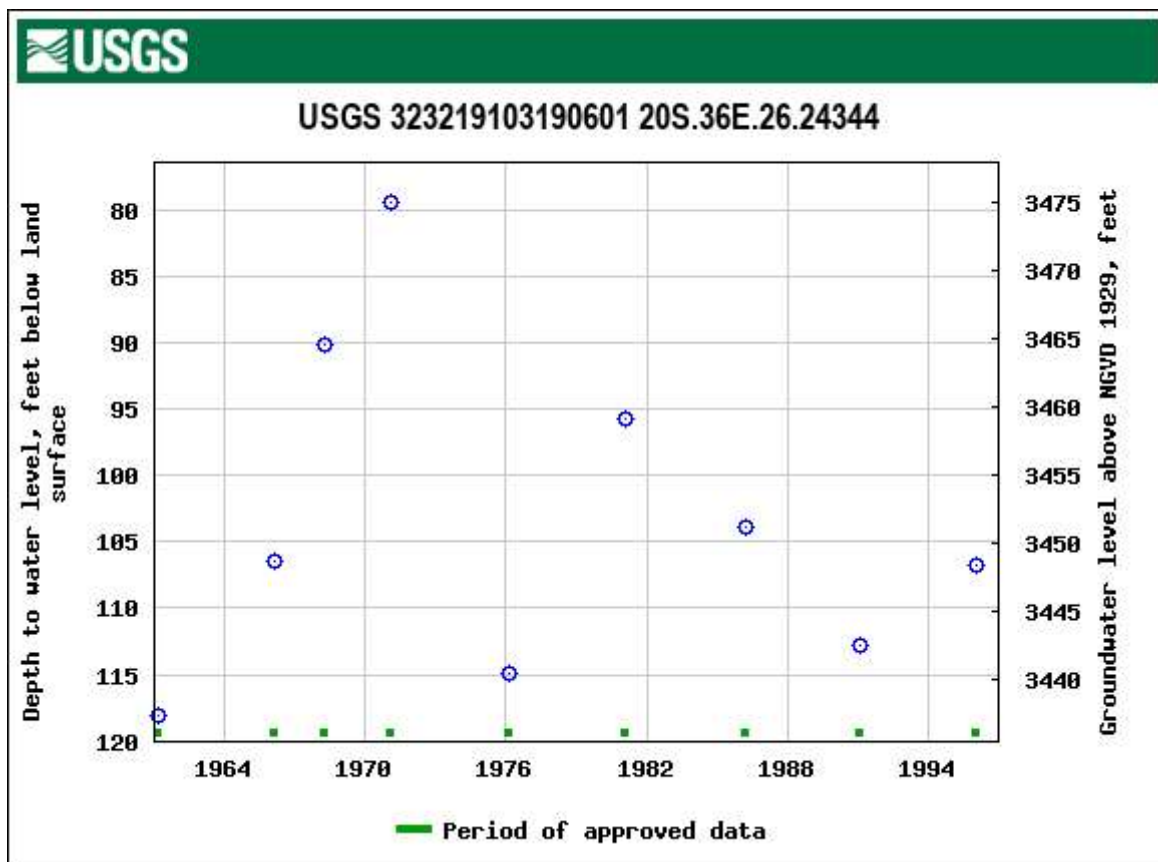
[agency_code=USGS&site_no=323219103190601](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=323219103190601)



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

Page Last Modified: 2021-07-19 10:18:28 EDT

0.28 0.26 caww01



ATTACHMENT 2: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG

Empire New Mexico, LLC	EMSU B 925 Lea County, New Mexico	NAPP2118039585
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Photo No.	Date	
1	August 13, 2021	
View of the release extent facing north.		 A photograph showing a wide, flat landscape with sparse green and yellow vegetation under a clear blue sky. The terrain appears to be a dry, open field or desert.


Photo No.	Date	
2	September 13, 2021	
View of final excavation extent.		 A photograph showing a large, deep, rectangular excavation pit in the ground. The pit is filled with dark brown soil. The surrounding area is dry and sandy with some sparse vegetation. A red flag is visible in the background.


ATTACHMENT 3: LITHOLOGIC/SAMPLING LOGS


 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						BH01		8/24/2021	
						Site Name: EMSU B 925			
						RP or Incident Number: NAPP2118039585			
						WSP Job Number: 31403551.000 Task 01.02			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By		Method: Hand Auger	
Lat/Long: 32.55624, -103.31587				Field Screening:		Hole Diameter:		Total Depth:	
				Chloride, PID		2"		4'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0			
						1			
D	<151.2	0.4	N	BH01	2	2	SM	sandy, brown, well graded, no staining or odor	
						3			
D	<151.2	0.1	N	BH01A	4	4		sandy, brown, well graded, no staining or odor	
TD @ 4 feet bgs									

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								BH02		8/24/2021	
								Site Name: EMSU B 925			
								RP or Incident Number: NAPP2118039585			
WSP Job Number: 31403551.000 Task 01.02											
LITHOLOGIC / SOIL SAMPLING LOG											
Lat/Long: 32.55624, -103.31587				Field Screening:		Hole Diameter:		Total Depth:			
				Chloride, PID		2"		4'			
Comments:											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
						1					
D	<151.2	0.2	N	BH02	2	2	SM	sandy, brown, well graded, no staining or odor			
						3					
D	<151.2	1.3	N	BH02A	4	4	SM	sandy, brown, well graded, no staining or odor			
TD @ 4 feet bgs											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220						BH or PH Name:		Date:	
						BH03		8/24/2021	
						Site Name: EMSU B 925			
						RP or Incident Number: NAPP2118039585			
						WSP Job Number: 31403551.000 Task 01.02			
LITHOLOGIC / SOIL SAMPLING LOG						Logged By		Method: Hand Auger	
Lat/Long: 32.55624, -103.31587				Field Screening:		Hole Diameter:		Total Depth:	
				Chloride, PID		2"		4'	
Comments:									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
						0			
						1			
D	<151.2	1.5	N	BH03	2	2	SM	sandy, brown, well graded, no staining or odor	
						3			
D	<151.2	0.4	N	BH03A	4	4	SM	sandy, brown, well graded, no staining or odor	
TD @ 4 feet bgs									

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH04		8/24/2021	
					Site Name: EMSU B 925			
					RP or Incident Number: NAPP2118039585			
					WSP Job Number: 31403551.000 Task 01.02			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By		Method: Hand Auger	
Lat/Long: 32.55624, -103.31587			Field Screening:		Hole Diameter:		Total Depth:	
			Chloride, PID		2"		4'	
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<151.2	0.1	N	BH04	1	0	SM	sandy, brown, well graded, no staining or odor
						1		
						2		
						3		
D	<151.2	0.0	N	BH04A	4	4	SM	sandy, brown, well graded, no staining or odor
TD @ 4 feet bgs								

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH05		8/24/2021	
					Site Name: EMSU B 925			
					RP or Incident Number: NAPP2118039585			
					WSP Job Number: 31403551.000 Task 01.02			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By		Method: Hand Auger	
Lat/Long: 32.55624, -103.31587			Field Screening:		Hole Diameter:		Total Depth:	
			Chloride, PID		2"		4'	
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<151.2	0.6	N	BH05	1	0	SM	sandy, brown, well graded, no staining or odor
						1		
						2		
						3		
D	<151.2	0.0	N	BH05A	4	4	SM	sandy, brown, well graded, no staining or odor
TD @ 4 feet bgs								

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220					BH or PH Name:		Date:	
					BH06		8/24/2021	
					Site Name: EMSU B 925			
					RP or Incident Number: NAPP2118039585			
					WSP Job Number: 31403551.000 Task 01.02			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By		Method: Hand Auger	
Lat/Long: 32.55624, -103.31587			Field Screening:		Hole Diameter:		Total Depth:	
			Chloride, PID		2"		4'	
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<151.2	0.1	N	BH06	1	0	SM	sandy, brown, well graded, no staining or odor
						1		
						2		
						3		
D	<151.2	0.0	N	BH06A	4	4	SM	sandy, brown, well graded, no staining or odor
TD @ 4 feet bgs								

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1097-1
Laboratory Sample Delivery Group: Lea County
Client Project/Site: EMSU B 925

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

Attn: Tacoma Morrissey

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

Authorized for release by:
8/18/2021 3:34:49 PM

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

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

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

Client: WSP USA Inc.
Project/Site: EMSU B 925

Laboratory Job ID: 890-1097-1
SDG: Lea County

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

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

Case Narrative

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Job ID: 890-1097-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1097-1

Receipt

The samples were received on 8/12/2021 9:21 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

GC VOA

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

GC Semi VOA

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: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Client Sample ID: SS01

Lab Sample ID: 890-1097-1

Date Collected: 08/11/21 12:25

Matrix: Solid

Date Received: 08/12/21 09:21

Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F2 F1	0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:11	1
Toluene	<0.00198	U F2 F1	0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:11	1
Ethylbenzene	<0.00198	U F1	0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:11	1
m-Xylene & p-Xylene	<0.00397	U F2 F1	0.00397	mg/Kg		08/14/21 10:45	08/15/21 05:11	1
o-Xylene	<0.00198	U F2 F1	0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:11	1
Xylenes, Total	<0.00397	U F2 F1	0.00397	mg/Kg		08/14/21 10:45	08/15/21 05:11	1
Total BTEX	<0.00397	U F2 F1	0.00397	mg/Kg		08/14/21 10:45	08/15/21 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130	08/14/21 10:45	08/15/21 05:11	1
1,4-Difluorobenzene (Surr)	90		70 - 130	08/14/21 10:45	08/15/21 05:11	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		08/16/21 08:50	08/16/21 18:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		08/16/21 08:50	08/16/21 18:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/16/21 08:50	08/16/21 18:09	1
Total TPH	<49.9	U	49.9	mg/Kg		08/16/21 08:50	08/16/21 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	08/16/21 08:50	08/16/21 18:09	1
o-Terphenyl	97		70 - 130	08/16/21 08:50	08/16/21 18:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.6		4.98	mg/Kg			08/18/21 11:48	1

Client Sample ID: SS02

Lab Sample ID: 890-1097-2

Date Collected: 08/11/21 12:27

Matrix: Solid

Date Received: 08/12/21 09:21

Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		08/14/21 10:45	08/15/21 05:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/14/21 10:45	08/15/21 05:31	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		08/14/21 10:45	08/15/21 05:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		08/14/21 10:45	08/15/21 05:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		08/14/21 10:45	08/15/21 05:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		08/14/21 10:45	08/15/21 05:31	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		08/14/21 10:45	08/15/21 05:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	08/14/21 10:45	08/15/21 05:31	1
1,4-Difluorobenzene (Surr)	106		70 - 130	08/14/21 10:45	08/15/21 05:31	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Client Sample ID: SS02

Lab Sample ID: 890-1097-2

Date Collected: 08/11/21 12:27

Matrix: Solid

Date Received: 08/12/21 09:21

Sample Depth: - 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		08/16/21 08:50	08/16/21 18:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		08/16/21 08:50	08/16/21 18:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		08/16/21 08:50	08/16/21 18:31	1
Total TPH	<49.8	U	49.8	mg/Kg		08/16/21 08:50	08/16/21 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	08/16/21 08:50	08/16/21 18:31	1
o-Terphenyl	94		70 - 130	08/16/21 08:50	08/16/21 18:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.1		4.99	mg/Kg			08/18/21 11:54	1

Client Sample ID: SS03

Lab Sample ID: 890-1097-3

Date Collected: 08/11/21 12:30

Matrix: Solid

Date Received: 08/12/21 09:21

Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00506		0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:52	1
Toluene	<0.00198	U	0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:52	1
Ethylbenzene	0.00337		0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		08/14/21 10:45	08/15/21 05:52	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		08/14/21 10:45	08/15/21 05:52	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		08/14/21 10:45	08/15/21 05:52	1
Total BTEX	0.00843		0.00396	mg/Kg		08/14/21 10:45	08/15/21 05:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	146	S1+	70 - 130	08/14/21 10:45	08/15/21 05:52	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/14/21 10:45	08/15/21 05:52	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		08/16/21 08:50	08/16/21 18:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		08/16/21 08:50	08/16/21 18:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/16/21 08:50	08/16/21 18:52	1
Total TPH	<49.9	U	49.9	mg/Kg		08/16/21 08:50	08/16/21 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	08/16/21 08:50	08/16/21 18:52	1
o-Terphenyl	109		70 - 130	08/16/21 08:50	08/16/21 18:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.1		5.00	mg/Kg			08/18/21 12:00	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1097-1	SS01	144 S1+	90
890-1097-1 MS	SS01	108	106
890-1097-1 MSD	SS01	134 S1+	99
890-1097-2	SS02	114	106
890-1097-3	SS03	146 S1+	107
LCS 880-6528/1-A	Lab Control Sample	101	97
LCSD 880-6528/2-A	Lab Control Sample Dup	106	98
MB 880-6498/5-A	Method Blank	123	107
MB 880-6528/5-A	Method Blank	127	101
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1097-1	SS01	91	97
890-1097-2	SS02	88	94
890-1097-3	SS03	104	109
890-1100-A-81-H MS	Matrix Spike	92	87
890-1100-A-81-I MSD	Matrix Spike Duplicate	91	88
LCS 880-6589/2-A	Lab Control Sample	97	97
LCSD 880-6589/3-A	Lab Control Sample Dup	98	99
MB 880-6589/1-A	Method Blank	107	118
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6498/5-A

Matrix: Solid

Analysis Batch: 6512

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6498

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/13/21 09:35	08/14/21 17:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/13/21 09:35	08/14/21 17:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/13/21 09:35	08/14/21 17:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/13/21 09:35	08/14/21 17:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/13/21 09:35	08/14/21 17:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/13/21 09:35	08/14/21 17:08	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		08/13/21 09:35	08/14/21 17:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	08/13/21 09:35	08/14/21 17:08	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/13/21 09:35	08/14/21 17:08	1

Lab Sample ID: MB 880-6528/5-A

Matrix: Solid

Analysis Batch: 6512

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6528

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/14/21 10:45	08/15/21 04:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/14/21 10:45	08/15/21 04:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/14/21 10:45	08/15/21 04:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/14/21 10:45	08/15/21 04:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/14/21 10:45	08/15/21 04:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/14/21 10:45	08/15/21 04:42	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		08/14/21 10:45	08/15/21 04:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	08/14/21 10:45	08/15/21 04:42	1
1,4-Difluorobenzene (Surr)	101		70 - 130	08/14/21 10:45	08/15/21 04:42	1

Lab Sample ID: LCS 880-6528/1-A

Matrix: Solid

Analysis Batch: 6512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08320		mg/Kg		83	70 - 130
Toluene	0.100	0.09118		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09785		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2046		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1034		mg/Kg		103	70 - 130

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

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-6528/2-A

Matrix: Solid

Analysis Batch: 6512

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08452		mg/Kg		85	70 - 130	2	35
Toluene	0.100	0.08944		mg/Kg		89	70 - 130	2	35
Ethylbenzene	0.100	0.09922		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2067		mg/Kg		103	70 - 130	1	35
o-Xylene	0.100	0.1043		mg/Kg		104	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-1097-1 MS

Matrix: Solid

Analysis Batch: 6512

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 6528

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F2 F1	0.100	0.05169	F1	mg/Kg		51	70 - 130		
Toluene	<0.00198	U F2 F1	0.100	0.02818	F1	mg/Kg		28	70 - 130		
Ethylbenzene	<0.00198	U F1	0.100	<0.00201	U F1	mg/Kg		2	70 - 130		
m-Xylene & p-Xylene	<0.00397	U F2 F1	0.201	0.01416	F1	mg/Kg		7	70 - 130		
o-Xylene	<0.00198	U F2 F1	0.100	0.04480	F1	mg/Kg		45	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-1097-1 MSD

Matrix: Solid

Analysis Batch: 6512

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 6528

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F2 F1	0.100	0.004504	F2 F1	mg/Kg		5	70 - 130	168	35
Toluene	<0.00198	U F2 F1	0.100	0.008829	F2 F1	mg/Kg		9	70 - 130	105	35
Ethylbenzene	<0.00198	U F1	0.100	0.002489	F1	mg/Kg		2	70 - 130	27	35
m-Xylene & p-Xylene	<0.00397	U F2 F1	0.200	0.007105	F2 F1	mg/Kg		4	70 - 130	66	35
o-Xylene	<0.00198	U F2 F1	0.100	0.01766	F2 F1	mg/Kg		18	70 - 130	87	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

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

Lab Sample ID: MB 880-6589/1-A

Matrix: Solid

Analysis Batch: 6591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6589

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		08/16/21 08:50	08/16/21 11:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/16/21 08:50	08/16/21 11:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/16/21 08:50	08/16/21 11:24	1
Total TPH	<50.0	U	50.0	mg/Kg		08/16/21 08:50	08/16/21 11:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	08/16/21 08:50	08/16/21 11:24	1
o-Terphenyl	118		70 - 130	08/16/21 08:50	08/16/21 11:24	1

Lab Sample ID: LCS 880-6589/2-A

Matrix: Solid

Analysis Batch: 6591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6589

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	814.9		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	832.6		mg/Kg		83	70 - 130

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

Lab Sample ID: LCSD 880-6589/3-A

Matrix: Solid

Analysis Batch: 6591

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6589

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	902.4		mg/Kg		90	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	833.9		mg/Kg		83	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-1100-A-81-H MS

Matrix: Solid

Analysis Batch: 6591

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6589

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	1032		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	843.5		mg/Kg		85	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

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

Lab Sample ID: 890-1100-A-81-H MS

Matrix: Solid

Analysis Batch: 6591

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6589

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-1100-A-81-I MSD

Matrix: Solid

Analysis Batch: 6591

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 6589

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	981.7		mg/Kg		98	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	844.9		mg/Kg		85	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	88		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6602/1-A

Matrix: Solid

Analysis Batch: 6718

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			08/18/21 10:30	1

Lab Sample ID: LCS 880-6602/2-A

Matrix: Solid

Analysis Batch: 6718

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	254.3		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-6602/3-A

Matrix: Solid

Analysis Batch: 6718

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	254.6		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 820-1615-A-1-B MS

Matrix: Solid

Analysis Batch: 6718

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24.3		248	267.2		mg/Kg		98	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 820-1615-A-1-C MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 6718												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	24.3		248	267.4		mg/Kg		98	90 - 110	0	20	

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

GC VOA

Prep Batch: 6498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-6498/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 6512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1097-1	SS01	Total/NA	Solid	8021B	6528
890-1097-2	SS02	Total/NA	Solid	8021B	6528
890-1097-3	SS03	Total/NA	Solid	8021B	6528
MB 880-6498/5-A	Method Blank	Total/NA	Solid	8021B	6498
MB 880-6528/5-A	Method Blank	Total/NA	Solid	8021B	6528
LCS 880-6528/1-A	Lab Control Sample	Total/NA	Solid	8021B	6528
LCSD 880-6528/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6528
890-1097-1 MS	SS01	Total/NA	Solid	8021B	6528
890-1097-1 MSD	SS01	Total/NA	Solid	8021B	6528

Prep Batch: 6528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1097-1	SS01	Total/NA	Solid	5035	
890-1097-2	SS02	Total/NA	Solid	5035	
890-1097-3	SS03	Total/NA	Solid	5035	
MB 880-6528/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6528/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6528/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1097-1 MS	SS01	Total/NA	Solid	5035	
890-1097-1 MSD	SS01	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 6589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1097-1	SS01	Total/NA	Solid	8015NM Prep	
890-1097-2	SS02	Total/NA	Solid	8015NM Prep	
890-1097-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-6589/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6589/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6589/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1100-A-81-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1100-A-81-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 6591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1097-1	SS01	Total/NA	Solid	8015B NM	6589
890-1097-2	SS02	Total/NA	Solid	8015B NM	6589
890-1097-3	SS03	Total/NA	Solid	8015B NM	6589
MB 880-6589/1-A	Method Blank	Total/NA	Solid	8015B NM	6589
LCS 880-6589/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6589
LCSD 880-6589/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6589
890-1100-A-81-H MS	Matrix Spike	Total/NA	Solid	8015B NM	6589
890-1100-A-81-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6589

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

HPLC/IC

Leach Batch: 6602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1097-1	SS01	Soluble	Solid	DI Leach	
890-1097-2	SS02	Soluble	Solid	DI Leach	
890-1097-3	SS03	Soluble	Solid	DI Leach	
MB 880-6602/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6602/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6602/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-1615-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
820-1615-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 6718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1097-1	SS01	Soluble	Solid	300.0	6602
890-1097-2	SS02	Soluble	Solid	300.0	6602
890-1097-3	SS03	Soluble	Solid	300.0	6602
MB 880-6602/1-A	Method Blank	Soluble	Solid	300.0	6602
LCS 880-6602/2-A	Lab Control Sample	Soluble	Solid	300.0	6602
LCSD 880-6602/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6602
820-1615-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	6602
820-1615-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	6602

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Client Sample ID: SS01

Lab Sample ID: 890-1097-1

Date Collected: 08/11/21 12:25

Matrix: Solid

Date Received: 08/12/21 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	6528	08/14/21 10:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6512	08/15/21 05:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6589	08/16/21 08:50	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6591	08/16/21 18:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6602	08/16/21 11:10	CH	XEN MID
Soluble	Analysis	300.0		1			6718	08/18/21 11:48	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1097-2

Date Collected: 08/11/21 12:27

Matrix: Solid

Date Received: 08/12/21 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	6528	08/14/21 10:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6512	08/15/21 05:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6589	08/16/21 08:50	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6591	08/16/21 18:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6602	08/16/21 11:10	CH	XEN MID
Soluble	Analysis	300.0		1			6718	08/18/21 11:54	CH	XEN MID

Client Sample ID: SS03

Lab Sample ID: 890-1097-3

Date Collected: 08/11/21 12:30

Matrix: Solid

Date Received: 08/12/21 09:21

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	6528	08/14/21 10:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6512	08/15/21 05:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6589	08/16/21 08:50	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6591	08/16/21 18:52	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6602	08/16/21 11:10	CH	XEN MID
Soluble	Analysis	300.0		1			6718	08/18/21 12:00	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Carlsbad

Sample Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1097-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1097-1	SS01	Solid	08/11/21 12:25	08/12/21 09:21	- 0.5
890-1097-2	SS02	Solid	08/11/21 12:27	08/12/21 09:21	- 0.5
890-1097-3	SS03	Solid	08/11/21 12:30	08/12/21 09:21	- 0.5

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Environment Testing
Xenco

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

Chain of Custody

Work Order No:

www.xenco.com Page 1 of 1

Project Manager:	TACOMA MORESEY	Billed to (if different)	→
Company Name:	WSP USA	Company Name:	→
Address:	3388 N A St	Address:	→
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	→
Phone:	432-764-5178	Email:	anna.byers@wsp.com

Work Order Comments

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

State of Project:

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

Deliverables: EDD ☐ ADAPT ☐ Other:

[illegible][illegible]

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

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

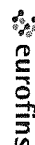
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anne Hayes	ACE Staff	5.12.21 09:17			
3			4		
5			6		

Printed Date: 06/02/2020 09:17:00

Eurofins Xenco, Carlsbad

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)				Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact:				Phone	Kramer Jessica		890-348 1
Shipping/Receiving					E-Mail	State of Origin	Page:
Company					Jessica.kramer@eurofinset.com	New Mexico	Page 1 of 1
Address:				Accreditations Required (See note)			
1211 W Florida Ave				NELAP - Louisiana NELAP - Texas			
City				Analysis Requested			
Midland							
State, Zip							
TX, 79701							
Phone							
432-704-5440(Tel)							
Email							
Project Name							
EMSU B 925							
Site							
SSOW#							
Due Date Requested				8/18/2021			
TAT Requested (days)							
PO #							
WO #							
Project #				89000048			
Sample Identification - Client ID (Lab ID)							
Sample Date				Sample Time			
SS01 (890-1097-1)				12 25			
SS02 (890-1097-2)				12 27			
SS03 (890-1097-3)				12 30			
Sample Type				Sample Type			
(C=comp, G=grab)				(W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)			
Preservation Code							
Field Filtered Sample (Yes or No)							
Perform MS/MSD (Yes or No)							
8015MOD_NM/8015NM_S_Prep Full TPH							
300_ORGFM_28D/DI_LEACH Chloride							
8021B/5035FP_Calc BTEX							
Total 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. Na2O4S			
E. NaHSO4				Q. Na2SO3			
F. MeOH				R. Na2S2O3			
G. Amchlor				S. H2SO4			
H. Ascorbic Acid				T. TSP Dodecylalrate			
I. Ice				U. Acetone			
J. DI Water				V. MCAA			
K. EDTA				W. pH 4-5			
L. EDA				Z. other (specify)			
Other							

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1097-1

SDG Number: Lea County

Login Number: 1097

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1097-1

SDG Number: Lea County

Login Number: 1097

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 08/13/21 11:21 AM

Creator: Copeland, Tatiana

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-5425-1
Client Project/Site: EMSU B925
Revision: 1

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

Attn: Tacoma Morrissey

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

Authorized for release by:
9/14/2021 12:43:09 PM

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

LINKS

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results through

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

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

Client: WSP USA Inc.
Project/Site: EMSU B925

Laboratory Job ID: 880-5425-1

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Eurofins Xenco, Midland

Case Narrative

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Job ID: 880-5425-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-5425-1

REVISION

The report being provided is a revision of the original report sent on 8/30/2021. The report (revision 1) is being revised due to Per client email, requesting TPH re run on samples 003-004 and 009.

Report revision history

Receipt

The samples were received on 8/25/2021 9:53 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH03A (880-5425-6), BH04 (880-5425-7), BH04A (880-5425-8), BH05A (880-5425-10), BH06 (880-5425-11) and BH06A (880-5425-12). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-5425-A-1-A 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: Surrogate recovery for the following sample was outside control limits: (880-5369-A-1-F MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7363 and analytical batch 880-7359 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH01

Lab Sample ID: 880-5425-1

Date Collected: 08/24/21 11:15

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/25/21 10:43	08/26/21 00:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/25/21 10:43	08/26/21 00:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/25/21 10:43	08/26/21 00:07	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/25/21 10:43	08/26/21 00:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/25/21 10:43	08/26/21 00:07	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/25/21 10:43	08/26/21 00:07	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		08/25/21 10:43	08/26/21 00:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	08/25/21 10:43	08/26/21 00:07	1
1,4-Difluorobenzene (Surr)	84		70 - 130	08/25/21 10:43	08/26/21 00:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 12:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 12:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 12:32	1
Total TPH	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	08/26/21 09:55	08/26/21 12:32	1
o-Terphenyl	97		70 - 130	08/26/21 09:55	08/26/21 12:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.8		4.98		mg/Kg			08/27/21 23:48	1

Client Sample ID: BH01A

Lab Sample ID: 880-5425-2

Date Collected: 08/24/21 11:20

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 00:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 00:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 00:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/25/21 10:43	08/26/21 00:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 00:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/25/21 10:43	08/26/21 00:28	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/25/21 10:43	08/26/21 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	08/25/21 10:43	08/26/21 00:28	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/25/21 10:43	08/26/21 00:28	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH01A

Lab Sample ID: 880-5425-2

Date Collected: 08/24/21 11:20

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 16:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 16:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 16:25	1
Total TPH	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 16:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	08/26/21 09:55	08/26/21 16:25	1
o-Terphenyl	96		70 - 130	08/26/21 09:55	08/26/21 16:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.0		4.97		mg/Kg			08/27/21 23:54	1

Client Sample ID: BH02

Lab Sample ID: 880-5425-3

Date Collected: 08/24/21 11:25

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 00:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 00:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 00:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/25/21 10:43	08/26/21 00:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 00:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/25/21 10:43	08/26/21 00:48	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/25/21 10:43	08/26/21 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	08/25/21 10:43	08/26/21 00:48	1
1,4-Difluorobenzene (Surr)	105		70 - 130	08/25/21 10:43	08/26/21 00:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U H	49.8		mg/Kg		09/08/21 14:58	09/09/21 04:14	1
Diesel Range Organics (Over C10-C28)	349	H	49.8		mg/Kg		09/08/21 14:58	09/09/21 04:14	1
Oil Range Organics (Over C28-C36)	<49.8	U H	49.8		mg/Kg		09/08/21 14:58	09/09/21 04:14	1
Total TPH	349	H	49.8		mg/Kg		09/08/21 14:58	09/09/21 04:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/08/21 14:58	09/09/21 04:14	1
o-Terphenyl	116		70 - 130	09/08/21 14:58	09/09/21 04:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.7		4.95		mg/Kg			08/26/21 18:55	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH02A

Lab Sample ID: 880-5425-4

Date Collected: 08/24/21 11:30

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 01:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 01:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 01:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/25/21 10:43	08/26/21 01:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/25/21 10:43	08/26/21 01:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/25/21 10:43	08/26/21 01:08	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/25/21 10:43	08/26/21 01:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	08/25/21 10:43	08/26/21 01:08	1
1,4-Difluorobenzene (Surr)	99		70 - 130	08/25/21 10:43	08/26/21 01:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U H	50.0		mg/Kg		09/08/21 14:58	09/09/21 04:34	1
Diesel Range Organics (Over C10-C28)	462	H	50.0		mg/Kg		09/08/21 14:58	09/09/21 04:34	1
Oil Range Organics (Over C28-C36)	<50.0	U H	50.0		mg/Kg		09/08/21 14:58	09/09/21 04:34	1
Total TPH	462	H	50.0		mg/Kg		09/08/21 14:58	09/09/21 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/08/21 14:58	09/09/21 04:34	1
o-Terphenyl	118		70 - 130	09/08/21 14:58	09/09/21 04:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.3		4.99		mg/Kg			08/26/21 19:12	1

Client Sample ID: BH03

Lab Sample ID: 880-5425-5

Date Collected: 08/24/21 11:35

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 01:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 01:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 01:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 01:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 01:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 01:29	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 01:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	08/25/21 10:43	08/26/21 01:29	1
1,4-Difluorobenzene (Surr)	73		70 - 130	08/25/21 10:43	08/26/21 01:29	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH03

Lab Sample ID: 880-5425-5

Date Collected: 08/24/21 11:35

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/26/21 09:55	08/26/21 17:50	1
Diesel Range Organics (Over C10-C28)	88.6		49.8		mg/Kg		08/26/21 09:55	08/26/21 17:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/26/21 09:55	08/26/21 17:50	1
Total TPH	88.6		49.8		mg/Kg		08/26/21 09:55	08/26/21 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	08/26/21 09:55	08/26/21 17:50	1
o-Terphenyl	98		70 - 130	08/26/21 09:55	08/26/21 17:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.9		4.97		mg/Kg			08/26/21 19:18	1

Client Sample ID: BH03A

Lab Sample ID: 880-5425-6

Date Collected: 08/24/21 11:40

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 01:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 01:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 01:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/25/21 10:43	08/26/21 01:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 01:49	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/25/21 10:43	08/26/21 01:49	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/25/21 10:43	08/26/21 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	08/25/21 10:43	08/26/21 01:49	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/25/21 10:43	08/26/21 01:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 18:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 18:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 18:11	1
Total TPH	<49.9	U	49.9		mg/Kg		08/26/21 09:55	08/26/21 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	08/26/21 09:55	08/26/21 18:11	1
o-Terphenyl	95		70 - 130	08/26/21 09:55	08/26/21 18:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.4		5.00		mg/Kg			08/26/21 19:23	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH04

Lab Sample ID: 880-5425-7

Date Collected: 08/24/21 11:45

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/25/21 10:43	08/26/21 02:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/25/21 10:43	08/26/21 02:10	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/25/21 10:43	08/26/21 02:10	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/25/21 10:43	08/26/21 02:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/25/21 10:43	08/26/21 02:10	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/25/21 10:43	08/26/21 02:10	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		08/25/21 10:43	08/26/21 02:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130	08/25/21 10:43	08/26/21 02:10	1
1,4-Difluorobenzene (Surr)	103		70 - 130	08/25/21 10:43	08/26/21 02:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/26/21 09:55	08/26/21 18:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/26/21 09:55	08/26/21 18:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/26/21 09:55	08/26/21 18:32	1
Total TPH	<49.8	U	49.8		mg/Kg		08/26/21 09:55	08/26/21 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	08/26/21 09:55	08/26/21 18:32	1
o-Terphenyl	97		70 - 130	08/26/21 09:55	08/26/21 18:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.2		5.04		mg/Kg			08/26/21 19:29	1

Client Sample ID: BH04A

Lab Sample ID: 880-5425-8

Date Collected: 08/24/21 11:50

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 02:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 02:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 02:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 02:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 02:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 02:30	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 02:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	08/25/21 10:43	08/26/21 02:30	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/25/21 10:43	08/26/21 02:30	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH04A

Lab Sample ID: 880-5425-8

Date Collected: 08/24/21 11:50

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/25/21 10:12	08/25/21 19:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/25/21 10:12	08/25/21 19:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/25/21 10:12	08/25/21 19:04	1
Total TPH	<49.9	U	49.9		mg/Kg		08/25/21 10:12	08/25/21 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	08/25/21 10:12	08/25/21 19:04	1
o-Terphenyl	102		70 - 130	08/25/21 10:12	08/25/21 19:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.8		4.98		mg/Kg			08/26/21 19:46	1

Client Sample ID: BH05

Lab Sample ID: 880-5425-9

Date Collected: 08/24/21 11:55

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 02:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 02:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 02:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/25/21 10:43	08/26/21 02:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 02:50	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/25/21 10:43	08/26/21 02:50	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/25/21 10:43	08/26/21 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	08/25/21 10:43	08/26/21 02:50	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/25/21 10:43	08/26/21 02:50	1

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

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	09/01/21 08:19	09/01/21 21:12	1
o-Terphenyl	80		70 - 130	09/01/21 08:19	09/01/21 21:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.3		5.01		mg/Kg			08/26/21 19:51	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH05A

Lab Sample ID: 880-5425-10

Date Collected: 08/24/21 12:00

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 03:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 03:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 03:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/25/21 10:43	08/26/21 03:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 03:11	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/25/21 10:43	08/26/21 03:11	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/25/21 10:43	08/26/21 03:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	08/25/21 10:43	08/26/21 03:11	1
1,4-Difluorobenzene (Surr)	97		70 - 130	08/25/21 10:43	08/26/21 03:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/25/21 10:12	08/25/21 19:46	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/25/21 10:12	08/25/21 19:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/25/21 10:12	08/25/21 19:46	1
Total TPH	<49.8	U	49.8		mg/Kg		08/25/21 10:12	08/25/21 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	08/25/21 10:12	08/25/21 19:46	1
o-Terphenyl	110		70 - 130	08/25/21 10:12	08/25/21 19:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.4		4.97		mg/Kg			08/26/21 19:57	1

Client Sample ID: BH06

Lab Sample ID: 880-5425-11

Date Collected: 08/24/21 12:05

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 04:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 04:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 04:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 04:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/25/21 10:43	08/26/21 04:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 04:32	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/25/21 10:43	08/26/21 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	153	S1+	70 - 130	08/25/21 10:43	08/26/21 04:32	1
1,4-Difluorobenzene (Surr)	110		70 - 130	08/25/21 10:43	08/26/21 04:32	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH06

Lab Sample ID: 880-5425-11

Date Collected: 08/24/21 12:05

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:07	1
Total TPH	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	08/25/21 10:12	08/25/21 20:07	1
o-Terphenyl	126		70 - 130	08/25/21 10:12	08/25/21 20:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.5		4.96		mg/Kg			08/26/21 20:02	1

Client Sample ID: BH06A

Lab Sample ID: 880-5425-12

Date Collected: 08/24/21 12:10

Matrix: Solid

Date Received: 08/25/21 09:53

Sample Depth: 4'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 04:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 04:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 04:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/25/21 10:43	08/26/21 04:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/26/21 04:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/25/21 10:43	08/26/21 04:52	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/25/21 10:43	08/26/21 04:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130	08/25/21 10:43	08/26/21 04:52	1
1,4-Difluorobenzene (Surr)	105		70 - 130	08/25/21 10:43	08/26/21 04:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:28	1
Total TPH	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	08/25/21 10:12	08/25/21 20:28	1
o-Terphenyl	114		70 - 130	08/25/21 10:12	08/25/21 20:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.8		4.95		mg/Kg			08/26/21 20:08	1

Eurofins Xenco, Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-5425-1	BH01	95	84
880-5425-1 MS	BH01	134 S1+	93
880-5425-1 MSD	BH01	116	104
880-5425-2	BH01A	124	98
880-5425-3	BH02	128	105
880-5425-4	BH02A	126	99
880-5425-5	BH03	124	73
880-5425-6	BH03A	131 S1+	98
880-5425-7	BH04	141 S1+	103
880-5425-8	BH04A	138 S1+	98
880-5425-9	BH05	130	98
880-5425-10	BH05A	131 S1+	97
880-5425-11	BH06	153 S1+	110
880-5425-12	BH06A	141 S1+	105
LCS 880-7057/1-A	Lab Control Sample	113	106
LCSD 880-7057/2-A	Lab Control Sample Dup	109	93
MB 880-7029/5-A	Method Blank	97	102
MB 880-7057/5-A	Method Blank	109	97
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-5369-A-1-E MS	Matrix Spike	75	70
880-5369-A-1-F MSD	Matrix Spike Duplicate	71	65 S1-
880-5425-1	BH01	85	97
880-5425-1 MS	BH01	82	87
880-5425-1 MSD	BH01	82	87
880-5425-2	BH01A	85	96
880-5425-3	BH02	104	116
880-5425-4	BH02A	102	118
880-5425-5	BH03	85	98
880-5425-6	BH03A	83	95
880-5425-7	BH04	85	97
880-5425-8	BH04A	95	102
880-5425-9	BH05	73	80
880-5425-10	BH05A	99	110
880-5425-11	BH06	113	126
880-5425-12	BH06A	103	114
880-5857-A-1-H MS	Matrix Spike	92	94
880-5857-A-1-I MSD	Matrix Spike Duplicate	94	96
890-1190-A-1-F MS	Matrix Spike	89	69 S1-
890-1190-A-1-G MSD	Matrix Spike Duplicate	91	72
LCS 880-7053/2-A	Lab Control Sample	89	92

Eurofins Xenco, Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
LCS 880-7115/2-A	Lab Control Sample	85	90
LCS 880-7363/2-A	Lab Control Sample	126	141 S1+
LCS 880-7663/2-A	Lab Control Sample	102	111
LCSD 880-7053/3-A	Lab Control Sample Dup	93	96
LCSD 880-7115/3-A	Lab Control Sample Dup	87	93
LCSD 880-7363/3-A	Lab Control Sample Dup	87	96
LCSD 880-7663/3-A	Lab Control Sample Dup	96	104
MB 880-7053/1-A	Method Blank	98	113
MB 880-7115/1-A	Method Blank	86	98
MB 880-7363/1-A	Method Blank	67 S1-	67 S1-
MB 880-7663/1-A	Method Blank	94	110

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7029/5-A

Matrix: Solid

Analysis Batch: 7042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7029

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/24/21 16:46	08/25/21 12:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/24/21 16:46	08/25/21 12:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/24/21 16:46	08/25/21 12:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/24/21 16:46	08/25/21 12:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/24/21 16:46	08/25/21 12:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/24/21 16:46	08/25/21 12:54	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/24/21 16:46	08/25/21 12:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	08/24/21 16:46	08/25/21 12:54	1
1,4-Difluorobenzene (Surr)	102		70 - 130	08/24/21 16:46	08/25/21 12:54	1

Lab Sample ID: MB 880-7057/5-A

Matrix: Solid

Analysis Batch: 7042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/25/21 23:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/25/21 23:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/25/21 23:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/25/21 10:43	08/25/21 23:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/25/21 10:43	08/25/21 23:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/25/21 10:43	08/25/21 23:46	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/25/21 10:43	08/25/21 23:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	08/25/21 10:43	08/25/21 23:46	1
1,4-Difluorobenzene (Surr)	97		70 - 130	08/25/21 10:43	08/25/21 23:46	1

Lab Sample ID: LCS 880-7057/1-A

Matrix: Solid

Analysis Batch: 7042

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08469		mg/Kg		85	70 - 130
Toluene	0.100	0.08501		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08017		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1686		mg/Kg		84	70 - 130
o-Xylene	0.100	0.08535		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Lab Sample ID: LCSD 880-7057/2-A

Matrix: Solid

Analysis Batch: 7042

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7057

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07953		mg/Kg		80	70 - 130	6	35
Toluene	0.100	0.08027		mg/Kg		80	70 - 130	6	35
Ethylbenzene	0.100	0.07757		mg/Kg		78	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1629		mg/Kg		81	70 - 130	3	35
o-Xylene	0.100	0.08198		mg/Kg		82	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 880-5425-1 MS

Matrix: Solid

Analysis Batch: 7042

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 7057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0998	0.07239		mg/Kg		72	70 - 130		
Toluene	<0.00198	U	0.0998	0.09185		mg/Kg		90	70 - 130		
Ethylbenzene	<0.00198	U	0.0998	0.08219		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00397	U	0.200	0.1685		mg/Kg		84	70 - 130		
o-Xylene	<0.00198	U	0.0998	0.08876		mg/Kg		88	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 880-5425-1 MSD

Matrix: Solid

Analysis Batch: 7042

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 7057

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0994	0.08393		mg/Kg		84	70 - 130	15	35
Toluene	<0.00198	U	0.0994	0.07659		mg/Kg		75	70 - 130	18	35
Ethylbenzene	<0.00198	U	0.0994	0.07062		mg/Kg		71	70 - 130	15	35
m-Xylene & p-Xylene	<0.00397	U	0.199	0.1472		mg/Kg		73	70 - 130	13	35
o-Xylene	<0.00198	U	0.0994	0.07509		mg/Kg		75	70 - 130	17	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Lab Sample ID: MB 880-7053/1-A

Matrix: Solid

Analysis Batch: 7038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 11:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 11:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 11:32	1
Total TPH	<50.0	U	50.0		mg/Kg		08/25/21 10:12	08/25/21 11:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	08/25/21 10:12	08/25/21 11:32	1
o-Terphenyl	113		70 - 130	08/25/21 10:12	08/25/21 11:32	1

Lab Sample ID: LCS 880-7053/2-A

Matrix: Solid

Analysis Batch: 7038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	979.2		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	850.4		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: LCSD 880-7053/3-A

Matrix: Solid

Analysis Batch: 7038

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7053

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1044		mg/Kg		104	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	895.0		mg/Kg		89	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 880-5369-A-1-E MS

Matrix: Solid

Analysis Batch: 7038

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	950.3		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	801.8		mg/Kg		81	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Lab Sample ID: 880-5369-A-1-E MS

Matrix: Solid

Analysis Batch: 7038

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7053

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	70		70 - 130

Lab Sample ID: 880-5369-A-1-F MSD

Matrix: Solid

Analysis Batch: 7038

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	904.0		mg/Kg		91	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	762.3		mg/Kg		76	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	65	S1-	70 - 130

Lab Sample ID: MB 880-7115/1-A

Matrix: Solid

Analysis Batch: 7099

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 11:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 11:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 11:28	1
Total TPH	<50.0	U	50.0		mg/Kg		08/26/21 09:55	08/26/21 11:28	1

	MB	MB					Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	86		70 - 130				08/26/21 09:55	08/26/21 11:28	1
o-Terphenyl	98		70 - 130				08/26/21 09:55	08/26/21 11:28	1

Lab Sample ID: LCS 880-7115/2-A

Matrix: Solid

Analysis Batch: 7099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	894.7		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	910.1		mg/Kg		91	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	90		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Lab Sample ID: LCSD 880-7115/3-A

Matrix: Solid

Analysis Batch: 7099

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7115

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	839.1		mg/Kg		84	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	923.4		mg/Kg		92	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	87		70 - 130						
o-Terphenyl	93		70 - 130						

Lab Sample ID: 880-5425-1 MS

Matrix: Solid

Analysis Batch: 7099

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 7115

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	879.7		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	995	857.5		mg/Kg		84	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	82		70 - 130								
o-Terphenyl	87		70 - 130								

Lab Sample ID: 880-5425-1 MSD

Matrix: Solid

Analysis Batch: 7099

Client Sample ID: BH01

Prep Type: Total/NA

Prep Batch: 7115

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	838.7		mg/Kg		84	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	858.2		mg/Kg		83	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	82		70 - 130								
o-Terphenyl	87		70 - 130								

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

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7363

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

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

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

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7363

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

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

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7363

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

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

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

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7363

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

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

Lab Sample ID: 890-1190-A-1-F MS

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7363

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

Surrogate	MS	MS	Limits
%Recovery	Qualifier		
1-Chlorooctane	89		70 - 130
o-Terphenyl	69	S1-	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Lab Sample ID: 890-1190-A-1-G MSD

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7363

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	3660	F1	998	5715	F1	mg/Kg		206	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	448		998	1276		mg/Kg		83	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	91		70 - 130								
o-Terphenyl	72		70 - 130								

Lab Sample ID: MB 880-7663/1-A

Matrix: Solid

Analysis Batch: 7628

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7663

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/21 14:58	09/08/21 20:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/21 14:58	09/08/21 20:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/21 14:58	09/08/21 20:13	1
Total TPH	<50.0	U	50.0		mg/Kg		09/08/21 14:58	09/08/21 20:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				09/08/21 14:58	09/08/21 20:13	1
o-Terphenyl	110		70 - 130				09/08/21 14:58	09/08/21 20:13	1

Lab Sample ID: LCS 880-7663/2-A

Matrix: Solid

Analysis Batch: 7628

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7663

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	883.3		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	970.5		mg/Kg		97	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	111		70 - 130						

Lab Sample ID: LCSD 880-7663/3-A

Matrix: Solid

Analysis Batch: 7628

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7663

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	794.2		mg/Kg		79	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	911.3		mg/Kg		91	70 - 130	6	20

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Lab Sample ID: LCSD 880-7663/3-A

Matrix: Solid

Analysis Batch: 7628

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7663

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 880-5857-A-1-H MS

Matrix: Solid

Analysis Batch: 7628

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7663

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	772.6		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	861.4		mg/Kg		87	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-5857-A-1-I MSD

Matrix: Solid

Analysis Batch: 7628

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7663

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	810.7		mg/Kg		81	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	902.4		mg/Kg		90	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	96		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7056/1-A

Matrix: Solid

Analysis Batch: 7135

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/26/21 18:38	1

Lab Sample ID: LCS 880-7056/2-A

Matrix: Solid

Analysis Batch: 7135

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	270.2		mg/Kg		108	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-7056/3-A

Matrix: Solid

Analysis Batch: 7135

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	270.2		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 880-5425-3 MS

Matrix: Solid

Analysis Batch: 7135

Client Sample ID: BH02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	21.7		248	282.5		mg/Kg		105	90 - 110		

Lab Sample ID: 880-5425-3 MSD

Matrix: Solid

Analysis Batch: 7135

Client Sample ID: BH02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	21.7		248	281.7		mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-7059/1-A

Matrix: Solid

Analysis Batch: 7191

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/27/21 23:14	1

Lab Sample ID: LCS 880-7059/2-A

Matrix: Solid

Analysis Batch: 7191

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	242.2		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-7059/3-A

Matrix: Solid

Analysis Batch: 7191

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	247.6		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 880-5423-A-1-B MS

Matrix: Solid

Analysis Batch: 7191

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12.3		252	279.1		mg/Kg		106	90 - 110		

Lab Sample ID: 880-5423-A-1-C MSD

Matrix: Solid

Analysis Batch: 7191

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12.3		252	263.8		mg/Kg		100	90 - 110	6	20

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

GC VOA

Prep Batch: 7029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7029/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 7042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-1	BH01	Total/NA	Solid	8021B	7057
880-5425-2	BH01A	Total/NA	Solid	8021B	7057
880-5425-3	BH02	Total/NA	Solid	8021B	7057
880-5425-4	BH02A	Total/NA	Solid	8021B	7057
880-5425-5	BH03	Total/NA	Solid	8021B	7057
880-5425-6	BH03A	Total/NA	Solid	8021B	7057
880-5425-7	BH04	Total/NA	Solid	8021B	7057
880-5425-8	BH04A	Total/NA	Solid	8021B	7057
880-5425-9	BH05	Total/NA	Solid	8021B	7057
880-5425-10	BH05A	Total/NA	Solid	8021B	7057
880-5425-11	BH06	Total/NA	Solid	8021B	7057
880-5425-12	BH06A	Total/NA	Solid	8021B	7057
MB 880-7029/5-A	Method Blank	Total/NA	Solid	8021B	7029
MB 880-7057/5-A	Method Blank	Total/NA	Solid	8021B	7057
LCS 880-7057/1-A	Lab Control Sample	Total/NA	Solid	8021B	7057
LCSD 880-7057/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7057
880-5425-1 MS	BH01	Total/NA	Solid	8021B	7057
880-5425-1 MSD	BH01	Total/NA	Solid	8021B	7057

Prep Batch: 7057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-1	BH01	Total/NA	Solid	5035	
880-5425-2	BH01A	Total/NA	Solid	5035	
880-5425-3	BH02	Total/NA	Solid	5035	
880-5425-4	BH02A	Total/NA	Solid	5035	
880-5425-5	BH03	Total/NA	Solid	5035	
880-5425-6	BH03A	Total/NA	Solid	5035	
880-5425-7	BH04	Total/NA	Solid	5035	
880-5425-8	BH04A	Total/NA	Solid	5035	
880-5425-9	BH05	Total/NA	Solid	5035	
880-5425-10	BH05A	Total/NA	Solid	5035	
880-5425-11	BH06	Total/NA	Solid	5035	
880-5425-12	BH06A	Total/NA	Solid	5035	
MB 880-7057/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7057/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7057/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5425-1 MS	BH01	Total/NA	Solid	5035	
880-5425-1 MSD	BH01	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 7038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-8	BH04A	Total/NA	Solid	8015B NM	7053
880-5425-10	BH05A	Total/NA	Solid	8015B NM	7053
880-5425-11	BH06	Total/NA	Solid	8015B NM	7053
880-5425-12	BH06A	Total/NA	Solid	8015B NM	7053

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

GC Semi VOA (Continued)

Analysis Batch: 7038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7053/1-A	Method Blank	Total/NA	Solid	8015B NM	7053
LCS 880-7053/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7053
LCSD 880-7053/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7053
880-5369-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	7053
880-5369-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7053

Prep Batch: 7053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-8	BH04A	Total/NA	Solid	8015NM Prep	
880-5425-10	BH05A	Total/NA	Solid	8015NM Prep	
880-5425-11	BH06	Total/NA	Solid	8015NM Prep	
880-5425-12	BH06A	Total/NA	Solid	8015NM Prep	
MB 880-7053/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7053/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7053/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5369-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5369-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 7099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-1	BH01	Total/NA	Solid	8015B NM	7115
880-5425-2	BH01A	Total/NA	Solid	8015B NM	7115
880-5425-5	BH03	Total/NA	Solid	8015B NM	7115
880-5425-6	BH03A	Total/NA	Solid	8015B NM	7115
880-5425-7	BH04	Total/NA	Solid	8015B NM	7115
MB 880-7115/1-A	Method Blank	Total/NA	Solid	8015B NM	7115
LCS 880-7115/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7115
LCSD 880-7115/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7115
880-5425-1 MS	BH01	Total/NA	Solid	8015B NM	7115
880-5425-1 MSD	BH01	Total/NA	Solid	8015B NM	7115

Prep Batch: 7115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-1	BH01	Total/NA	Solid	8015NM Prep	
880-5425-2	BH01A	Total/NA	Solid	8015NM Prep	
880-5425-5	BH03	Total/NA	Solid	8015NM Prep	
880-5425-6	BH03A	Total/NA	Solid	8015NM Prep	
880-5425-7	BH04	Total/NA	Solid	8015NM Prep	
MB 880-7115/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7115/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7115/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5425-1 MS	BH01	Total/NA	Solid	8015NM Prep	
880-5425-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 7359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-9	BH05	Total/NA	Solid	8015B NM	7363
MB 880-7363/1-A	Method Blank	Total/NA	Solid	8015B NM	7363
LCS 880-7363/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7363
LCSD 880-7363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7363
890-1190-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	7363

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

GC Semi VOA (Continued)

Analysis Batch: 7359 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1190-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7363

Prep Batch: 7363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-9	BH05	Total/NA	Solid	8015NM Prep	
MB 880-7363/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7363/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7363/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1190-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1190-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 7628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-3	BH02	Total/NA	Solid	8015B NM	7663
880-5425-4	BH02A	Total/NA	Solid	8015B NM	7663
MB 880-7663/1-A	Method Blank	Total/NA	Solid	8015B NM	7663
LCS 880-7663/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7663
LCSD 880-7663/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7663
880-5857-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	7663
880-5857-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7663

Prep Batch: 7663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-3	BH02	Total/NA	Solid	8015NM Prep	
880-5425-4	BH02A	Total/NA	Solid	8015NM Prep	
MB 880-7663/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7663/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7663/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5857-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5857-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-3	BH02	Soluble	Solid	DI Leach	
880-5425-4	BH02A	Soluble	Solid	DI Leach	
880-5425-5	BH03	Soluble	Solid	DI Leach	
880-5425-6	BH03A	Soluble	Solid	DI Leach	
880-5425-7	BH04	Soluble	Solid	DI Leach	
880-5425-8	BH04A	Soluble	Solid	DI Leach	
880-5425-9	BH05	Soluble	Solid	DI Leach	
880-5425-10	BH05A	Soluble	Solid	DI Leach	
880-5425-11	BH06	Soluble	Solid	DI Leach	
880-5425-12	BH06A	Soluble	Solid	DI Leach	
MB 880-7056/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7056/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7056/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5425-3 MS	BH02	Soluble	Solid	DI Leach	
880-5425-3 MSD	BH02	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

HPLC/IC

Leach Batch: 7059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-1	BH01	Soluble	Solid	DI Leach	
880-5425-2	BH01A	Soluble	Solid	DI Leach	
MB 880-7059/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7059/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7059/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5423-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5423-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 7135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-3	BH02	Soluble	Solid	300.0	7056
880-5425-4	BH02A	Soluble	Solid	300.0	7056
880-5425-5	BH03	Soluble	Solid	300.0	7056
880-5425-6	BH03A	Soluble	Solid	300.0	7056
880-5425-7	BH04	Soluble	Solid	300.0	7056
880-5425-8	BH04A	Soluble	Solid	300.0	7056
880-5425-9	BH05	Soluble	Solid	300.0	7056
880-5425-10	BH05A	Soluble	Solid	300.0	7056
880-5425-11	BH06	Soluble	Solid	300.0	7056
880-5425-12	BH06A	Soluble	Solid	300.0	7056
MB 880-7056/1-A	Method Blank	Soluble	Solid	300.0	7056
LCS 880-7056/2-A	Lab Control Sample	Soluble	Solid	300.0	7056
LCSD 880-7056/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7056
880-5425-3 MS	BH02	Soluble	Solid	300.0	7056
880-5425-3 MSD	BH02	Soluble	Solid	300.0	7056

Analysis Batch: 7191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5425-1	BH01	Soluble	Solid	300.0	7059
880-5425-2	BH01A	Soluble	Solid	300.0	7059
MB 880-7059/1-A	Method Blank	Soluble	Solid	300.0	7059
LCS 880-7059/2-A	Lab Control Sample	Soluble	Solid	300.0	7059
LCSD 880-7059/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7059
880-5423-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	7059
880-5423-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7059

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH01

Date Collected: 08/24/21 11:15

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 00:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7115	08/26/21 09:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7099	08/26/21 12:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7059	08/25/21 10:48	CH	XEN MID
Soluble	Analysis	300.0		1			7191	08/27/21 23:48	CH	XEN MID

Client Sample ID: BH01A

Date Collected: 08/24/21 11:20

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-2

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	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 00:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7115	08/26/21 09:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7099	08/26/21 16:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7059	08/25/21 10:48	CH	XEN MID
Soluble	Analysis	300.0		1			7191	08/27/21 23:54	CH	XEN MID

Client Sample ID: BH02

Date Collected: 08/24/21 11:25

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-3

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			5.03 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 00:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7663	09/08/21 14:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7628	09/09/21 04:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 18:55	CH	XEN MID

Client Sample ID: BH02A

Date Collected: 08/24/21 11:30

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 01:08	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7663	09/08/21 14:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7628	09/09/21 04:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:12	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH03

Date Collected: 08/24/21 11:35

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 01:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7115	08/26/21 09:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7099	08/26/21 17:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:18	CH	XEN MID

Client Sample ID: BH03A

Date Collected: 08/24/21 11:40

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 01:49	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7115	08/26/21 09:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7099	08/26/21 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:23	CH	XEN MID

Client Sample ID: BH04

Date Collected: 08/24/21 11:45

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 02:10	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7115	08/26/21 09:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7099	08/26/21 18:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:29	CH	XEN MID

Client Sample ID: BH04A

Date Collected: 08/24/21 11:50

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-8

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			4.97 g	5 mL	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 02:30	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	7053	08/25/21 10:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7038	08/25/21 19:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:46	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

Client Sample ID: BH05

Date Collected: 08/24/21 11:55

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-9

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	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 02:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	7363	09/01/21 08:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7359	09/01/21 21:12	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:51	CH	XEN MID

Client Sample ID: BH05A

Date Collected: 08/24/21 12:00

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-10

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	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 03:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7053	08/25/21 10:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7038	08/25/21 19:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 19:57	CH	XEN MID

Client Sample ID: BH06

Date Collected: 08/24/21 12:05

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-11

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	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 04:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7053	08/25/21 10:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7038	08/25/21 20:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 20:02	CH	XEN MID

Client Sample ID: BH06A

Date Collected: 08/24/21 12:10

Date Received: 08/25/21 09:53

Lab Sample ID: 880-5425-12

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	7057	08/25/21 10:43	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7042	08/26/21 04:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	7053	08/25/21 10:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7038	08/25/21 20:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7056	08/25/21 10:43	CH	XEN MID
Soluble	Analysis	300.0		1			7135	08/26/21 20:08	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Eurofins Xenco, Midland

Method Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

Job ID: 880-5425-1

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: EMSU B925

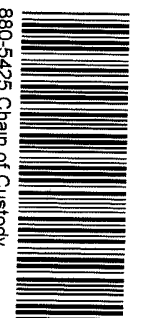
Job ID: 880-5425-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-5425-1	BH01	Solid	08/24/21 11:15	08/25/21 09:53	2'
880-5425-2	BH01A	Solid	08/24/21 11:20	08/25/21 09:53	4'
880-5425-3	BH02	Solid	08/24/21 11:25	08/25/21 09:53	2'
880-5425-4	BH02A	Solid	08/24/21 11:30	08/25/21 09:53	4'
880-5425-5	BH03	Solid	08/24/21 11:35	08/25/21 09:53	2'
880-5425-6	BH03A	Solid	08/24/21 11:40	08/25/21 09:53	4'
880-5425-7	BH04	Solid	08/24/21 11:45	08/25/21 09:53	1'
880-5425-8	BH04A	Solid	08/24/21 11:50	08/25/21 09:53	4'
880-5425-9	BH05	Solid	08/24/21 11:55	08/25/21 09:53	1'
880-5425-10	BH05A	Solid	08/24/21 12:00	08/25/21 09:53	4'
880-5425-11	BH06	Solid	08/24/21 12:05	08/25/21 09:53	1'
880-5425-12	BH06A	Solid	08/24/21 12:10	08/25/21 09:53	4'



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

Chain of Custody



880-5425 Chain of Custody

Project Manager	<i>Tasuma Morrissey</i>	Bill to (if different)	<i>Tasuma Morrissey</i>
Company Name	<i>WSP USA</i>	Company Name	<i>WSP USA</i>
Address	3300 North A Street	Address	3300 North A Street
City, State ZIP	Midland, TX 79705	City, State ZIP	Midland, TX 79705
Phone	432 704 5178	Email	

Program: <input checked="" type="checkbox"/> UST/PST <input checked="" type="checkbox"/> RP <input type="checkbox"/> Brownfields <input type="checkbox"/> C <input type="checkbox"/> perfund <input type="checkbox"/> State of Project:	
Reporting Level II	<input checked="" type="checkbox"/> Level III <input type="checkbox"/> I/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input checked="" type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	<i>EMSV B925</i>	Turn Around	
Project Number	<i>3403551.000</i>	Routine	<input checked="" type="checkbox"/>
P O Number		Rush	
Sampler's Name	<i>Kaleb Henry</i>	Due Date	
SAMPLE RECEIPT			
Temperature (°C)	<i>3.1/3.4</i>	Temp Blank	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Received Intact	<i>Yes</i>	Thermometer ID	<i>128</i>
Cooler Custody Seals	<i>Yes</i>	Correction Factor	<i>0.5</i>
Sample Custody Seals	<i>Yes</i>	Total Containers	
ANALYSIS REQUEST			
Sample Identification	Matrix	Date Sampled	Time Sampled
<i>BH01</i>	<i>S</i>	<i>8/24</i>	<i>11:15</i>
<i>BH01A</i>			<i>2'</i>
<i>BH02</i>			<i>11:20</i>
<i>BH02A</i>			<i>11:25</i>
<i>BH02A</i>			<i>11:30</i>
<i>BH03</i>			<i>11:35</i>
<i>BH03A</i>			<i>11:40</i>
<i>BH04</i>			<i>11:45</i>
<i>BH04A</i>			<i>11:50</i>
<i>BH05</i>			<i>11:55</i>
<i>BH05A</i>			<i>12:00</i>
Number of Containers			
<i>2</i>			
<i>TPH (EPA 8015)</i>			
<i>BTEX (EPA 8021B)</i>			
<i>Chloride (EPA 300.0)</i>			
Work Order Notes			
TAT starts the day received by the lab if received by 4 30pm			
Sample Comments			

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	<i>8:35:21</i>			
		<i>9/31</i>			



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Midland TX (432-704-5440) EL Paso TX (915)555-3443 Lubbock, TX (806)794-1296
Phoenix,AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL (813)
Hobbs NM (575-392-7550)

Chain of Custody

Loc: 880
5425
Work Or

Project Manager	Tacong Morrissey		Bill to (if different)	11	4
Company Name	WSP USA		Company Name	11	4
Address	3300 North A Street		Address	3300 North A Street	
City, State ZIP	Midland, TX 79705		City, State ZIP	Midland, Tx 79705	
Phone	432 704 5178	Email			

Work Order Comments				
Program: UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> C	<input type="checkbox"/> \$ <input type="checkbox"/> perfund
State of Project:				
Reporting Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> T <input type="checkbox"/> RP	<input type="checkbox"/> L <input type="checkbox"/> el IV
Deliverables	EDD	<input type="checkbox"/>	ADaPT	<input type="checkbox"/> Other

[illegible][illegible]

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	8 26 21			
		9 5 1			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-5425-1

Login Number: 5425

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1252-1

Laboratory Sample Delivery Group: 31403551

Client Project/Site: EMSU B 925

For:

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

Attn: Tacoma Morrissey

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

Authorized for release by:
9/16/2021 9:22:25 AM

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

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

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

Client: WSP USA Inc.
Project/Site: EMSU B 925

Laboratory Job ID: 890-1252-1
SDG: 31403551

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Job ID: 890-1252-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-1252-1****Receipt**

The samples were received on 9/14/2021 1:27 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA

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: SW01 (890-1252-2). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Client Sample ID: FS01

Lab Sample ID: 890-1252-1

Date Collected: 09/13/21 14:55

Matrix: Solid

Date Received: 09/14/21 13:27

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/15/21 11:00	09/15/21 12:01	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/15/21 11:00	09/15/21 12:01	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/15/21 11:00	09/15/21 12:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/15/21 11:00	09/15/21 12:01	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/15/21 11:00	09/15/21 12:01	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/15/21 11:00	09/15/21 12:01	1
Total BTEX	<0.00396	U	0.00396	mg/Kg		09/15/21 11:00	09/15/21 12:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/15/21 11:00	09/15/21 12:01	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/15/21 11:00	09/15/21 12:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/15/21 14:30	09/15/21 14:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		09/15/21 14:30	09/15/21 14:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 14:30	09/15/21 14:52	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 14:30	09/15/21 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/15/21 14:30	09/15/21 14:52	1
o-Terphenyl	128		70 - 130	09/15/21 14:30	09/15/21 14:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3	F1	5.05	mg/Kg			09/15/21 14:43	1

Client Sample ID: SW01

Lab Sample ID: 890-1252-2

Date Collected: 09/13/21 14:56

Matrix: Solid

Date Received: 09/14/21 13:27

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:00	09/15/21 12:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:00	09/15/21 12:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:00	09/15/21 12:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/15/21 11:00	09/15/21 12:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/15/21 11:00	09/15/21 12:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/15/21 11:00	09/15/21 12:21	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/15/21 11:00	09/15/21 12:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/15/21 11:00	09/15/21 12:21	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/15/21 11:00	09/15/21 12:21	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Client Sample ID: SW01

Lab Sample ID: 890-1252-2

Date Collected: 09/13/21 14:56

Matrix: Solid

Date Received: 09/14/21 13:27

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U *	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:14	1
Total TPH	<49.8	U	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130	09/15/21 15:00	09/15/21 15:14	1
o-Terphenyl	149	S1+	70 - 130	09/15/21 15:00	09/15/21 15:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.5		4.95	mg/Kg			09/15/21 15:00	1

Client Sample ID: SW02

Lab Sample ID: 890-1252-3

Date Collected: 09/13/21 14:58

Matrix: Solid

Date Received: 09/14/21 13:27

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/15/21 11:00	09/15/21 12:41	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/15/21 11:00	09/15/21 12:41	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/15/21 11:00	09/15/21 12:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/15/21 11:00	09/15/21 12:41	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/15/21 11:00	09/15/21 12:41	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/15/21 11:00	09/15/21 12:41	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		09/15/21 11:00	09/15/21 12:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/15/21 11:00	09/15/21 12:41	1
1,4-Difluorobenzene (Surr)	110		70 - 130	09/15/21 11:00	09/15/21 12:41	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		09/15/21 15:00	09/15/21 15:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		09/15/21 15:00	09/15/21 15:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 15:00	09/15/21 15:35	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 15:00	09/15/21 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/15/21 15:00	09/15/21 15:35	1
o-Terphenyl	108		70 - 130	09/15/21 15:00	09/15/21 15:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.2		5.03	mg/Kg			09/15/21 15:06	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Client Sample ID: SW03

Lab Sample ID: 890-1252-4

Date Collected: 09/13/21 15:00

Matrix: Solid

Date Received: 09/14/21 13:27

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		09/15/21 11:00	09/15/21 13:02	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:00	09/15/21 13:02	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:00	09/15/21 13:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/15/21 11:00	09/15/21 13:02	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:00	09/15/21 13:02	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/15/21 11:00	09/15/21 13:02	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/15/21 11:00	09/15/21 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/15/21 11:00	09/15/21 13:02	1
1,4-Difluorobenzene (Surr)	108		70 - 130	09/15/21 11:00	09/15/21 13:02	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		09/15/21 15:00	09/15/21 15:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U *	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:55	1
Total TPH	<49.8	U	49.8	mg/Kg		09/15/21 15:00	09/15/21 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/15/21 15:00	09/15/21 15:55	1
o-Terphenyl	114		70 - 130	09/15/21 15:00	09/15/21 15:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.4		5.04	mg/Kg			09/15/21 15:11	1

Client Sample ID: SW04

Lab Sample ID: 890-1252-5

Date Collected: 09/13/21 15:02

Matrix: Solid

Date Received: 09/14/21 13:27

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		09/15/21 11:00	09/15/21 13:22	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:00	09/15/21 13:22	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:00	09/15/21 13:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/15/21 11:00	09/15/21 13:22	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/15/21 11:00	09/15/21 13:22	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/15/21 11:00	09/15/21 13:22	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		09/15/21 11:00	09/15/21 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/15/21 11:00	09/15/21 13:22	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/15/21 11:00	09/15/21 13:22	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Client Sample ID: SW04

Lab Sample ID: 890-1252-5

Date Collected: 09/13/21 15:02

Matrix: Solid

Date Received: 09/14/21 13:27

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/15/21 15:00	09/15/21 16:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		09/15/21 15:00	09/15/21 16:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 15:00	09/15/21 16:16	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 15:00	09/15/21 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	09/15/21 15:00	09/15/21 16:16	1
o-Terphenyl	117		70 - 130	09/15/21 15:00	09/15/21 16:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.8		5.00	mg/Kg			09/15/21 15:17	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-6055-A-1-C MS	Matrix Spike	113	92
880-6055-A-1-D MSD	Matrix Spike Duplicate	117	86
890-1252-1	FS01	104	103
890-1252-2	SW01	105	100
890-1252-3	SW02	106	110
890-1252-4	SW03	108	108
890-1252-5	SW04	116	102
LCS 880-7888/1-A	Lab Control Sample	103	90
LCSD 880-7888/2-A	Lab Control Sample Dup	100	90
MB 880-7878/5-A	Method Blank	129	100
MB 880-7881/39	Method Blank	123	98
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-6143-A-1-F MS	Matrix Spike	83	77
880-6143-A-1-G MSD	Matrix Spike Duplicate	83	76
890-1252-1	FS01	109	128
890-1252-2	SW01	128	149 S1+
890-1252-3	SW02	99	108
890-1252-4	SW03	105	114
890-1252-5	SW04	111	117
LCS 880-7930/2-A	Lab Control Sample	90	88
LCSD 880-7930/3-A	Lab Control Sample Dup	91	91
MB 880-7930/1-A	Method Blank	95	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7878/5-A

Matrix: Solid

Analysis Batch: 7881

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7878

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/14/21 11:16	09/14/21 17:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/14/21 11:16	09/14/21 17:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/14/21 11:16	09/14/21 17:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/14/21 11:16	09/14/21 17:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/14/21 11:16	09/14/21 17:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/14/21 11:16	09/14/21 17:01	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		09/14/21 11:16	09/14/21 17:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	09/14/21 11:16	09/14/21 17:01	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/14/21 11:16	09/14/21 17:01	1

Lab Sample ID: MB 880-7881/39

Matrix: Solid

Analysis Batch: 7881

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			09/15/21 04:37	1
Toluene	<0.00200	U	0.00200	mg/Kg			09/15/21 04:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			09/15/21 04:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			09/15/21 04:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			09/15/21 04:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			09/15/21 04:37	1
Total BTEX	<0.00400	U	0.00400	mg/Kg			09/15/21 04:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130		09/15/21 04:37	1
1,4-Difluorobenzene (Surr)	98		70 - 130		09/15/21 04:37	1

Lab Sample ID: LCS 880-7888/1-A

Matrix: Solid

Analysis Batch: 7881

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08771		mg/Kg		88	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1052		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.1877		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09521		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

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

Lab Sample ID: LCSD 880-7888/2-A

Matrix: Solid

Analysis Batch: 7881

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7888

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08560		mg/Kg		86	70 - 130	2	35
Toluene	0.100	0.09932		mg/Kg		99	70 - 130	2	35
Ethylbenzene	0.100	0.1030		mg/Kg		103	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1854		mg/Kg		93	70 - 130	1	35
o-Xylene	0.100	0.09370		mg/Kg		94	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 880-6055-A-1-C MS

Matrix: Solid

Analysis Batch: 7881

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7888

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.07442		mg/Kg		74	70 - 130		
Toluene	<0.00199	U	0.100	0.08327		mg/Kg		83	70 - 130		
Ethylbenzene	0.00236		0.100	0.08393		mg/Kg		81	70 - 130		
m-Xylene & p-Xylene	0.00546		0.200	0.1488		mg/Kg		72	70 - 130		
o-Xylene	0.00832		0.100	0.07984		mg/Kg		71	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-6055-A-1-D MSD

Matrix: Solid

Analysis Batch: 7881

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7888

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0996	0.07844		mg/Kg		79	70 - 130	5	35
Toluene	<0.00199	U	0.0996	0.09275		mg/Kg		93	70 - 130	11	35
Ethylbenzene	0.00236		0.0996	0.1034		mg/Kg		101	70 - 130	21	35
m-Xylene & p-Xylene	0.00546		0.199	0.1558		mg/Kg		75	70 - 130	5	35
o-Xylene	0.00832		0.0996	0.08219		mg/Kg		74	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

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

Lab Sample ID: MB 880-7930/1-A

Matrix: Solid

Analysis Batch: 7905

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7930

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/15/21 11:54	09/15/21 12:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/15/21 11:54	09/15/21 12:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/21 11:54	09/15/21 12:04	1
Total TPH	<50.0	U	50.0	mg/Kg		09/15/21 11:54	09/15/21 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	09/15/21 11:54	09/15/21 12:04	1
o-Terphenyl	109		70 - 130	09/15/21 11:54	09/15/21 12:04	1

Lab Sample ID: LCS 880-7930/2-A

Matrix: Solid

Analysis Batch: 7905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	749.2		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	736.7		mg/Kg		74	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: LCSD 880-7930/3-A

Matrix: Solid

Analysis Batch: 7905

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7930

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	852.2		mg/Kg		85	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	769.5		mg/Kg		77	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 880-6143-A-1-F MS

Matrix: Solid

Analysis Batch: 7905

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7930

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	863.4		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U F1 *-	997	672.1	F1	mg/Kg		66	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

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

Lab Sample ID: 880-6143-A-1-F MS

Matrix: Solid

Analysis Batch: 7905

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7930

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	77		70 - 130

Lab Sample ID: 880-6143-A-1-G MSD

Matrix: Solid

Analysis Batch: 7905

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7930

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	846.5		mg/Kg		85	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1 *-	999	678.8	F1	mg/Kg		66	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	83		70 - 130								
o-Terphenyl	76		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7938/1-A

Matrix: Solid

Analysis Batch: 7939

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00	mg/Kg			09/15/21 14:26	1		

Lab Sample ID: LCS 880-7938/2-A

Matrix: Solid

Analysis Batch: 7939

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	245.5		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-7938/3-A

Matrix: Solid

Analysis Batch: 7939

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	253	263.1		mg/Kg		104	90 - 110	7	20

Lab Sample ID: 890-1252-1 MS

Matrix: Solid

Analysis Batch: 7939

Client Sample ID: FS01

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	17.3	F1	253	299.7	F1	mg/Kg		112	90 - 110	

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1252-1 MSD					Client Sample ID: FS01							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 7939												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	17.3	F1	250	299.1	F1	mg/Kg		113	90 - 110	0	20	

QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

GC VOA

Prep Batch: 7878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7878/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 7881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1252-1	FS01	Total/NA	Solid	8021B	7888
890-1252-2	SW01	Total/NA	Solid	8021B	7888
890-1252-3	SW02	Total/NA	Solid	8021B	7888
890-1252-4	SW03	Total/NA	Solid	8021B	7888
890-1252-5	SW04	Total/NA	Solid	8021B	7888
MB 880-7878/5-A	Method Blank	Total/NA	Solid	8021B	7878
MB 880-7881/39	Method Blank	Total/NA	Solid	8021B	
LCS 880-7888/1-A	Lab Control Sample	Total/NA	Solid	8021B	7888
LCSD 880-7888/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7888
880-6055-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	7888
880-6055-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	7888

Prep Batch: 7888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1252-1	FS01	Total/NA	Solid	5035	
890-1252-2	SW01	Total/NA	Solid	5035	
890-1252-3	SW02	Total/NA	Solid	5035	
890-1252-4	SW03	Total/NA	Solid	5035	
890-1252-5	SW04	Total/NA	Solid	5035	
LCS 880-7888/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7888/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6055-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-6055-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 7905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1252-1	FS01	Total/NA	Solid	8015B NM	7930
890-1252-2	SW01	Total/NA	Solid	8015B NM	7930
890-1252-3	SW02	Total/NA	Solid	8015B NM	7930
890-1252-4	SW03	Total/NA	Solid	8015B NM	7930
890-1252-5	SW04	Total/NA	Solid	8015B NM	7930
MB 880-7930/1-A	Method Blank	Total/NA	Solid	8015B NM	7930
LCS 880-7930/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7930
LCSD 880-7930/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7930
880-6143-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	7930
880-6143-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7930

Prep Batch: 7930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1252-1	FS01	Total/NA	Solid	8015NM Prep	
890-1252-2	SW01	Total/NA	Solid	8015NM Prep	
890-1252-3	SW02	Total/NA	Solid	8015NM Prep	
890-1252-4	SW03	Total/NA	Solid	8015NM Prep	
890-1252-5	SW04	Total/NA	Solid	8015NM Prep	
MB 880-7930/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

GC Semi VOA (Continued)

Prep Batch: 7930 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-7930/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7930/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-6143-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-6143-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1252-1	FS01	Soluble	Solid	DI Leach	
890-1252-2	SW01	Soluble	Solid	DI Leach	
890-1252-3	SW02	Soluble	Solid	DI Leach	
890-1252-4	SW03	Soluble	Solid	DI Leach	
890-1252-5	SW04	Soluble	Solid	DI Leach	
MB 880-7938/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7938/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7938/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1252-1 MS	FS01	Soluble	Solid	DI Leach	
890-1252-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 7939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1252-1	FS01	Soluble	Solid	300.0	7938
890-1252-2	SW01	Soluble	Solid	300.0	7938
890-1252-3	SW02	Soluble	Solid	300.0	7938
890-1252-4	SW03	Soluble	Solid	300.0	7938
890-1252-5	SW04	Soluble	Solid	300.0	7938
MB 880-7938/1-A	Method Blank	Soluble	Solid	300.0	7938
LCS 880-7938/2-A	Lab Control Sample	Soluble	Solid	300.0	7938
LCSD 880-7938/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7938
890-1252-1 MS	FS01	Soluble	Solid	300.0	7938
890-1252-1 MSD	FS01	Soluble	Solid	300.0	7938

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Client Sample ID: FS01

Lab Sample ID: 890-1252-1

Date Collected: 09/13/21 14:55

Matrix: Solid

Date Received: 09/14/21 13:27

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	7888	09/15/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7881	09/15/21 12:01	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7930	09/15/21 14:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7905	09/15/21 14:52	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	7938	09/15/21 14:08	CH	XEN MID
Soluble	Analysis	300.0		1			7939	09/15/21 14:43	CH	XEN MID

Client Sample ID: SW01

Lab Sample ID: 890-1252-2

Date Collected: 09/13/21 14:56

Matrix: Solid

Date Received: 09/14/21 13:27

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	7888	09/15/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7881	09/15/21 12:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	7930	09/15/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7905	09/15/21 15:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	7938	09/15/21 14:08	CH	XEN MID
Soluble	Analysis	300.0		1			7939	09/15/21 15:00	CH	XEN MID

Client Sample ID: SW02

Lab Sample ID: 890-1252-3

Date Collected: 09/13/21 14:58

Matrix: Solid

Date Received: 09/14/21 13:27

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	7888	09/15/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7881	09/15/21 12:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7930	09/15/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7905	09/15/21 15:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	7938	09/15/21 14:08	CH	XEN MID
Soluble	Analysis	300.0		1			7939	09/15/21 15:06	CH	XEN MID

Client Sample ID: SW03

Lab Sample ID: 890-1252-4

Date Collected: 09/13/21 15:00

Matrix: Solid

Date Received: 09/14/21 13:27

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	7888	09/15/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7881	09/15/21 13:02	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	7930	09/15/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7905	09/15/21 15:55	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	7938	09/15/21 14:08	CH	XEN MID
Soluble	Analysis	300.0		1			7939	09/15/21 15:11	CH	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Client Sample ID: SW04
Date Collected: 09/13/21 15:02
Date Received: 09/14/21 13:27

Lab Sample ID: 890-1252-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	7888	09/15/21 11:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	7881	09/15/21 13:22	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	7930	09/15/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7905	09/15/21 16:16	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	7938	09/15/21 14:08	CH	XEN MID
Soluble	Analysis	300.0		1			7939	09/15/21 15:17	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: EMSU B 925

Job ID: 890-1252-1
SDG: 31403551

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1252-1	FS01	Solid	09/13/21 14:55	09/14/21 13:27	4
890-1252-2	SW01	Solid	09/13/21 14:56	09/14/21 13:27	0 - 4
890-1252-3	SW02	Solid	09/13/21 14:58	09/14/21 13:27	0 - 4
890-1252-4	SW03	Solid	09/13/21 15:00	09/14/21 13:27	0 - 4
890-1252-5	SW04	Solid	09/13/21 15:02	09/14/21 13:27	0 - 4



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

Chain of Custody

Work Order No: _____

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Page 1 of 1

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Empire
Company Name:	WSP USA	Company Name:	WSP
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(337) 257-8307	Email:	Alexis.Castro@wsp.com Tacoma.Morrissey@wsp.com

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

Project Name: EMSU B 925 Turn Around

Project Number: 31403551 Routine ☐

P.O. Number: Rush: 24hr

Sampler's Name: Alexis Castro Due Date: 9/15/21

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	1.4/1.4	Thermometer ID				
Received Intact:	Yes	No	Correction Factor: -0.2			
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seals:	Yes	No	N/A			



890-1252 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers			ANALYSIS REQUEST										Work Order Notes	
					TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)											ID: NAPP2118039585	API: 30-025-32122
FS01	S	9/13/2021	1455	4'	1 X	X	X											COMPOSITE	
SW01	S	9/13/2021	1456	0-4'	1 X	X	X											COMPOSITE	
SW02	S	9/13/2021	1458	0-4'	1 X	X	X											COMPOSITE	
SW03	S	9/13/2021	1500	0-4'	1 X	X	X											COMPOSITE	
SW04	S	9/13/2021	1502	0-4'	1 X	X	X											COMPOSITE	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>W. Castro</i>	<i>W. Castro</i>	9.14.21 1323			

Revised Date 05/14/18 Rev 2018.1

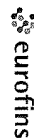
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

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

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1252-1

SDG Number: 31403551

Login Number: 1252

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1252-1

SDG Number: 31403551

Login Number: 1252

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 09/15/21 11:30 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1/ 2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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 51331

CONDITIONS

Operator: Empire New Mexico LLC 2200 S. Utica Place Tulsa, OK 74114	OGRID: 330679
	Action Number: 51331
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	10/13/2021